Final Regulatory Impact Analysis: CAFE Data Book

(Appendix II – EIS Analysis)

Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027 and Beyond and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030 and Beyond

May 2024

U.S. Department of Transportation
National Highway Traffic Safety Administration

NHTSA

Contents

Summary Tables

Table 1 - Incremental Benefit Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	21.5	53.7	69.6	91.1	137.5
Total Incremental Social Benefits, SC-GHG 2.5%	29.6	74.4	96.1	126.0	189.1
Total Incremental Social Benefits, SC-GHG 2%	38.8	97.8	126.3	165.5	247.8
Net Incremental Social Benefits, SC-GHG 3%	9.3	22.4	27.6	31.5	31.7
Net Incremental Social Benefits, SC-GHG 2.5%	17.4	43.0	54.1	66.3	83.4
Net Incremental Social Benefits, SC-GHG 2%	26.7	66.4	84.2	105.8	142.1

Table 2 - Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	14.5	36.4	47.0	61.5	92.1
Total Incremental Social Benefits, SC-GHG 2.5%	22.6	57.0	73.6	96.4	143.8
Total Incremental Social Benefits, SC-GHG 2%	31.8	80.4	103.7	135.9	202.5
Net Incremental Social Benefits, SC-GHG 3%	6.0	15.2	18.9	21.7	22.4
Net Incremental Social Benefits, SC-GHG 2.5%	14.1	35.9	45.5	56.5	74.1
Net Incremental Social Benefits, SC-GHG 2%	23.4	59.3	75.6	96.1	132.8

Table 3 - Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	34.0	92.6	113.4	189.8	421.4
Total Incremental Social Benefits, SC-GHG 2.5%	47.2	129.0	155.5	263.0	585.6
Total Incremental Social Benefits, SC-GHG 2%	62.2	170.2	203.2	346.0	771.6
Net Incremental Social Benefits, SC-GHG 3%	23.5	50.4	55.6	80.8	137.9
Net Incremental Social Benefits, SC-GHG 2.5%	36.8	86.8	97.7	154.0	302.2
Net Incremental Social Benefits, SC-GHG 2%	51.8	128.1	145.4	237.0	488.2

Table 4 - Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels

Incremental Benefits Over the Lifetimes of Total Fleet for Calendar Years 2022-2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, All SC-GHG Levels					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Total Incremental Social Benefits, SC-GHG 3%	22.1	60.3	73.4	120.9	261.2
Total Incremental Social Benefits, SC-GHG 2.5%	35.3	96.7	115.5	194.2	425.5
Total Incremental Social Benefits, SC-GHG 2%	50.3	138.0	163.2	277.2	611.5
Net Incremental Social Benefits, SC-GHG 3%	14.2	32.9	36.6	55.2	100.8
Net Incremental Social Benefits, SC-GHG 2.5%	27.5	69.3	78.7	128.4	265.1
Net Incremental Social Benefits, SC-GHG 2%	42.5	110.6	126.4	211.4	451.1

Table 5 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	12.2	8.4	0.5	0.6
Benefits	38.8	31.8	1.5	2.3
Net Benefits	26.7	23.4	1.0	1.7

Table 6 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	0.6	0.5	0.0	0.0
Benefits	5.3	4.3	0.2	0.3
Net Benefits	4.7	3.8	0.2	0.3

Table 7 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	11.6	7.9	0.5	0.6
Benefits	33.5	27.5	1.3	2.0
Net Benefits	22.0	19.5	0.9	1.4

Table 8 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	31.3	21.1	1.2	1.5
Benefits	97.8	80.4	3.8	5.8
Net Benefits	66.4	59.3	2.6	4.3

Table 9 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	3.2	2.0	0.1	0.1
Benefits	4.5	3.8	0.2	0.3
Net Benefits	1.3	1.8	0.1	0.1

Table 10 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	28.1	19.1	1.1	1.4
Benefits	93.3	76.6	3.7	5.6
Net Benefits	65.1	57.5	2.6	4.2

Table 11 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	42.0	28.1	1.6	2.0
Benefits	126.3	103.7	5.0	7.5
Net Benefits	84.2	75.6	3.3	5.5

Table 12 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	6.4	4.1	0.3	0.3
Benefits	13.3	10.9	0.5	0.8
Net Benefits	6.9	6.9	0.3	0.5

Table 13 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	35.6	24.0	1.4	1.7
Benefits	112.9	92.8	4.4	6.7
Net Benefits	77.3	68.7	3.0	5.0

Table 14 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	59.7	39.8	2.3	2.9
Benefits	165.5	135.9	6.5	9.9
Net Benefits	105.8	96.1	4.2	7.0

Table 15 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	9.0	6.0	0.4	0.4
Benefits	18.8	15.3	0.7	1.1
Net Benefits	9.9	9.2	0.4	0.7

Table 16 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	50.7	33.8	2.0	2.5
Benefits	146.7	120.6	5.8	8.8
Net Benefits	96.0	86.8	3.8	6.3

Table 17 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	105.7	69.7	4.1	5.1
Benefits	247.8	202.5	9.7	14.7
Net Benefits	142.1	132.8	5.6	9.6

Table 18 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	22.4	14.9	0.9	1.1
Benefits	34.8	28.2	1.4	2.0
Net Benefits	12.4	13.3	0.5	1.0

Table 19 - Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	83.3	54.8	3.3	4.0
Benefits	213.0	174.2	8.4	12.7
Net Benefits	129.7	119.5	5.1	8.7

Table 20 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	10.5	7.9	0.5	0.6
Benefits	62.2	50.3	3.2	4.1
Net Benefits	51.8	42.5	2.7	3.5

Table 21 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	3.5	1.5	0.2	0.1
Benefits	17.8	14.7	0.9	1.2
Net Benefits	14.3	13.2	0.7	1.1

Table 22 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT002, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	6.9	6.3	0.4	0.5
Benefits	44.4	35.6	2.3	2.9
Net Benefits	37.5	29.3	2.0	2.4

Table 23 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	42.2	27.4	2.2	2.2
Benefits	170.2	138.0	8.9	11.2
Net Benefits	128.1	110.6	6.7	9.0

Table 24 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	0.7	0.4	0.0	0.0
Benefits	-19.9	-15.4	-1.0	-1.3
Net Benefits	-20.6	-15.7	-1.1	-1.3

Table 25 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC1LT3, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	41.5	27.0	2.2	2.2
Benefits	190.1	153.3	9.9	12.5
Net Benefits	148.6	126.3	7.7	10.3

Table 26 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	57.8	36.8	3.0	3.0
Benefits	203.2	163.2	10.6	13.3
Net Benefits	145.4	126.4	7.6	10.3

Table 27 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	8.6	4.4	0.4	0.4
Benefits	-0.4	0.6	0.0	0.1
Net Benefits	-9.0	-3.8	-0.5	-0.3

Table 28 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC2LT4, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	49.1	32.4	2.6	2.6
Benefits	203.6	162.6	10.6	13.2
Net Benefits	154.4	130.2	8.0	10.6

Table 29 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	109.0	65.8	5.7	5.4
Benefits	346.0	277.2	18.0	22.6
Net Benefits	237.0	211.4	12.4	17.2

Table 30 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	19.1	10.3	1.0	0.8
Benefits	16.8	13.6	0.9	1.1
Net Benefits	-2.3	3.3	-0.1	0.3

Table 31 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC3LT5, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	89.9	55.5	4.7	4.5
Benefits	329.2	263.6	17.2	21.5
Net Benefits	239.3	208.1	12.5	16.9

Table 32 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Total Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	283.4	160.4	14.8	13.1
Benefits	771.6	611.5	40.2	49.8
Net Benefits	488.2	451.1	25.4	36.7

Table 33 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Passenger Car Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	73.6	38.9	3.8	3.2
Benefits	76.2	60.7	4.0	4.9
Net Benefits	2.6	21.8	0.1	1.8

Table 34 - Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%

Estimated Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars), Light Truck Fleet for Alternative PC6LT8, SC-GHG 2%				
	Totals		Annualized	
	3% Discount Rate	7% Discount Rate	3% Discount Rate	7% Discount Rate
Costs	209.8	121.5	10.9	9.9
Benefits	695.4	550.8	36.2	44.9
Net Benefits	485.6	429.3	25.3	35.0

Table 35 - Estimated Total Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%

Estimated Total Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	12.2	38.8	26.7	8.4	31.8	23.4
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	31.3	97.8	66.4	21.1	80.4	59.3
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	42.0	126.3	84.2	28.1	103.7	75.6
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	59.7	165.5	105.8	39.8	135.9	96.1
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	105.7	247.8	142.1	69.7	202.5	132.8

Table 36 - Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%

Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	0.6	5.3	4.7	0.5	4.3	3.8
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	3.2	4.5	1.3	2.0	3.8	1.8
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	6.4	13.3	6.9	4.1	10.9	6.9
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	9.0	18.8	9.9	6.0	15.3	9.2
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	22.4	34.8	12.4	14.9	28.2	13.3

Table 37 - Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%

Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across MYs 1983-2031 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	11.6	33.5	22.0	7.9	27.5	19.5
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	28.1	93.3	65.1	19.1	76.6	57.5
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	35.6	112.9	77.3	24.0	92.8	68.7
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	50.7	146.7	96.0	33.8	120.6	86.8
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	83.3	213.0	129.7	54.8	174.2	119.5

Table 38 - Estimated Total Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%

Estimated Total Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Total Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	10.5	62.2	51.8	7.9	50.3	42.5
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	42.2	170.2	128.1	27.4	138.0	110.6
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	57.8	203.2	145.4	36.8	163.2	126.4
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	109.0	346.0	237.0	65.8	277.2	211.4
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	283.4	771.6	488.2	160.4	611.5	451.1

Table 39 - Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%

Estimated Passenger Car Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Passenger Car Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	3.5	17.8	14.3	1.5	14.7	13.2
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	0.7	-19.9	-20.6	0.4	-15.4	-15.7
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	8.6	-0.4	-9.0	4.4	0.6	-3.8
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	19.1	16.8	-2.3	10.3	13.6	3.3
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	73.6	76.2	2.6	38.9	60.7	21.8

Table 40 - Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%

Estimated Light Truck Fleet Costs, Benefits, and Net Benefits Across Calendar Years 2022-2050 (billions of dollars) Light Truck Fleet, by Alternative, SC-GHG 2%						
Alternative	3% Discount Rate			7% Discount Rate		
	Costs	Benefits	Net Benefits	Costs	Benefits	Net Benefits
2.00%/Y Pc And 2.00%/Y Lt (0% Lt To 2028)	6.9	44.4	37.5	6.3	35.6	29.3
1.00%/Y Pc And 3.00%/Y Lt During 2027-2032	41.5	190.1	148.6	27.0	153.3	126.3
2.00%/Y Pc And 4.00%/Y Lt During 2027-2032	49.1	203.6	154.4	32.4	162.6	130.2
3.00%/Y Pc And 5.00%/Y Lt During 2027-2032	89.9	329.2	239.3	55.5	263.6	208.1
6.00%/Y Pc And 8.00%/Y Lt During 2027-2032	209.8	695.4	485.6	121.5	550.8	429.3

CAFE Costs per Vehicle

Table 41 - MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Total Fleet by Alternative

MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Total Fleet by Alternative			
	Avg Required (mpg)	Avg Achieved (mpg)	Avg Reg. Cost ($)
No Action Alternative (Baseline)	46.9	60.0	1605
Alternative PC2LT002	50.4	58.1	1686
Alternative PC1LT3	53.1	60.0	1826
Alternative PC2LT4	55.9	61.3	1937
Alternative PC3LT5	58.9	63.2	2172
Alternative PC6LT8	69.1	70.2	3104

Table 42 - MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Passenger Car Fleet by Alternative

MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Passenger Car Fleet by Alternative			
	Avg Required (mpg)	Avg Achieved (mpg)	Avg Reg. Cost ($)
No Action Alternative (Baseline)	58.8	88.5	1509
Alternative PC2LT002	65.1	82.6	1499
Alternative PC1LT3	61.8	80.4	1369
Alternative PC2LT4	65.1	82.9	1475
Alternative PC3LT5	68.5	83.2	1590
Alternative PC6LT8	80.1	88.7	2134

Table 43 - MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Light Truck Fleet by Alternative

MY 2031 Required and Achieved CAFE Levels (mpg), and Per-Vehicle Regulatory Costs ($) for Light Truck Fleet by Alternative			
	Avg Required (mpg)	Avg Achieved (mpg)	Avg Reg. Cost ($)
No Action Alternative (Baseline)	42.6	51.6	1653
Alternative PC2LT002	45.2	50.5	1780
Alternative PC1LT3	49.6	53.1	2057
Alternative PC2LT4	52.2	54.2	2172
Alternative PC3LT5	55.0	56.4	2467
Alternative PC6LT8	64.6	63.4	3600

Various Impacts of Alternatives

Table 44 - Impacts for Alternative PC2LT002, SC-GHG 2%

Impacts for Alternative PC2LT002, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	65.1	45.2	50.4
Achieved Fuel Economy for MY 2032 (mpg)	82.6	50.5	58.1
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	-10	127	81
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-85	-271	-208
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-62	-212	-161
Payback Period Relative to MY 2020, 3% Discount Rate (years)	0.0	0.0	0.0
Payback Period Relative to MY 2020, 7% Discount Rate (years)	0.0	0.0	0.0
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-1	-7	-9
Total Lifetime CO2 Volume (million metric tons)	-16	-98	-114
Fatalities (Including Rebound Miles)	-11	32	21
Fatalities (Excluding Rebound Miles)	-22	-15	-37
Total Technology Costs, 3% Discount Rate ($b)	0.5	7.1	7.6
Total Technology Costs, 7% Discount Rate ($b)	0.4	5.3	5.7
Total Net Societal Benefits, 3% Discount Rate ($b)	4.7	22.0	26.7
Total Net Societal Benefits, 7% Discount Rate ($b)	3.8	19.5	23.4

Table 45 - Impacts for Alternative PC1LT3, SC-GHG 2%

Impacts for Alternative PC1LT3, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	61.8	49.6	53.1
Achieved Fuel Economy for MY 2032 (mpg)	80.4	53.1	60.0
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	-140	404	221
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	129	-876	-543
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	104	-682	-421
Payback Period Relative to MY 2020, 3% Discount Rate (years)	0.0	0.0	0.0
Payback Period Relative to MY 2020, 7% Discount Rate (years)	-1.0	1.0	0.3
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-1	-21	-22
Total Lifetime CO2 Volume (million metric tons)	-14	-277	-291
Fatalities (Including Rebound Miles)	57	51	109
Fatalities (Excluding Rebound Miles)	47	-73	-26
Total Technology Costs, 3% Discount Rate ($b)	0.2	17.6	17.8
Total Technology Costs, 7% Discount Rate ($b)	0.2	13.0	13.2
Total Net Societal Benefits, 3% Discount Rate ($b)	1.3	65.1	66.4
Total Net Societal Benefits, 7% Discount Rate ($b)	1.8	57.5	59.3

Table 46 - Impacts for Alternative PC2LT4, SC-GHG 2%

Impacts for Alternative PC2LT4, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	65.1	52.2	55.9
Achieved Fuel Economy for MY 2032 (mpg)	82.9	54.2	61.3
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	-34	519	333
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-100	-1,103	-771
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-75	-859	-599
Payback Period Relative to MY 2020, 3% Discount Rate (years)	0.0	0.0	0.0
Payback Period Relative to MY 2020, 7% Discount Rate (years)	-1.0	1.0	0.3
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-3	-25	-28
Total Lifetime CO2 Volume (million metric tons)	-39	-334	-374
Fatalities (Including Rebound Miles)	78	97	175
Fatalities (Excluding Rebound Miles)	54	-57	-4
Total Technology Costs, 3% Discount Rate ($b)	1.9	21.6	23.4
Total Technology Costs, 7% Discount Rate ($b)	1.4	15.9	17.3
Total Net Societal Benefits, 3% Discount Rate ($b)	6.9	77.3	84.2
Total Net Societal Benefits, 7% Discount Rate ($b)	6.9	68.7	75.6

Table 47 - Impacts for Alternative PC3LT5, SC-GHG 2%

Impacts for Alternative PC3LT5, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	68.5	55.0	58.9
Achieved Fuel Economy for MY 2032 (mpg)	83.2	56.4	63.2
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	81	813	567
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-141	-1,566	-1,091
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-105	-1,217	-846
Payback Period Relative to MY 2020, 3% Discount Rate (years)	0.0	1.0	0.7
Payback Period Relative to MY 2020, 7% Discount Rate (years)	0.0	1.0	0.7
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-4	-33	-37
Total Lifetime CO2 Volume (million metric tons)	-54	-437	-491
Fatalities (Including Rebound Miles)	64	219	282
Fatalities (Excluding Rebound Miles)	29	20	50
Total Technology Costs, 3% Discount Rate ($b)	4.7	28.8	33.5
Total Technology Costs, 7% Discount Rate ($b)	3.5	21.2	24.8
Total Net Societal Benefits, 3% Discount Rate ($b)	9.9	96.0	105.8
Total Net Societal Benefits, 7% Discount Rate ($b)	9.2	86.8	96.1

Table 48 - Impacts for Alternative PC6LT8, SC-GHG 2%

Impacts for Alternative PC6LT8, SC-GHG 2%			
Category	Passenger Car	Light Truck	Combined Fleet
Fuel Economy			
Required Fuel Economy for MY 2032(mpg)	80.1	64.6	69.1
Achieved Fuel Economy for MY 2032 (mpg)	88.7	63.4	70.2
Achieved Fuel Economy for MY 2020 - for reference (mpg)	47.1	32.1	36.5
Average MY 2031 Vehicle - Incremental to Alternative 0 (Baseline)			
Per Vehicle Price Increase (dollars)	624	1,946	1,499
Lifetime Fuel Cost (per vehicle), 3% Discount Rate (dollars)	-607	-2,842	-2,103
Lifetime Fuel Cost (per vehicle), 7% Discount Rate (dollars)	-468	-2,204	-1,629
Payback Period Relative to MY 2020, 3% Discount Rate (years)	1.0	2.0	1.7
Payback Period Relative to MY 2020, 7% Discount Rate (years)	1.0	3.0	2.3
Lifetime of Vehicles Through 2031 - Incremental to Alternative 0 (Baseline)			
Total Lifetime Fuel Volume (billion gallons)	-8	-48	-56
Total Lifetime CO2 Volume (million metric tons)	-100	-629	-729
Fatalities (Including Rebound Miles)	183	460	643
Fatalities (Excluding Rebound Miles)	113	175	288
Total Technology Costs, 3% Discount Rate ($b)	12.4	47.2	59.6
Total Technology Costs, 7% Discount Rate ($b)	9.1	34.4	43.5
Total Net Societal Benefits, 3% Discount Rate ($b)	12.4	129.7	142.1
Total Net Societal Benefits, 7% Discount Rate ($b)	13.3	119.5	132.8

Required and Achieved CAFE Levels, Baseline vs Preferred Alternative

Table 49 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	37.6	35.3	37.6	35.3	31.4	30.9	31.4	30.9	32.5	30.8	32.5	30.8
2023	38.0	38.1	38.0	38.1	31.9	32.7	31.9	32.7	33.0	31.0	33.0	31.0
2024	41.3	41.8	41.3	41.8	34.3	37.4	34.3	37.4	35.4	37.3	35.4	37.3
2025	44.7	46.4	44.7	46.4	37.3	38.4	37.3	38.4	38.4	41.4	38.4	41.4
2026	49.6	52.8	49.6	52.8	41.4	41.5	41.4	41.5	42.6	43.0	42.6	43.0
2027	49.6	55.7	50.0	54.2	41.4	44.4	41.4	43.9	42.5	44.2	42.7	45.0
2028	49.5	55.3	50.4	54.1	41.4	48.1	41.5	47.1	42.5	43.5	42.7	44.2
2029	49.5	54.1	51.3	52.9	41.4	54.9	42.4	52.8	42.5	44.1	43.6	46.2
2030	49.5	56.4	52.4	54.6	41.4	52.5	43.2	50.6	42.5	44.2	44.5	45.9
2031	49.5	66.3	53.5	61.9	41.3	52.5	44.0	50.3	42.5	49.3	45.4	50.4

Table 50 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	39.1	40.0	39.1	40.0	39.6	41.4	39.6	41.4	39.5	40.9	39.5	40.9
2023	39.5	44.4	39.5	44.4	40.1	43.5	40.1	43.5	39.9	43.6	39.9	43.6
2024	42.9	44.5	42.9	44.5	43.5	46.2	43.5	46.2	43.4	47.3	43.4	47.3
2025	46.5	48.3	46.5	48.3	47.1	50.4	47.1	50.4	47.0	49.3	47.0	49.3
2026	51.5	52.0	51.5	52.0	52.3	53.9	52.3	53.9	52.1	52.9	52.1	52.9
2027	51.5	54.3	51.9	61.6	52.2	54.5	52.8	54.8	52.0	53.0	52.5	52.3
2028	51.4	64.7	52.3	62.8	52.2	54.1	53.2	54.4	52.0	52.8	53.0	54.3
2029	51.4	65.2	53.3	63.0	52.2	61.6	54.3	62.1	52.0	57.9	54.0	59.7
2030	51.4	63.6	54.4	61.4	52.2	60.6	55.4	60.8	52.0	62.2	55.1	64.7
2031	51.4	63.5	55.6	60.9	52.1	66.4	56.5	66.2	51.9	69.1	56.2	65.6

Table 51 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.9	29.0	32.9	29.0	40.6	106.8	40.6	106.8	40.6	742.5	40.6	742.5
2023	33.4	37.9	33.4	37.9	41.1	106.8	41.1	106.8	41.1	742.5	41.1	742.5
2024	36.2	41.8	36.2	41.8	44.3	106.8	44.3	106.8	44.3	742.5	44.3	742.5
2025	39.4	42.0	39.4	42.0	48.1	106.8	48.1	106.8	48.1	742.5	48.1	742.5
2026	43.7	48.5	43.7	48.5	53.5	542.6	53.5	542.6	53.5	742.5	53.5	742.5
2027	43.7	48.5	43.8	47.1	54.1	520.9	55.2	328.4	54.1	709.0	55.2	394.4
2028	43.7	47.0	43.8	45.6	54.1	270.0	56.3	207.1	54.1	345.2	56.3	248.6
2029	43.7	45.5	44.7	44.3	54.1	182.1	57.5	151.2	54.1	228.1	57.5	181.5
2030	43.7	46.2	45.6	45.1	54.1	137.4	58.6	119.0	54.1	170.3	58.6	142.9
2031	43.7	47.3	46.5	46.5	54.1	137.4	59.8	119.0	54.1	170.3	59.8	142.9

Table 52 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	37.3	36.5	37.3	36.5	36.8	32.8	36.8	32.8	42.0	40.3	42.0	40.3
2023	37.8	47.1	37.8	47.1	37.3	39.5	37.3	39.5	42.6	40.6	42.6	40.6
2024	41.1	49.5	41.1	49.5	40.4	40.4	40.4	40.4	46.2	48.6	46.2	48.6
2025	44.6	50.3	44.6	50.3	43.8	42.0	43.8	42.0	50.0	62.3	50.0	62.3
2026	49.5	53.0	49.5	53.0	48.6	49.4	48.6	49.4	55.5	62.3	55.5	62.3
2027	49.5	57.3	49.6	56.3	48.6	53.4	49.0	52.2	55.5	62.6	56.0	61.2
2028	49.4	58.0	49.7	55.4	48.6	67.0	49.3	63.8	55.4	67.0	56.4	65.7
2029	49.4	61.3	50.7	58.1	48.5	64.9	50.3	61.7	55.4	65.4	57.6	64.2
2030	49.4	70.9	51.7	64.2	48.5	62.7	51.3	59.7	55.4	64.1	58.8	62.9
2031	49.4	70.9	52.7	63.7	48.5	63.5	52.4	60.2	55.4	67.2	59.9	69.6

Table 53 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	38.9	38.6	38.9	38.6	31.9	28.9	31.9	28.9	37.8	39.0	37.8	39.0
2023	39.4	42.4	39.4	42.4	32.3	30.9	32.3	30.9	38.2	43.7	38.2	43.7
2024	42.7	45.0	42.7	45.0	35.0	34.9	35.0	34.9	41.5	46.3	41.5	46.3
2025	46.3	48.7	46.3	48.7	38.1	41.7	38.1	41.7	45.1	48.9	45.1	48.9
2026	51.3	52.7	51.3	52.7	42.3	42.4	42.3	42.4	50.1	51.5	50.1	51.5
2027	51.3	53.2	51.8	52.9	42.2	42.7	42.3	42.9	50.1	53.9	50.2	53.2
2028	51.2	62.7	52.2	62.4	42.2	42.4	42.4	42.7	50.0	57.2	50.3	56.1
2029	51.2	61.3	53.2	62.1	42.2	46.5	43.2	46.5	50.0	77.9	51.3	73.0
2030	51.2	62.8	54.3	64.6	42.2	45.8	44.1	45.8	50.0	74.2	52.3	69.7
2031	51.2	69.3	55.4	69.4	42.2	46.9	45.0	46.4	50.0	74.2	53.4	69.2

Table 54 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	40.7	699.0	40.7	699.0	37.1	39.1	37.1	39.1	36.0	43.8	36.0	43.8
2023	41.3	707.6	41.3	707.6	37.5	41.0	37.5	41.0	36.4	47.1	36.4	47.1
2024	44.8	710.6	44.8	710.6	40.6	45.3	40.6	45.3	39.5	47.5	39.5	47.5
2025	48.7	714.2	48.7	714.2	43.9	47.5	43.9	47.5	42.8	53.4	42.8	53.4
2026	54.1	714.6	54.1	714.6	48.7	52.3	48.7	52.3	47.6	60.3	47.6	60.3
2027	54.1	682.5	55.2	380.6	48.7	52.5	49.0	51.7	47.6	59.2	47.8	57.1
2028	54.1	332.7	56.2	239.9	48.6	52.0	49.2	51.1	47.5	56.9	48.0	54.9
2029	54.1	220.0	57.3	175.2	48.6	55.4	50.2	53.9	47.5	54.9	48.9	53.1
2030	54.1	164.3	58.4	137.9	48.6	60.4	51.2	58.1	47.5	67.4	49.9	63.3
2031	54.1	164.3	59.7	137.9	48.6	64.4	52.2	60.2	47.5	68.6	51.0	63.5

Table 55 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Total Fleet (mpg)												
	VWA				Total							
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002					
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved				
2022	37.9	36.3	37.9	36.3	35.8	36.5	35.8	36.5				
2023	38.3	38.5	38.3	38.5	36.2	38.9	36.2	38.9				
2024	41.6	45.6	41.6	45.6	39.1	43.1	39.1	43.1				
2025	45.0	49.0	45.0	49.0	42.4	46.7	42.4	46.7				
2026	50.0	52.5	50.0	52.5	47.0	49.9	47.0	49.9				
2027	49.9	52.0	50.2	52.6	47.0	51.1	47.3	51.4				
2028	49.9	52.2	50.5	52.5	46.9	52.9	47.5	52.4				
2029	49.9	51.1	51.6	51.3	46.9	56.1	48.4	55.6				
2030	49.8	65.9	52.6	59.0	46.9	57.1	49.4	56.1				
2031	49.8	67.2	53.7	60.8	46.9	60.0	50.4	58.1				

Table 56 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.3	37.8	43.3	37.8	43.4	45.5	43.4	45.5	45.1	41.9	45.1	41.9
2023	44.0	42.2	44.0	42.2	44.1	45.8	44.1	45.8	45.8	42.3	45.8	42.3
2024	47.8	51.8	47.8	51.8	47.9	66.6	47.9	66.6	49.7	54.2	49.7	54.2
2025	52.0	54.7	52.0	54.7	52.1	69.2	52.1	69.2	54.1	58.4	54.1	58.4
2026	57.7	60.9	57.7	60.9	57.9	69.2	57.9	69.2	60.1	64.0	60.1	64.0
2027	57.7	72.4	58.9	68.9	57.9	74.6	59.0	78.5	60.1	64.0	61.3	63.6
2028	57.7	73.0	60.1	69.1	57.9	70.7	60.2	73.6	60.1	62.6	62.6	62.2
2029	57.7	70.6	61.3	66.9	57.9	67.2	61.5	69.4	60.1	62.9	63.9	82.5
2030	57.7	81.0	62.6	74.6	57.9	64.3	62.7	65.9	60.1	65.1	65.1	82.8
2031	57.7	81.0	63.9	74.1	57.9	64.3	64.0	65.4	60.1	86.7	66.5	115.6

Table 57 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.7	45.6	44.7	45.6	44.2	45.3	44.2	45.3	44.7	47.0	44.7	47.0
2023	45.4	52.2	45.4	52.2	44.9	48.8	44.9	48.8	45.4	49.7	45.4	49.7
2024	49.4	52.6	49.4	52.6	48.8	53.7	48.8	53.7	49.4	57.0	49.4	57.0
2025	53.7	56.7	53.7	56.7	53.1	54.6	53.1	54.6	53.6	59.4	53.6	59.4
2026	59.6	59.6	59.6	59.6	59.0	61.5	59.0	61.5	59.6	60.6	59.6	60.6
2027	59.6	61.3	60.8	60.9	59.0	62.7	60.2	64.3	59.6	60.9	60.8	60.4
2028	59.6	99.5	62.1	66.2	59.0	61.5	61.4	62.9	59.6	60.0	62.1	61.6
2029	59.6	107.2	63.3	70.4	59.0	64.7	62.7	67.9	59.6	75.0	63.3	77.7
2030	59.6	99.0	64.6	68.3	59.0	63.1	64.0	65.9	59.6	92.2	64.6	93.0
2031	59.6	99.0	66.0	67.6	59.0	70.0	65.3	73.3	59.6	127.4	65.9	93.0

Table 58 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.2	30.6	43.2	30.6	40.6	106.8	40.6	106.8	40.6	742.5	40.6	742.5
2023	43.8	68.6	43.8	68.6	41.1	106.8	41.1	106.8	41.1	742.5	41.1	742.5
2024	47.6	69.1	47.6	69.1	44.3	106.8	44.3	106.8	44.3	742.5	44.3	742.5
2025	51.8	69.2	51.8	69.2	48.1	106.8	48.1	106.8	48.1	742.5	48.1	742.5
2026	57.5	74.2	57.5	74.2	53.5	542.6	53.5	542.6	53.5	742.5	53.5	742.5
2027	57.5	75.4	58.7	70.9	54.1	520.9	55.2	328.4	54.1	709.0	55.2	394.4
2028	57.5	70.1	59.9	66.2	54.1	270.0	56.3	207.1	54.1	345.2	56.3	248.6
2029	57.5	65.4	61.1	62.1	54.1	182.1	57.5	151.2	54.1	228.1	57.5	181.5
2030	57.5	61.2	62.4	61.7	54.1	137.4	58.6	119.0	54.1	170.3	58.6	142.9
2031	57.5	61.2	63.7	61.3	54.1	137.4	59.8	119.0	54.1	170.3	59.8	142.9

Table 59 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	46.1	41.5	46.1	41.5	41.8	35.5	41.8	35.5	47.0	42.9	47.0	42.9
2023	46.8	42.5	46.8	42.5	42.4	45.3	42.4	45.3	47.7	43.3	47.7	43.3
2024	50.9	55.6	50.9	55.6	46.1	47.9	46.1	47.9	51.9	61.2	51.9	61.2
2025	55.3	58.8	55.3	58.8	50.1	52.7	50.1	52.7	56.4	67.6	56.4	67.6
2026	61.5	61.5	61.5	61.5	55.6	71.3	55.6	71.3	62.7	67.7	62.7	67.7
2027	61.5	61.5	62.7	62.4	55.6	74.1	56.8	70.8	62.7	68.0	63.9	66.5
2028	61.5	62.3	64.0	62.0	55.6	69.8	57.9	66.9	62.7	73.2	65.2	72.0
2029	61.5	148.4	65.3	130.6	55.6	69.0	59.1	65.9	62.7	71.4	66.6	70.2
2030	61.5	131.8	66.7	115.7	55.6	68.5	60.3	65.3	62.7	69.9	67.9	68.7
2031	61.5	131.8	68.0	115.7	55.6	70.6	61.6	67.1	62.7	70.1	69.3	78.2

Table 60 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.7	44.3	44.7	44.3	41.8	29.2	41.8	29.2	46.0	38.3	46.0	38.3
2023	45.4	49.4	45.4	49.4	42.4	31.9	42.4	31.9	46.7	52.1	46.7	52.1
2024	49.3	53.8	49.3	53.8	46.1	45.5	46.1	45.5	50.7	52.2	50.7	52.2
2025	53.6	58.7	53.6	58.7	50.0	55.3	50.0	55.3	55.1	65.4	55.1	65.4
2026	59.6	64.9	59.6	64.9	55.6	57.5	55.6	57.5	61.3	68.1	61.3	68.1
2027	59.6	64.9	60.8	64.9	55.6	57.5	56.8	55.9	61.3	71.8	62.5	69.1
2028	59.6	63.9	62.1	66.7	55.6	56.0	57.9	55.4	61.3	94.7	63.8	88.0
2029	59.6	63.0	63.3	65.3	55.6	58.6	59.1	59.8	61.3	159.3	65.1	136.4
2030	59.6	65.9	64.6	71.1	55.6	58.3	60.3	59.8	61.3	136.9	66.4	119.6
2031	59.6	80.8	65.9	83.2	55.6	77.7	61.5	77.0	61.3	136.9	67.8	119.7

Table 61 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	41.1	698.9	41.1	698.9	44.7	46.7	44.7	46.7	42.9	64.5	42.9	64.5
2023	41.7	698.9	41.7	698.9	45.4	51.6	45.4	51.6	43.6	67.5	43.6	67.5
2024	45.3	698.9	45.3	698.9	49.4	54.3	49.4	54.3	47.4	69.3	47.4	69.3
2025	49.3	698.9	49.3	698.9	53.6	58.9	53.6	58.9	51.5	75.5	51.5	75.5
2026	54.8	698.9	54.8	698.9	59.6	64.5	59.6	64.5	57.2	126.6	57.2	126.6
2027	54.8	668.2	55.9	381.4	59.6	65.4	60.8	63.9	57.2	125.8	58.3	112.1
2028	54.8	329.6	57.0	240.4	59.6	64.7	62.1	63.0	57.2	109.1	59.5	98.6
2029	54.8	218.8	58.2	175.6	59.6	65.9	63.4	64.1	57.2	97.8	60.8	89.4
2030	54.8	163.8	59.4	138.3	59.6	84.7	64.6	79.6	57.2	87.8	62.0	80.9
2031	54.8	163.8	60.7	138.3	59.6	88.0	65.9	81.1	57.2	91.8	63.3	83.7

Table 62 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Passenger Car Fleet (mpg)												
	VWA				Total							
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	45.0	40.1	45.0	40.1	44.1	47.1	44.1	47.1	0.0	0.0	0.0	0.0
2023	45.7	41.6	45.7	41.6	44.8	51.6	44.8	51.6	0.0	0.0	0.0	0.0
2024	49.7	49.1	49.7	49.1	48.7	58.4	48.7	58.4	0.0	0.0	0.0	0.0
2025	54.0	53.1	54.0	53.1	52.9	63.0	52.9	63.0	0.0	0.0	0.0	0.0
2026	60.0	62.6	60.0	62.6	58.8	68.8	58.8	68.8	0.0	0.0	0.0	0.0
2027	60.0	64.1	61.2	69.0	58.8	70.3	60.0	69.5	0.0	0.0	0.0	0.0
2028	60.0	67.3	62.5	71.7	58.8	73.8	61.2	69.8	0.0	0.0	0.0	0.0
2029	60.0	64.6	63.8	68.1	58.8	76.0	62.5	73.7	0.0	0.0	0.0	0.0
2030	60.0	63.8	65.1	66.2	58.8	79.6	63.7	76.7	0.0	0.0	0.0	0.0
2031	60.0	66.9	66.4	73.3	58.8	88.5	65.1	82.6	0.0	0.0	0.0	0.0

Table 63 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.5	32.7	32.5	32.7	30.3	29.6	30.3	29.6	29.8	28.3	29.8	28.3
2023	33.0	34.4	33.0	34.4	30.8	31.6	30.8	31.6	30.3	28.6	30.3	28.6
2024	35.9	34.4	35.9	34.4	33.2	35.5	33.2	35.5	32.5	34.0	32.5	34.0
2025	39.0	40.0	39.0	40.0	36.1	36.5	36.1	36.5	35.4	38.2	35.4	38.2
2026	43.4	46.5	43.4	46.5	40.1	39.7	40.1	39.7	39.3	39.3	39.3	39.3
2027	43.4	45.2	43.4	44.6	40.1	42.5	40.1	41.8	39.3	40.7	39.3	41.6
2028	43.4	44.6	43.4	44.5	40.1	46.5	40.1	45.3	39.3	40.1	39.3	40.9
2029	43.4	43.9	44.2	43.9	40.1	53.8	41.0	51.5	39.3	40.7	40.1	41.2
2030	43.4	43.4	45.1	43.2	40.1	51.5	41.8	49.4	39.3	40.6	40.9	40.9
2031	43.4	56.2	46.1	53.3	40.1	51.5	42.6	49.1	39.3	44.1	41.8	43.7

Table 64 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	34.0	35.0	34.0	35.0	34.0	36.4	34.0	36.4	34.0	34.6	34.0	34.6
2023	34.5	38.0	34.5	38.0	34.5	37.4	34.5	37.4	34.5	37.5	34.5	37.5
2024	37.5	38.1	37.5	38.1	37.5	38.3	37.5	38.3	37.5	38.8	37.5	38.8
2025	40.8	41.9	40.8	41.9	40.7	45.5	40.7	45.5	40.8	40.8	40.8	40.8
2026	45.3	46.1	45.3	46.1	45.3	46.1	45.3	46.1	45.3	45.9	45.3	45.9
2027	45.3	48.8	45.3	62.4	45.3	46.3	45.3	45.7	45.3	45.9	45.3	45.2
2028	45.3	48.1	45.3	59.8	45.3	46.8	45.3	46.2	45.3	46.4	45.3	47.8
2029	45.3	47.1	46.2	57.1	45.3	58.0	46.2	55.8	45.3	45.9	46.2	47.1
2030	45.3	47.1	47.2	55.9	45.3	57.7	47.1	55.3	45.3	45.3	47.2	48.0
2031	45.3	47.1	48.2	55.5	45.3	62.2	48.1	58.7	45.3	45.3	48.1	49.1

Table 65 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.7	29.0	32.7	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	33.2	37.5	33.2	37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	36.0	41.4	36.0	41.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	39.2	41.6	39.2	41.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	43.5	48.1	43.5	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	43.5	48.1	43.5	46.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	43.5	46.6	43.5	45.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	43.5	45.2	44.4	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	43.5	45.9	45.3	44.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	43.5	47.1	46.2	46.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 66 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	36.0	35.7	36.0	35.7	32.9	30.4	32.9	30.4	37.0	37.4	37.0	37.4
2023	36.6	48.0	36.6	48.0	33.4	35.2	33.4	35.2	37.6	37.7	37.6	37.7
2024	39.8	48.6	39.8	48.6	36.3	35.3	36.3	35.3	40.8	39.0	40.8	39.0
2025	43.2	49.2	43.2	49.2	39.5	35.6	39.5	35.6	44.4	57.3	44.4	57.3
2026	48.0	51.9	48.0	51.9	43.9	39.1	43.9	39.1	49.3	57.3	49.3	57.3
2027	48.0	56.7	48.0	55.5	43.9	43.2	43.9	42.6	49.3	57.6	49.3	56.4
2028	48.0	57.4	48.0	54.5	43.9	64.8	43.9	61.5	49.3	61.4	49.3	60.1
2029	48.0	56.3	49.0	53.6	43.9	61.8	44.8	58.6	49.3	60.1	50.3	58.8
2030	48.0	66.2	50.0	60.1	43.9	58.6	45.7	55.7	49.3	58.9	51.4	57.7
2031	48.0	66.2	51.0	59.6	43.9	58.6	46.6	55.4	49.3	64.3	52.4	62.4

Table 67 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	32.9	32.6	32.9	32.6	30.7	28.9	30.7	28.9	36.5	39.1	36.5	39.1
2023	33.4	35.6	33.4	35.6	31.2	30.7	31.2	30.7	37.0	42.4	37.0	42.4
2024	36.3	37.0	36.3	37.0	33.8	33.7	33.8	33.7	40.2	45.4	40.2	45.4
2025	39.5	40.2	39.5	40.2	36.8	40.3	36.8	40.3	43.7	46.9	43.7	46.9
2026	43.9	42.9	43.9	42.9	40.9	40.9	40.9	40.9	48.6	49.5	48.6	49.5
2027	43.9	43.7	43.9	43.2	40.9	41.2	40.9	41.6	48.6	51.8	48.6	51.3
2028	43.9	61.2	43.9	58.0	40.9	41.1	40.9	41.4	48.6	53.8	48.6	53.0
2029	43.9	59.5	44.8	58.7	40.9	45.2	41.7	45.2	48.6	72.0	49.6	67.9
2030	43.9	59.4	45.7	58.4	40.9	44.5	42.6	44.4	48.6	69.1	50.6	65.3
2031	43.9	59.4	46.6	58.0	40.9	44.5	43.4	44.1	48.6	69.1	51.6	64.8

Table 68 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	33.4	700.3	33.4	700.3	33.0	35.0	33.0	35.0	33.4	38.0	33.4	38.0
2023	33.9	936.4	33.9	936.4	33.5	36.0	33.5	36.0	33.9	41.4	33.9	41.4
2024	36.9	1046.7	36.9	1046.7	36.3	40.8	36.3	40.8	36.8	41.7	36.8	41.7
2025	40.1	1186.5	40.1	1186.5	39.4	42.4	39.4	42.4	40.0	47.6	40.0	47.6
2026	44.5	1186.5	44.5	1186.5	43.8	46.8	43.8	46.8	44.5	49.6	44.5	49.6
2027	44.5	1097.1	44.5	365.7	43.8	46.9	43.8	46.3	44.5	48.7	44.5	47.6
2028	44.5	397.6	44.5	230.5	43.8	46.6	43.8	45.9	44.5	47.7	44.5	46.6
2029	44.5	242.9	45.4	168.3	43.8	50.6	44.7	49.2	44.5	46.7	45.4	45.7
2030	44.5	174.8	46.3	132.5	43.8	51.6	45.6	50.0	44.5	61.7	46.3	58.3
2031	44.5	174.8	47.3	132.5	43.8	55.5	46.5	52.2	44.5	62.4	47.3	57.9

Table 69 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Light Truck Fleet (mpg)												
	VWA				Total							
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	34.0	33.9	34.0	33.9	32.1	32.1	32.1	32.1	0.0	0.0	0.0	0.0
2023	34.5	36.6	34.5	36.6	32.6	34.0	32.6	34.0	0.0	0.0	0.0	0.0
2024	37.5	43.6	37.5	43.6	35.2	37.5	35.2	37.5	0.0	0.0	0.0	0.0
2025	40.8	46.8	40.8	46.8	38.3	41.0	38.3	41.0	0.0	0.0	0.0	0.0
2026	45.3	47.8	45.3	47.8	42.6	43.6	42.6	43.6	0.0	0.0	0.0	0.0
2027	45.3	46.6	45.3	45.9	42.6	44.8	42.6	45.3	0.0	0.0	0.0	0.0
2028	45.3	46.0	45.3	45.3	42.6	46.2	42.6	46.5	0.0	0.0	0.0	0.0
2029	45.3	45.4	46.3	44.8	42.6	49.5	43.5	49.5	0.0	0.0	0.0	0.0
2030	45.3	67.1	47.2	55.4	42.6	49.9	44.3	49.4	0.0	0.0	0.0	0.0
2031	45.3	67.3	48.2	55.2	42.6	51.6	45.2	50.5	0.0	0.0	0.0	0.0

Table 70 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	0.0	0.0	0.0	0.0	43.4	45.5	43.4	45.5	44.3	41.2	44.3	41.2
2023	0.0	0.0	0.0	0.0	44.1	45.8	44.1	45.8	45.0	41.7	45.0	41.7
2024	0.0	0.0	0.0	0.0	47.9	66.6	47.9	66.6	48.9	54.7	48.9	54.7
2025	0.0	0.0	0.0	0.0	52.1	69.2	52.1	69.2	53.2	59.2	53.2	59.2
2026	0.0	0.0	0.0	0.0	57.9	69.2	57.9	69.2	59.1	63.6	59.1	63.6
2027	0.0	0.0	0.0	0.0	57.9	74.6	59.0	78.5	59.1	63.6	60.3	63.5
2028	0.0	0.0	0.0	0.0	57.9	70.7	60.2	73.6	59.1	62.0	61.5	61.9
2029	0.0	0.0	0.0	0.0	57.9	67.2	61.5	69.4	59.1	60.5	62.8	87.9
2030	0.0	0.0	0.0	0.0	57.9	64.3	62.7	65.9	59.1	59.1	64.0	81.6
2031	0.0	0.0	0.0	0.0	57.9	64.3	64.0	65.4	59.1	71.0	65.4	102.9

Table 71 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.7	45.6	44.7	45.6	48.7	53.4	48.7	53.4	45.8	47.1	45.8	47.1
2023	45.4	52.2	45.4	52.2	49.5	2658.3	49.5	2658.3	46.5	47.2	46.5	47.2
2024	49.4	52.6	49.4	52.6	53.8	3125.8	53.8	3125.8	50.6	62.1	50.6	62.1
2025	53.7	56.7	53.7	56.7	58.4	3792.9	58.4	3792.9	55.0	61.9	55.0	61.9
2026	59.6	59.6	59.6	59.6	64.9	4821.9	64.9	4821.9	61.1	62.1	61.1	62.1
2027	59.6	61.3	60.8	60.9	64.9	7575.1	66.3	674.6	61.1	62.6	62.3	61.9
2028	59.6	99.5	62.1	66.2	64.9	999.0	67.6	433.4	61.1	61.9	63.6	61.2
2029	59.6	107.2	63.3	70.4	64.9	534.7	69.0	316.4	61.1	316.8	64.9	227.5
2030	59.6	99.0	64.6	68.3	64.9	365.1	70.4	249.2	61.1	230.3	66.2	179.2
2031	59.6	99.0	66.0	67.6	64.9	365.1	71.8	249.2	61.1	230.3	67.6	179.2

Table 72 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	0.0	0.0	0.0	0.0	40.6	106.8	40.6	106.8	40.6	742.5	40.6	742.5
2023	0.0	0.0	0.0	0.0	41.1	106.8	41.1	106.8	41.1	742.5	41.1	742.5
2024	0.0	0.0	0.0	0.0	44.3	106.8	44.3	106.8	44.3	742.5	44.3	742.5
2025	0.0	0.0	0.0	0.0	48.1	106.8	48.1	106.8	48.1	742.5	48.1	742.5
2026	0.0	0.0	0.0	0.0	53.5	542.6	53.5	542.6	53.5	742.5	53.5	742.5
2027	0.0	0.0	0.0	0.0	54.1	520.9	55.2	328.4	54.1	709.0	55.2	394.4
2028	0.0	0.0	0.0	0.0	54.1	270.0	56.3	207.1	54.1	345.2	56.3	248.6
2029	0.0	0.0	0.0	0.0	54.1	182.1	57.5	151.2	54.1	228.1	57.5	181.5
2030	0.0	0.0	0.0	0.0	54.1	137.4	58.6	119.0	54.1	170.3	58.6	142.9
2031	0.0	0.0	0.0	0.0	54.1	137.4	59.8	119.0	54.1	170.3	59.8	142.9

Table 73 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 74 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.5	43.4	44.5	43.4	41.4	28.7	41.4	28.7	0.0	0.0	0.0	0.0
2023	45.2	44.6	45.2	44.6	42.0	31.5	42.0	31.5	0.0	0.0	0.0	0.0
2024	49.1	49.1	49.1	49.1	45.7	45.6	45.7	45.6	0.0	0.0	0.0	0.0
2025	53.4	54.7	53.4	54.7	49.6	55.3	49.6	55.3	0.0	0.0	0.0	0.0
2026	59.3	62.2	59.3	62.2	55.1	56.5	55.1	56.5	0.0	0.0	0.0	0.0
2027	59.3	62.3	60.5	62.9	55.1	56.5	56.3	55.0	0.0	0.0	0.0	0.0
2028	59.3	61.7	61.8	62.1	55.1	55.2	57.4	54.7	0.0	0.0	0.0	0.0
2029	59.3	61.1	63.0	61.4	55.1	58.3	58.6	59.8	0.0	0.0	0.0	0.0
2030	59.3	65.7	64.3	69.8	55.1	57.9	59.8	59.8	0.0	0.0	0.0	0.0
2031	59.3	88.0	65.6	87.1	55.1	80.4	61.0	80.0	0.0	0.0	0.0	0.0

Table 75 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	40.8	671.8	40.8	671.8	43.1	43.2	43.1	43.2	42.3	45.3	42.3	45.3
2023	41.4	671.8	41.4	671.8	43.7	43.9	43.7	43.9	42.9	49.2	42.9	49.2
2024	45.0	671.8	45.0	671.8	47.5	49.4	47.5	49.4	46.7	49.7	46.7	49.7
2025	48.9	671.8	48.9	671.8	51.7	61.1	51.7	61.1	50.7	55.0	50.7	55.0
2026	54.4	671.8	54.4	671.8	57.4	63.2	57.4	63.2	56.4	1119.7	56.4	1119.7
2027	54.4	642.7	55.5	373.0	57.4	63.2	58.6	61.9	56.4	1051.7	57.5	434.6
2028	54.4	319.7	56.6	235.1	57.4	62.5	59.8	61.0	56.4	434.9	58.7	274.0
2029	54.4	212.8	57.8	171.7	57.4	63.5	61.0	61.9	56.4	274.1	59.9	200.0
2030	54.4	159.5	58.9	135.2	57.4	264.3	62.2	182.8	56.4	200.1	61.1	157.5
2031	54.4	159.5	60.2	135.2	57.4	265.1	63.5	183.1	56.4	200.1	62.3	157.5

Table 76 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Domestic Car Fleet (mpg)												
	VWA				Total							
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	41.4	34.1	41.4	34.1	43.5	48.9	43.5	48.9	0.0	0.0	0.0	0.0
2023	42.0	34.2	42.0	34.2	44.2	52.4	44.2	52.4	0.0	0.0	0.0	0.0
2024	45.7	40.2	45.7	40.2	48.1	60.9	48.1	60.9	0.0	0.0	0.0	0.0
2025	49.6	40.3	49.6	40.3	52.3	67.3	52.3	67.3	0.0	0.0	0.0	0.0
2026	55.2	117.7	55.2	117.7	58.0	72.2	58.0	72.2	0.0	0.0	0.0	0.0
2027	55.2	117.1	56.3	104.1	58.0	73.3	59.2	72.2	0.0	0.0	0.0	0.0
2028	55.2	104.5	57.4	94.1	58.0	81.7	60.4	71.9	0.0	0.0	0.0	0.0
2029	55.2	94.4	58.6	85.8	58.0	84.0	61.7	77.6	0.0	0.0	0.0	0.0
2030	55.2	86.3	59.8	78.8	58.0	88.9	62.9	82.1	0.0	0.0	0.0	0.0
2031	55.2	86.3	61.0	78.8	58.0	100.6	64.2	89.6	0.0	0.0	0.0	0.0

Table 77 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	BMW				Ford				GM			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.3	37.8	43.3	37.8	0.0	0.0	0.0	0.0	47.1	43.8	47.1	43.8
2023	44.0	42.2	44.0	42.2	0.0	0.0	0.0	0.0	47.9	44.0	47.9	44.0
2024	47.8	51.8	47.8	51.8	0.0	0.0	0.0	0.0	52.0	52.9	52.0	52.9
2025	52.0	54.7	52.0	54.7	0.0	0.0	0.0	0.0	56.5	56.6	56.5	56.6
2026	57.7	60.9	57.7	60.9	0.0	0.0	0.0	0.0	62.8	65.1	62.8	65.1
2027	57.7	72.4	58.9	68.9	0.0	0.0	0.0	0.0	62.8	65.0	64.1	63.9
2028	57.7	73.0	60.1	69.1	0.0	0.0	0.0	0.0	62.8	64.0	65.4	62.9
2029	57.7	70.6	61.3	66.9	0.0	0.0	0.0	0.0	62.8	70.1	66.8	71.3
2030	57.7	81.0	62.6	74.6	0.0	0.0	0.0	0.0	62.8	87.6	68.1	86.1
2031	57.7	81.0	63.9	74.1	0.0	0.0	0.0	0.0	62.8	198.8	69.5	169.0

Table 78 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Honda				Hyundai				KIA			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	44.9	30.4	44.9	30.4	44.1	45.1	44.1	45.1	44.4	47.0	44.4	47.0
2023	45.6	31.2	45.6	31.2	44.8	47.3	44.8	47.3	45.0	50.6	45.0	50.6
2024	49.6	31.3	49.6	31.3	48.7	52.0	48.7	52.0	49.0	55.5	49.0	55.5
2025	53.8	31.7	53.8	31.7	52.9	52.9	52.9	52.9	53.2	58.7	53.2	58.7
2026	59.8	427.4	59.8	427.4	58.8	59.6	58.8	59.6	59.1	60.1	59.1	60.1
2027	59.8	409.1	61.1	242.0	58.8	60.7	60.0	62.4	59.1	60.4	60.3	59.9
2028	59.8	205.5	62.3	152.6	58.8	59.6	61.2	61.2	59.1	59.4	61.6	61.7
2029	59.8	137.2	63.6	111.4	58.8	62.9	62.5	66.2	59.1	60.4	62.8	64.3
2030	59.8	102.9	64.9	87.7	58.8	61.4	63.8	64.3	59.1	77.5	64.1	80.7
2031	59.8	102.9	66.2	87.7	58.8	68.2	65.1	71.6	59.1	111.6	65.4	80.7

Table 79 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	JLR				Karma				Lucid			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	43.2	30.6	43.2	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	43.8	68.6	43.8	68.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	47.6	69.1	47.6	69.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	51.8	69.2	51.8	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	57.5	74.2	57.5	74.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	57.5	75.4	58.7	70.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	57.5	70.1	59.9	66.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	57.5	65.4	61.1	62.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	57.5	61.2	62.4	61.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	57.5	61.2	63.7	61.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 80 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Mazda				Mercedes-Benz				Mitsubishi			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	46.1	41.5	46.1	41.5	41.8	35.5	41.8	35.5	47.0	42.9	47.0	42.9
2023	46.8	42.5	46.8	42.5	42.4	45.3	42.4	45.3	47.7	43.3	47.7	43.3
2024	50.9	55.6	50.9	55.6	46.1	47.9	46.1	47.9	51.9	61.2	51.9	61.2
2025	55.3	58.8	55.3	58.8	50.1	52.7	50.1	52.7	56.4	67.6	56.4	67.6
2026	61.5	61.5	61.5	61.5	55.6	71.3	55.6	71.3	62.7	67.7	62.7	67.7
2027	61.5	61.5	62.7	62.4	55.6	74.1	56.8	70.8	62.7	68.0	63.9	66.5
2028	61.5	62.3	64.0	62.0	55.6	69.8	57.9	66.9	62.7	73.2	65.2	72.0
2029	61.5	148.4	65.3	130.6	55.6	69.0	59.1	65.9	62.7	71.4	66.6	70.2
2030	61.5	131.8	66.7	115.7	55.6	68.5	60.3	65.3	62.7	69.9	67.9	68.7
2031	61.5	131.8	68.0	115.7	55.6	70.6	61.6	67.1	62.7	70.1	69.3	78.2

Table 81 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Nissan				Stellantis				Subaru			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	45.2	46.9	45.2	46.9	44.9	33.5	44.9	33.5	46.0	38.3	46.0	38.3
2023	45.9	68.7	45.9	68.7	45.5	35.8	45.5	35.8	46.7	52.1	46.7	52.1
2024	49.9	72.0	49.9	72.0	49.5	45.1	49.5	45.1	50.7	52.2	50.7	52.2
2025	54.3	72.7	54.3	72.7	53.8	55.1	53.8	55.1	55.1	65.4	55.1	65.4
2026	60.3	73.1	60.3	73.1	59.8	66.5	59.8	66.5	61.3	68.1	61.3	68.1
2027	60.3	73.0	61.5	70.8	59.8	66.4	61.0	64.2	61.3	71.8	62.5	69.1
2028	60.3	70.7	62.8	82.5	59.8	63.7	62.3	61.7	61.3	94.7	63.8	88.0
2029	60.3	68.6	64.0	78.4	59.8	61.2	63.5	59.6	61.3	159.3	65.1	136.4
2030	60.3	66.5	65.4	74.6	59.8	61.4	64.8	59.6	61.3	136.9	66.4	119.6
2031	60.3	66.5	66.7	74.6	59.8	61.4	66.1	59.6	61.3	136.9	67.8	119.7

Table 82 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	Tesla				Toyota				Volvo			
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	42.4	839.5	42.4	839.5	45.3	48.0	45.3	48.0	43.2	78.9	43.2	78.9
2023	43.1	839.5	43.1	839.5	46.0	54.8	46.0	54.8	43.9	80.4	43.9	80.4
2024	46.8	839.5	46.8	839.5	50.0	56.1	50.0	56.1	47.7	83.6	47.7	83.6
2025	50.9	839.5	50.9	839.5	54.3	58.2	54.3	58.2	51.8	90.0	51.8	90.0
2026	56.6	839.5	56.6	839.5	60.4	64.9	60.4	64.9	57.6	91.5	57.6	91.5
2027	56.6	799.6	57.7	420.9	60.4	66.1	61.6	64.6	57.6	91.1	58.7	84.8
2028	56.6	378.4	58.9	265.4	60.4	65.4	62.9	63.7	57.6	82.4	59.9	77.2
2029	56.6	247.7	60.1	193.7	60.4	66.7	64.2	64.9	57.6	76.5	61.2	72.1
2030	56.6	184.2	61.3	152.6	60.4	69.1	65.5	67.0	57.6	70.6	62.4	66.8
2031	56.6	184.2	62.6	152.6	60.4	72.0	66.8	68.4	57.6	74.4	63.7	69.6

Table 83 - Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)

Comparison of No Action Alternative (Baseline) and Alternative PC2LT002 Required and Achieved CAFE Levels in MYs 2022-2031 for the Imported Car Fleet (mpg)												
	VWA				Total							
	No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002		No Action Alternative (Baseline)		Alternative PC2LT002	
Model Year	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved	Required	Achieved
2022	45.3	40.7	45.3	40.7	44.7	45.5	44.7	45.5	0.0	0.0	0.0	0.0
2023	46.0	42.3	46.0	42.3	45.4	51.0	45.4	51.0	0.0	0.0	0.0	0.0
2024	50.0	49.9	50.0	49.9	49.3	56.2	49.3	56.2	0.0	0.0	0.0	0.0
2025	54.4	54.4	54.4	54.4	53.6	59.4	53.6	59.4	0.0	0.0	0.0	0.0
2026	60.4	60.4	60.4	60.4	59.5	65.7	59.5	65.7	0.0	0.0	0.0	0.0
2027	60.4	62.0	61.6	67.3	59.5	67.6	60.7	67.1	0.0	0.0	0.0	0.0
2028	60.4	65.5	62.9	70.4	59.5	67.5	62.0	67.8	0.0	0.0	0.0	0.0
2029	60.4	63.1	64.2	67.0	59.5	69.5	63.3	70.2	0.0	0.0	0.0	0.0
2030	60.4	62.6	65.5	65.4	59.5	72.1	64.6	72.1	0.0	0.0	0.0	0.0
2031	60.4	65.8	66.8	72.9	59.5	79.3	65.9	76.8	0.0	0.0	0.0	0.0

Incremental Benefits and Costs

Table 84 - Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	7.6	17.8	23.4	33.5	59.6
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.1
Safety Costs Internalized by Drivers	1.4	3.4	4.5	5.8	8.8
Subtotal - Incremental Private Costs	9.1	21.2	27.9	39.3	68.4
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	0.5	1.9	2.8	4.2	8.5
Safety Costs Not Internalized by Drivers	-0.6	-0.2	0.5	2.0	8.0
Loss in Fuel Tax Revenue	3.3	8.4	10.8	14.2	20.8
Subtotal - Incremental External Costs	3.1	10.2	14.1	20.3	37.3
Total Incremental Social Costs	12.2	31.3	42.0	59.7	105.7
Private Benefits					
Reduced Fuel Costs	13.5	33.8	43.8	57.4	85.5
Benefits from Additional Driving	2.1	5.1	6.7	8.7	13.0
Less Frequent Refueling	-1.4	-3.5	-4.7	-6.0	-6.8
Subtotal - Incremental Private Benefits	14.2	35.4	45.8	60.1	91.7
External Benefits					
Reduction in Petroleum Market Externality	0.8	2.0	2.6	3.4	5.0
Reduced Climate Damages, SC-GHG 2%	22.7	57.8	74.4	97.6	144.7
Reduced Health Damages	1.0	2.6	3.4	4.4	6.3
Subtotal - Incremental External Benefits	24.6	62.4	80.4	105.4	156.1
Total Incremental Social Benefits, SC-GHG 2%	38.8	97.8	126.3	165.5	247.8
Net Incremental Social Benefits, SC-GHG 2%	26.7	66.4	84.2	105.8	142.1

Table 85 - Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	0.5	0.2	1.9	4.7	12.4
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.0
Safety Costs Internalized by Drivers	0.3	0.3	0.6	0.9	1.7
Subtotal - Incremental Private Costs	0.8	0.5	2.5	5.6	14.1
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	-0.2	0.9	1.2	0.9	2.4
Safety Costs Not Internalized by Drivers	-0.5	1.4	1.6	0.9	3.1
Loss in Fuel Tax Revenue	0.4	0.4	1.1	1.5	2.8
Subtotal - Incremental External Costs	-0.2	2.7	4.0	3.4	8.3
Total Incremental Social Costs	0.6	3.2	6.4	9.0	22.4
Private Benefits					
Reduced Fuel Costs	2.0	1.5	4.6	6.8	12.3
Benefits from Additional Driving	0.5	0.4	0.9	1.3	2.5
Less Frequent Refueling	-0.5	-0.4	-0.7	-0.7	-1.3
Subtotal - Incremental Private Benefits	2.0	1.6	4.9	7.3	13.6
External Benefits					
Reduction in Petroleum Market Externality	0.1	0.1	0.3	0.4	0.7
Reduced Climate Damages, SC-GHG 2%	3.2	2.8	7.9	10.7	19.8
Reduced Health Damages	0.0	0.1	0.3	0.4	0.7
Subtotal - Incremental External Benefits	3.3	2.9	8.5	11.5	21.2
Total Incremental Social Benefits, SC-GHG 2%	5.3	4.5	13.3	18.8	34.8
Net Incremental Social Benefits, SC-GHG 2%	4.7	1.3	6.9	9.9	12.4

Table 86 - Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	7.1	17.6	21.6	28.8	47.2
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.1
Safety Costs Internalized by Drivers	1.2	3.1	3.9	4.9	7.0
Subtotal - Incremental Private Costs	8.2	20.7	25.4	33.8	54.3
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	0.6	1.0	1.6	3.3	6.1
Safety Costs Not Internalized by Drivers	-0.2	-1.6	-1.1	1.0	4.9
Loss in Fuel Tax Revenue	2.9	8.0	9.7	12.7	18.0
Subtotal - Incremental External Costs	3.3	7.4	10.2	17.0	29.0
Total Incremental Social Costs	11.6	28.1	35.6	50.7	83.3
Private Benefits					
Reduced Fuel Costs	11.6	32.2	39.2	50.7	73.2
Benefits from Additional Driving	1.7	4.6	5.8	7.4	10.5
Less Frequent Refueling	-1.0	-3.1	-4.0	-5.3	-5.5
Subtotal - Incremental Private Benefits	12.2	33.8	40.9	52.8	78.2
External Benefits					
Reduction in Petroleum Market Externality	0.7	1.9	2.3	3.0	4.3
Reduced Climate Damages, SC-GHG 2%	19.6	55.0	66.5	86.9	124.9
Reduced Health Damages	1.0	2.5	3.1	4.0	5.6
Subtotal - Incremental External Benefits	21.3	59.5	72.0	93.9	134.9
Total Incremental Social Benefits, SC-GHG 2%	33.5	93.3	112.9	146.7	213.0
Net Incremental Social Benefits, SC-GHG 2%	22.0	65.1	77.3	96.0	129.7

Table 87 - Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Total Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	5.7	13.2	17.3	24.8	43.5
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.1
Safety Costs Internalized by Drivers	0.8	1.9	2.5	3.3	4.9
Subtotal - Incremental Private Costs	6.5	15.1	19.9	28.1	48.5
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	0.3	1.2	1.7	2.4	4.8
Safety Costs Not Internalized by Drivers	-0.3	0.0	0.3	1.2	4.6
Loss in Fuel Tax Revenue	1.9	4.9	6.2	8.2	11.9
Subtotal - Incremental External Costs	2.0	6.0	8.2	11.8	21.2
Total Incremental Social Costs	8.4	21.1	28.1	39.8	69.7
Private Benefits					
Reduced Fuel Costs	7.7	19.3	25.1	32.8	48.5
Benefits from Additional Driving	1.2	2.9	3.8	4.9	7.3
Less Frequent Refueling	-0.8	-2.0	-2.7	-3.5	-3.9
Subtotal - Incremental Private Benefits	8.1	20.2	26.1	34.2	51.8
External Benefits					
Reduction in Petroleum Market Externality	0.4	1.1	1.5	1.9	2.8
Reduced Climate Damages, SC-GHG 2%	22.7	57.8	74.4	97.6	144.7
Reduced Health Damages	0.5	1.3	1.7	2.2	3.1
Subtotal - Incremental External Benefits	23.7	60.2	77.5	101.7	150.6
Total Incremental Social Benefits, SC-GHG 2%	31.8	80.4	103.7	135.9	202.5
Net Incremental Social Benefits, SC-GHG 2%	23.4	59.3	75.6	96.1	132.8

Table 88 - Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Passenger Car Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	0.4	0.2	1.4	3.5	9.1
Increased Maintenance and Repair Costs	0.0	0.0	0.0	0.0	0.0
Safety Costs Internalized by Drivers	0.2	0.2	0.3	0.5	1.0
Subtotal - Incremental Private Costs	0.6	0.3	1.7	4.0	10.1
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	-0.1	0.6	0.7	0.5	1.4
Safety Costs Not Internalized by Drivers	-0.2	0.8	1.0	0.6	1.9
Loss in Fuel Tax Revenue	0.2	0.2	0.7	0.9	1.6
Subtotal - Incremental External Costs	0.0	1.6	2.3	2.0	4.9
Total Incremental Social Costs	0.5	2.0	4.1	6.0	14.9
Private Benefits					
Reduced Fuel Costs	1.1	0.9	2.6	3.9	7.0
Benefits from Additional Driving	0.3	0.2	0.5	0.7	1.4
Less Frequent Refueling	-0.3	-0.2	-0.4	-0.4	-0.7
Subtotal - Incremental Private Benefits	1.1	0.9	2.8	4.2	7.7
External Benefits					
Reduction in Petroleum Market Externality	0.1	0.1	0.2	0.2	0.4
Reduced Climate Damages, SC-GHG 2%	3.2	2.8	7.9	10.7	19.8
Reduced Health Damages	0.0	0.0	0.2	0.2	0.3
Subtotal - Incremental External Benefits	3.2	2.8	8.2	11.1	20.5
Total Incremental Social Benefits, SC-GHG 2%	4.3	3.8	10.9	15.3	28.2
Net Incremental Social Benefits, SC-GHG 2%	3.8	1.8	6.9	9.2	13.3

Table 89 - Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs Over the Lifetimes of Light Truck Fleet Produced Through 2031 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	5.3	13.0	15.9	21.2	34.4
Increased Maintenance and Repair Costs	0.0	0.0	0.0	0.0	0.0
Safety Costs Internalized by Drivers	0.7	1.8	2.2	2.8	4.0
Subtotal - Incremental Private Costs	5.9	14.8	18.1	24.1	38.4
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	0.4	0.6	1.0	1.9	3.4
Safety Costs Not Internalized by Drivers	-0.1	-0.8	-0.6	0.6	2.7
Loss in Fuel Tax Revenue	1.7	4.6	5.6	7.3	10.3
Subtotal - Incremental External Costs	2.0	4.4	5.9	9.7	16.4
Total Incremental Social Costs	7.9	19.1	24.0	33.8	54.8
Private Benefits					
Reduced Fuel Costs	6.7	18.4	22.4	28.9	41.5
Benefits from Additional Driving	1.0	2.6	3.3	4.2	5.9
Less Frequent Refueling	-0.6	-1.8	-2.3	-3.1	-3.2
Subtotal - Incremental Private Benefits	7.0	19.3	23.4	30.1	44.2
External Benefits					
Reduction in Petroleum Market Externality	0.4	1.1	1.3	1.7	2.4
Reduced Climate Damages, SC-GHG 2%	19.6	55.0	66.5	86.9	124.9
Reduced Health Damages	0.5	1.3	1.5	2.0	2.8
Subtotal - Incremental External Benefits	20.5	57.4	69.4	90.6	130.1
Total Incremental Social Benefits, SC-GHG 2%	27.5	76.6	92.8	120.6	174.2
Net Incremental Social Benefits, SC-GHG 2%	19.5	57.5	68.7	86.8	119.5

Table 90 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	0.7	18.2	28.1	59.8	179.9
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.3
Safety Costs Internalized by Drivers	2.7	6.0	7.8	12.4	24.3
Subtotal - Incremental Private Costs	3.4	24.2	35.9	72.2	204.5
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.8	3.9	5.1	8.0	15.8
Safety Costs Not Internalized by Drivers	0.2	0.1	0.5	1.4	4.0
Loss in Fuel Tax Revenue	5.0	14.0	16.3	27.4	59.1
Subtotal - Incremental External Costs	7.1	18.0	21.8	36.8	78.9
Total Incremental Social Costs	10.5	42.2	57.8	109.0	283.4
Private Benefits					
Reduced Fuel Costs	21.5	57.5	69.6	118.2	257.2
Benefits from Additional Driving	4.1	9.4	12.4	19.3	36.5
Less Frequent Refueling	-3.0	-5.4	-4.4	-9.4	-10.8
Subtotal - Incremental Private Benefits	22.6	61.4	77.6	128.1	282.9
External Benefits					
Reduction in Petroleum Market Externality	1.3	3.5	4.0	6.9	15.1
Reduced Climate Damages, SC-GHG 2%	36.9	101.6	117.6	204.0	456.0
Reduced Health Damages	1.4	3.8	3.9	7.0	17.7
Subtotal - Incremental External Benefits	39.6	108.8	125.6	217.9	488.7
Total Incremental Social Benefits, SC-GHG 2%	62.2	170.2	203.2	346.0	771.6
Net Incremental Social Benefits, SC-GHG 2%	51.8	128.1	145.4	237.0	488.2

Table 91 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	-6.8	-9.2	-7.7	1.1	25.3
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.1
Safety Costs Internalized by Drivers	1.2	0.0	0.9	1.8	5.2
Subtotal - Incremental Private Costs	-5.6	-9.3	-6.8	3.0	30.5
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	3.3	4.2	5.9	6.0	14.8
Safety Costs Not Internalized by Drivers	4.4	7.2	9.2	8.8	22.4
Loss in Fuel Tax Revenue	1.5	-1.4	0.2	1.3	5.9
Subtotal - Incremental External Costs	9.2	10.0	15.4	16.1	43.1
Total Incremental Social Costs	3.5	0.7	8.6	19.1	73.6
Private Benefits					
Reduced Fuel Costs	5.7	-7.0	-0.4	6.0	25.4
Benefits from Additional Driving	1.8	0.1	1.6	2.9	7.5
Less Frequent Refueling	-2.1	0.3	-1.7	-2.0	-4.7
Subtotal - Incremental Private Benefits	5.4	-6.6	-0.5	6.9	28.2
External Benefits					
Reduction in Petroleum Market Externality	0.4	-0.4	0.0	0.3	1.5
Reduced Climate Damages, SC-GHG 2%	11.8	-12.0	0.6	9.9	45.3
Reduced Health Damages	0.2	-0.9	-0.6	-0.4	1.2
Subtotal - Incremental External Benefits	12.4	-13.3	0.1	9.9	48.0
Total Incremental Social Benefits, SC-GHG 2%	17.8	-19.9	-0.4	16.8	76.2
Net Incremental Social Benefits, SC-GHG 2%	14.3	-20.6	-9.0	-2.3	2.6

Table 92 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 3% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	7.5	27.4	35.9	58.7	154.6
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.2
Safety Costs Internalized by Drivers	1.5	6.1	6.8	10.6	19.1
Subtotal - Incremental Private Costs	9.0	33.5	42.7	69.2	174.0
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	-1.4	-0.2	-0.9	2.0	1.1
Safety Costs Not Internalized by Drivers	-4.1	-7.1	-8.7	-7.4	-18.5
Loss in Fuel Tax Revenue	3.5	15.4	16.1	26.0	53.2
Subtotal - Incremental External Costs	-2.1	8.0	6.4	20.7	35.9
Total Incremental Social Costs	6.9	41.5	49.1	89.9	209.8
Private Benefits					
Reduced Fuel Costs	15.8	64.5	70.0	112.2	231.8
Benefits from Additional Driving	2.3	9.3	10.8	16.4	28.9
Less Frequent Refueling	-0.9	-5.8	-2.6	-7.4	-6.1
Subtotal - Incremental Private Benefits	17.2	68.0	78.2	121.2	254.7
External Benefits					
Reduction in Petroleum Market Externality	0.9	3.8	4.0	6.5	13.6
Reduced Climate Damages, SC-GHG 2%	25.1	113.6	117.0	194.1	410.6
Reduced Health Damages	1.2	4.7	4.5	7.4	16.5
Subtotal - Incremental External Benefits	27.2	122.1	125.4	208.0	440.7
Total Incremental Social Benefits, SC-GHG 2%	44.4	190.1	203.6	329.2	695.4
Net Incremental Social Benefits, SC-GHG 2%	37.5	148.6	154.4	239.3	485.6

Table 93 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs for Calendar Years 2022-2050 for Total Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	2.7	14.5	20.7	40.0	108.1
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.2
Safety Costs Internalized by Drivers	1.4	3.2	4.1	6.3	12.0
Subtotal - Incremental Private Costs	4.0	17.6	24.8	46.3	120.3
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.0	2.1	2.7	4.2	8.0
Safety Costs Not Internalized by Drivers	0.1	0.1	0.3	0.8	2.4
Loss in Fuel Tax Revenue	2.7	7.6	9.0	14.4	29.7
Subtotal - Incremental External Costs	3.8	9.7	12.0	19.5	40.1
Total Incremental Social Costs	7.9	27.4	36.8	65.8	160.4
Private Benefits					
Reduced Fuel Costs	11.4	30.7	37.6	61.4	127.9
Benefits from Additional Driving	2.1	4.9	6.5	9.9	18.1
Less Frequent Refueling	-1.5	-2.8	-2.6	-4.9	-5.6
Subtotal - Incremental Private Benefits	12.1	32.8	41.5	66.4	140.4
External Benefits					
Reduction in Petroleum Market Externality	0.7	1.8	2.2	3.6	7.5
Reduced Climate Damages, SC-GHG 2%	36.9	101.6	117.6	204.0	456.0
Reduced Health Damages	0.7	1.8	1.9	3.3	7.7
Subtotal - Incremental External Benefits	38.2	105.2	121.7	210.8	471.1
Total Incremental Social Benefits, SC-GHG 2%	50.3	138.0	163.2	277.2	611.5
Net Incremental Social Benefits, SC-GHG 2%	42.5	110.6	126.4	211.4	451.1

Table 94 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs for Calendar Years 2022-2050 for Passenger Car Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	-3.0	-4.5	-3.4	1.8	16.0
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.1
Safety Costs Internalized by Drivers	0.5	0.0	0.5	0.9	2.5
Subtotal - Incremental Private Costs	-2.5	-4.5	-2.9	2.7	18.6
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	1.4	2.0	2.8	2.8	7.0
Safety Costs Not Internalized by Drivers	1.9	3.4	4.3	4.1	10.4
Loss in Fuel Tax Revenue	0.7	-0.6	0.2	0.7	2.9
Subtotal - Incremental External Costs	4.0	4.9	7.3	7.6	20.3
Total Incremental Social Costs	1.5	0.4	4.4	10.3	38.9
Private Benefits					
Reduced Fuel Costs	2.8	-3.0	0.2	3.2	12.7
Benefits from Additional Driving	0.9	0.1	0.8	1.4	3.7
Less Frequent Refueling	-1.0	0.1	-0.8	-0.9	-2.2
Subtotal - Incremental Private Benefits	2.7	-2.8	0.2	3.7	14.2
External Benefits					
Reduction in Petroleum Market Externality	0.2	-0.2	0.0	0.2	0.7
Reduced Climate Damages, SC-GHG 2%	11.8	-12.0	0.6	9.9	45.3
Reduced Health Damages	0.1	-0.4	-0.2	-0.2	0.5
Subtotal - Incremental External Benefits	12.1	-12.6	0.4	9.9	46.5
Total Incremental Social Benefits, SC-GHG 2%	14.7	-15.4	0.6	13.6	60.7
Net Incremental Social Benefits, SC-GHG 2%	13.2	-15.7	-3.8	3.3	21.8

Table 95 - Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%

Incremental Benefits and Costs for Calendar Years 2022-2050 for Light Truck Fleet Produced Through MY 2050 (2021$ BILLIONS), 7% Percent Discount Rate, by Alternative, SC-GHG 2%					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Private Costs					
Technology Costs to Increase Fuel Economy	5.7	19.0	24.1	38.2	92.1
Consumer Surplus Loss from Reduced New Vehicle Sales	0.0	0.0	0.0	0.0	0.1
Safety Costs Internalized by Drivers	0.8	3.1	3.6	5.4	9.5
Subtotal - Incremental Private Costs	6.5	22.1	27.7	43.7	101.7
External Costs					
Congestion and Noise Costs from Rebound-Effect Driving	-0.5	0.1	-0.1	1.3	1.0
Safety Costs Not Internalized by Drivers	-1.7	-3.3	-4.0	-3.2	-8.0
Loss in Fuel Tax Revenue	2.0	8.1	8.8	13.7	26.8
Subtotal - Incremental External Costs	-0.2	4.9	4.7	11.8	19.8
Total Incremental Social Costs	6.3	27.0	32.4	55.5	121.5
Private Benefits					
Reduced Fuel Costs	8.7	33.7	37.4	58.2	115.2
Benefits from Additional Driving	1.3	4.8	5.7	8.4	14.4
Less Frequent Refueling	-0.5	-2.9	-1.8	-4.0	-3.4
Subtotal - Incremental Private Benefits	9.4	35.6	41.3	62.7	126.2
External Benefits					
Reduction in Petroleum Market Externality	0.5	2.0	2.1	3.4	6.7
Reduced Climate Damages, SC-GHG 2%	25.1	113.6	117.0	194.1	410.6
Reduced Health Damages	0.6	2.2	2.2	3.4	7.2
Subtotal - Incremental External Benefits	26.2	117.8	121.3	200.9	424.6
Total Incremental Social Benefits, SC-GHG 2%	35.6	153.3	162.6	263.6	550.8
Net Incremental Social Benefits, SC-GHG 2%	29.3	126.3	130.2	208.1	429.3

Technology Costs per Vehicle, by Model Year

Table 96 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	468	996	1,361	1,368	1,162	1,287	1,517	1,574	1,605
Alternative PC2LT002	0	468	996	1,361	1,368	1,309	1,403	1,673	1,706	1,685
Alternative PC1LT3	0	468	996	1,361	1,368	1,428	1,596	1,874	1,901	1,826
Alternative PC2LT4	0	468	996	1,361	1,368	1,507	1,692	1,965	1,997	1,936
Alternative PC3LT5	0	468	996	1,361	1,368	1,637	1,887	2,104	2,158	2,167
Alternative PC6LT8	0	468	996	1,361	1,368	1,821	2,140	2,481	2,734	3,040

Table 97 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	392	858	1,125	1,072	1,009	1,132	1,196	1,364	1,509
Alternative PC2LT002	0	392	858	1,125	1,072	1,068	1,062	1,271	1,448	1,498
Alternative PC1LT3	0	392	858	1,125	1,072	1,029	1,128	1,283	1,428	1,369
Alternative PC2LT4	0	392	858	1,125	1,072	1,068	1,197	1,373	1,538	1,475
Alternative PC3LT5	0	392	858	1,125	1,072	1,180	1,394	1,523	1,693	1,587
Alternative PC6LT8	0	392	858	1,125	1,072	1,430	1,650	1,958	2,220	2,074

Table 98 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	512	1,074	1,488	1,524	1,242	1,366	1,680	1,680	1,653
Alternative PC2LT002	0	512	1,074	1,488	1,524	1,434	1,577	1,877	1,837	1,779
Alternative PC1LT3	0	512	1,074	1,488	1,524	1,636	1,836	2,175	2,141	2,057
Alternative PC2LT4	0	512	1,074	1,488	1,524	1,735	1,945	2,267	2,231	2,170
Alternative PC3LT5	0	512	1,074	1,488	1,524	1,874	2,139	2,399	2,393	2,461
Alternative PC6LT8	0	512	1,074	1,488	1,524	2,023	2,388	2,744	2,995	3,534

Table 99 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	524	1,110	1,714	1,436	1,324	1,229	1,059	1,139	1,541
Alternative PC2LT002	0	524	1,110	1,714	1,436	1,301	1,231	1,058	1,124	1,470
Alternative PC1LT3	0	524	1,110	1,714	1,436	1,302	1,257	1,085	1,151	1,350
Alternative PC2LT4	0	524	1,110	1,714	1,436	1,302	1,257	1,085	1,151	1,468
Alternative PC3LT5	0	524	1,110	1,714	1,436	1,302	1,258	1,085	1,161	1,652
Alternative PC6LT8	0	524	1,110	1,714	1,436	1,350	1,323	1,141	1,202	1,881

Table 100 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	787	1,570	1,663	1,694	1,412	1,889	2,230	1,995	1,814
Alternative PC2LT002	0	787	1,570	1,663	1,694	1,458	1,929	2,266	2,027	1,839
Alternative PC1LT3	0	787	1,570	1,663	1,694	1,409	1,956	2,290	2,048	1,858
Alternative PC2LT4	0	787	1,570	1,663	1,694	1,473	2,015	2,342	2,095	1,901
Alternative PC3LT5	0	787	1,570	1,663	1,694	1,829	2,315	2,604	2,326	2,148
Alternative PC6LT8	0	787	1,570	1,663	1,694	2,713	3,381	4,060	3,733	3,478

Table 101 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	213	1,880	2,267	2,165	1,798	1,690	1,770	1,786	2,120
Alternative PC2LT002	0	213	1,880	2,267	2,165	1,999	1,875	2,230	2,194	2,481
Alternative PC1LT3	0	213	1,880	2,267	2,165	2,562	2,397	2,699	2,633	2,620
Alternative PC2LT4	0	213	1,880	2,267	2,165	2,597	2,426	2,730	2,651	2,774
Alternative PC3LT5	0	213	1,880	2,267	2,165	2,939	2,750	3,042	2,945	3,359
Alternative PC6LT8	0	213	1,880	2,267	2,165	3,008	2,865	3,229	3,129	4,450

Table 102 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	560	610	1,040	1,144	1,128	1,689	1,621	1,447	1,276
Alternative PC2LT002	0	560	610	1,040	1,144	1,935	1,870	1,784	1,590	1,365
Alternative PC1LT3	0	560	610	1,040	1,144	1,934	2,434	2,411	2,161	1,890
Alternative PC2LT4	0	560	610	1,040	1,144	1,952	2,497	2,472	2,275	2,001
Alternative PC3LT5	0	560	610	1,040	1,144	2,008	2,785	2,451	2,362	2,077
Alternative PC6LT8	0	560	610	1,040	1,144	2,260	2,390	2,576	2,711	2,442

Table 103 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	262	458	937	1,039	945	901	1,472	1,363	1,568
Alternative PC2LT002	0	262	458	937	1,039	1,039	981	1,638	1,495	1,683
Alternative PC1LT3	0	262	458	937	1,039	1,065	1,044	1,590	1,448	1,639
Alternative PC2LT4	0	262	458	937	1,039	1,412	1,421	2,025	1,831	1,859
Alternative PC3LT5	0	262	458	937	1,039	1,643	1,524	2,110	1,965	1,913
Alternative PC6LT8	0	262	458	937	1,039	1,703	1,783	2,702	2,516	2,596

Table 104 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	132	375	514	717	675	665	1,083	1,371	1,519
Alternative PC2LT002	0	132	375	514	717	668	975	1,391	1,736	1,597
Alternative PC1LT3	0	132	375	514	717	663	1,201	1,608	1,907	1,843
Alternative PC2LT4	0	132	375	514	717	667	1,273	1,668	2,006	1,994
Alternative PC3LT5	0	132	375	514	717	668	1,413	1,799	2,000	2,109
Alternative PC6LT8	0	132	375	514	717	1,115	2,130	2,431	3,049	3,343

Table 105 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,565	2,130	2,151	1,765	1,236	1,060	858	913	612
Alternative PC2LT002	0	1,565	2,130	2,151	1,765	1,234	1,060	858	976	729
Alternative PC1LT3	0	1,565	2,130	2,151	1,765	1,234	1,060	1,050	1,162	1,360
Alternative PC2LT4	0	1,565	2,130	2,151	1,765	1,234	1,060	1,050	1,162	1,680
Alternative PC3LT5	0	1,565	2,130	2,151	1,765	1,234	1,060	1,050	1,162	4,231
Alternative PC6LT8	0	1,565	2,130	2,151	1,765	1,234	1,059	1,050	1,162	4,230

Table 106 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 107 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 108 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,014	1,198	1,281	1,354	1,485	1,499	1,712	2,257	2,059
Alternative PC2LT002	0	1,014	1,198	1,281	1,354	1,499	1,366	1,572	1,960	1,657
Alternative PC1LT3	0	1,014	1,198	1,281	1,354	1,499	1,366	1,573	1,961	1,658
Alternative PC2LT4	0	1,014	1,198	1,281	1,354	1,513	1,380	1,629	2,016	1,713
Alternative PC3LT5	0	1,014	1,198	1,281	1,354	1,513	1,381	2,254	2,571	2,244
Alternative PC6LT8	0	1,014	1,198	1,281	1,354	1,531	1,398	2,748	2,903	2,549

Table 109 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	925	947	1,149	1,552	1,706	2,506	2,293	2,102	1,919
Alternative PC2LT002	0	925	947	1,149	1,552	1,602	2,381	2,076	1,883	1,653
Alternative PC1LT3	0	925	947	1,149	1,552	2,102	2,686	2,299	2,017	1,762
Alternative PC2LT4	0	925	947	1,149	1,552	2,103	2,687	2,314	2,031	1,776
Alternative PC3LT5	0	925	947	1,149	1,552	2,119	2,704	2,330	2,110	1,883
Alternative PC6LT8	0	925	947	1,149	1,552	2,104	2,804	2,690	2,715	2,549

Table 110 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	84	1,283	2,723	2,018	1,846	1,630	1,448	1,298	1,355
Alternative PC2LT002	0	84	1,283	2,723	2,018	1,834	1,626	1,443	1,294	1,629
Alternative PC1LT3	0	84	1,283	2,723	2,018	1,833	1,617	1,434	1,285	1,341
Alternative PC2LT4	0	84	1,283	2,723	2,018	1,833	1,637	1,454	1,304	1,639
Alternative PC3LT5	0	84	1,283	2,723	2,018	1,834	1,637	1,454	1,979	1,978
Alternative PC6LT8	0	84	1,283	2,723	2,018	1,834	2,180	1,948	2,433	2,702

Table 111 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	651	860	1,319	1,241	1,151	1,623	1,422	1,388	1,666
Alternative PC2LT002	0	651	860	1,319	1,241	1,451	2,350	2,159	2,200	2,295
Alternative PC1LT3	0	651	860	1,319	1,241	1,451	2,318	2,133	2,061	2,177
Alternative PC2LT4	0	651	860	1,319	1,241	1,451	2,285	2,021	2,077	2,180
Alternative PC3LT5	0	651	860	1,319	1,241	1,451	2,376	2,102	2,193	2,283
Alternative PC6LT8	0	651	860	1,319	1,241	1,451	2,804	2,495	2,915	2,700

Table 112 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	847	1,635	2,476	2,029	1,579	1,487	1,889	1,762	1,739
Alternative PC2LT002	0	847	1,635	2,476	2,029	1,714	1,622	2,035	1,912	1,868
Alternative PC1LT3	0	847	1,635	2,476	2,029	2,081	1,960	2,487	2,332	2,256
Alternative PC2LT4	0	847	1,635	2,476	2,029	2,414	2,265	2,852	2,641	2,540
Alternative PC3LT5	0	847	1,635	2,476	2,029	2,660	2,490	3,000	3,015	2,815
Alternative PC6LT8	0	847	1,635	2,476	2,029	2,806	2,624	3,169	3,841	3,652

Table 113 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	460	494	638	757	841	1,047	2,425	2,161	1,948
Alternative PC2LT002	0	460	494	638	757	815	1,012	2,383	2,087	1,819
Alternative PC1LT3	0	460	494	638	757	815	1,016	2,389	2,093	1,825
Alternative PC2LT4	0	460	494	638	757	815	1,026	2,399	2,102	1,834
Alternative PC3LT5	0	460	494	638	757	815	1,228	2,224	1,956	1,698
Alternative PC6LT8	0	460	494	638	757	816	1,625	2,570	2,766	2,479

Table 114 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	7	11	16	16	15	15	15	15	15
Alternative PC2LT002	0	7	11	16	16	0	0	0	0	0
Alternative PC1LT3	0	7	11	16	16	0	0	0	0	0
Alternative PC2LT4	0	7	11	16	16	0	0	0	0	0
Alternative PC3LT5	0	7	11	16	16	0	0	0	0	0
Alternative PC6LT8	0	7	11	16	16	0	0	0	0	0

Table 115 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	234	492	717	1,014	740	668	931	1,326	1,386
Alternative PC2LT002	0	234	492	717	1,014	715	623	897	1,296	1,273
Alternative PC1LT3	0	234	492	717	1,014	715	682	967	1,391	1,354
Alternative PC2LT4	0	234	492	717	1,014	740	799	1,029	1,465	1,433
Alternative PC3LT5	0	234	492	717	1,014	716	893	1,152	1,599	1,727
Alternative PC6LT8	0	234	492	717	1,014	747	1,059	1,270	1,765	3,022

Table 116 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	140	195	1,128	1,041	677	531	337	1,169	1,016
Alternative PC2LT002	0	140	195	1,128	1,041	622	477	284	1,158	944
Alternative PC1LT3	0	140	195	1,128	1,041	623	478	285	1,140	929
Alternative PC2LT4	0	140	195	1,128	1,041	623	478	285	1,068	889
Alternative PC3LT5	0	140	195	1,128	1,041	622	477	284	1,137	926
Alternative PC6LT8	0	140	195	1,128	1,041	720	574	442	1,592	1,411

Table 117 - Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Technology Costs ($), Total Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	458	940	1,243	1,196	850	858	744	1,889	1,698
Alternative PC2LT002	0	458	940	1,243	1,196	946	920	787	1,534	1,467
Alternative PC1LT3	0	458	940	1,243	1,196	962	961	853	1,932	1,744
Alternative PC2LT4	0	458	940	1,243	1,196	995	989	877	1,953	1,789
Alternative PC3LT5	0	458	940	1,243	1,196	994	1,445	1,286	1,940	1,823
Alternative PC6LT8	0	458	940	1,243	1,196	994	1,515	1,351	2,854	2,781

Table 118 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	655	1,742	1,797	1,356	1,658	1,564	1,332	1,571	1,357
Alternative PC2LT002	0	655	1,742	1,797	1,356	1,612	1,507	1,271	1,498	1,218
Alternative PC1LT3	0	655	1,742	1,797	1,356	1,613	1,507	1,271	1,498	1,218
Alternative PC2LT4	0	655	1,742	1,797	1,356	1,613	1,507	1,271	1,499	1,218
Alternative PC3LT5	0	655	1,742	1,797	1,356	1,614	1,509	1,273	1,520	1,239
Alternative PC6LT8	0	655	1,742	1,797	1,356	1,710	1,642	1,388	1,605	1,392

Table 119 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	93	1,401	1,657	1,130	1,270	1,113	939	746	640
Alternative PC2LT002	0	93	1,401	1,657	1,130	1,726	1,520	1,301	1,070	895
Alternative PC1LT3	0	93	1,401	1,657	1,130	1,237	1,074	902	709	563
Alternative PC2LT4	0	93	1,401	1,657	1,130	1,726	1,520	1,301	1,070	895
Alternative PC3LT5	0	93	1,401	1,657	1,130	1,718	1,513	1,294	1,064	1,059
Alternative PC6LT8	0	93	1,401	1,657	1,130	3,409	3,169	2,929	2,685	2,493

Table 120 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	57	1,209	1,435	1,319	1,154	1,041	1,014	1,200	2,093
Alternative PC2LT002	0	57	1,209	1,435	1,319	1,286	1,170	2,498	2,501	3,227
Alternative PC1LT3	0	57	1,209	1,435	1,319	1,286	1,175	2,559	2,560	2,282
Alternative PC2LT4	0	57	1,209	1,435	1,319	1,286	1,170	2,498	2,501	2,226
Alternative PC3LT5	0	57	1,209	1,435	1,319	2,292	2,151	3,477	3,448	3,120
Alternative PC6LT8	0	57	1,209	1,435	1,319	2,292	2,151	3,852	3,754	3,494

Table 121 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	538	568	1,033	966	969	2,244	2,277	1,982	1,751
Alternative PC2LT002	0	538	568	1,033	966	957	1,126	1,293	1,104	879
Alternative PC1LT3	0	538	568	1,033	966	921	2,022	1,932	1,642	1,366
Alternative PC2LT4	0	538	568	1,033	966	957	2,056	1,962	1,669	1,392
Alternative PC3LT5	0	538	568	1,033	966	1,066	2,162	1,803	1,553	1,288
Alternative PC6LT8	0	538	568	1,033	966	1,606	2,035	2,308	2,069	1,796

Table 122 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	362	642	671	1,022	981	885	1,097	978	1,236
Alternative PC2LT002	0	362	642	671	1,022	1,157	1,046	1,414	1,254	1,522
Alternative PC1LT3	0	362	642	671	1,022	1,039	932	1,135	999	1,286
Alternative PC2LT4	0	362	642	671	1,022	1,157	1,046	1,418	1,258	1,525
Alternative PC3LT5	0	362	642	671	1,022	1,280	1,160	1,502	1,431	1,549
Alternative PC6LT8	0	362	642	671	1,022	1,685	1,524	2,443	2,302	2,300

Table 123 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	70	515	687	550	563	508	1,384	2,004	2,344
Alternative PC2LT002	0	70	515	687	550	563	752	1,650	2,193	1,945
Alternative PC1LT3	0	70	515	687	550	555	618	1,537	1,915	1,699
Alternative PC2LT4	0	70	515	687	550	563	752	1,650	1,990	1,767
Alternative PC3LT5	0	70	515	687	550	563	902	1,786	1,711	1,578
Alternative PC6LT8	0	70	515	687	550	1,392	2,230	2,953	2,884	2,841

Table 124 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	4,386	4,186	3,979	2,885	2,693	2,419	2,077	1,820	1,652
Alternative PC2LT002	0	4,386	4,186	3,979	2,885	2,571	2,300	1,966	2,031	1,784
Alternative PC1LT3	0	4,386	4,186	3,979	2,885	2,571	2,298	1,964	2,029	1,783
Alternative PC2LT4	0	4,386	4,186	3,979	2,885	2,571	2,300	1,964	2,029	1,782
Alternative PC3LT5	0	4,386	4,186	3,979	2,885	2,572	2,301	1,965	2,030	1,782
Alternative PC6LT8	0	4,386	4,186	3,979	2,885	2,569	2,298	1,962	2,028	1,781

Table 125 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 126 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 127 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	220	959	1,089	971	854	856	3,461	3,078	2,791
Alternative PC2LT002	0	220	959	1,089	971	1,069	1,088	3,541	3,073	2,790
Alternative PC1LT3	0	220	959	1,089	971	1,069	1,088	3,541	3,073	2,790
Alternative PC2LT4	0	220	959	1,089	971	1,069	1,089	3,541	3,073	2,789
Alternative PC3LT5	0	220	959	1,089	971	1,069	1,089	3,541	3,073	2,789
Alternative PC6LT8	0	220	959	1,089	971	1,070	1,089	3,541	3,073	2,790

Table 128 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,324	1,347	1,676	1,987	1,735	1,506	1,350	1,269	1,139
Alternative PC2LT002	0	1,324	1,347	1,676	1,987	1,571	1,335	1,182	1,092	953
Alternative PC1LT3	0	1,324	1,347	1,676	1,987	1,571	1,335	1,087	880	726
Alternative PC2LT4	0	1,324	1,347	1,676	1,987	1,573	1,337	1,119	910	757
Alternative PC3LT5	0	1,324	1,347	1,676	1,987	1,605	1,369	1,150	1,078	990
Alternative PC6LT8	0	1,324	1,347	1,676	1,987	1,632	1,393	1,789	1,941	2,010

Table 129 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	77	2,187	2,296	1,630	1,460	1,277	1,092	941	821
Alternative PC2LT002	0	77	2,187	2,296	1,630	1,438	1,273	1,086	935	1,357
Alternative PC1LT3	0	77	2,187	2,296	1,630	1,438	1,255	1,069	918	799
Alternative PC2LT4	0	77	2,187	2,296	1,630	1,438	1,273	1,086	935	1,357
Alternative PC3LT5	0	77	2,187	2,296	1,630	1,438	1,273	1,086	1,539	1,365
Alternative PC6LT8	0	77	2,187	2,296	1,630	1,438	1,802	1,567	1,986	2,045

Table 130 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	710	929	1,194	1,142	1,024	925	819	1,006	1,690
Alternative PC2LT002	0	710	929	1,194	1,142	1,261	1,362	1,215	1,594	2,059
Alternative PC1LT3	0	710	929	1,194	1,142	1,261	1,144	1,025	1,208	1,715
Alternative PC2LT4	0	710	929	1,194	1,142	1,261	1,362	1,215	1,594	2,059
Alternative PC3LT5	0	710	929	1,194	1,142	1,261	1,362	1,215	1,605	2,063
Alternative PC6LT8	0	710	929	1,194	1,142	1,261	1,425	1,280	2,218	2,163

Table 131 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	739	3,102	3,455	2,795	2,558	2,374	2,487	2,353	3,069
Alternative PC2LT002	0	739	3,102	3,455	2,795	2,516	2,418	2,649	2,540	3,132
Alternative PC1LT3	0	739	3,102	3,455	2,795	2,516	2,418	2,414	2,337	2,958
Alternative PC2LT4	0	739	3,102	3,455	2,795	2,516	2,418	2,649	2,540	3,132
Alternative PC3LT5	0	739	3,102	3,455	2,795	2,516	2,418	2,703	2,744	2,702
Alternative PC6LT8	0	739	3,102	3,455	2,795	2,516	2,418	2,750	3,389	3,517

Table 132 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,417	1,370	2,163	1,589	1,479	1,912	2,469	2,103	1,821
Alternative PC2LT002	0	1,417	1,370	2,163	1,589	1,388	1,809	2,324	1,923	1,643
Alternative PC1LT3	0	1,417	1,370	2,163	1,589	1,388	1,809	2,324	1,923	1,644
Alternative PC2LT4	0	1,417	1,370	2,163	1,589	1,388	1,809	2,324	1,923	1,644
Alternative PC3LT5	0	1,417	1,370	2,163	1,589	1,388	2,146	2,652	2,237	1,946
Alternative PC6LT8	0	1,417	1,370	2,163	1,589	1,388	2,146	2,652	2,260	1,969

Table 133 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 134 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	336	544	957	1,001	890	803	782	1,717	1,623
Alternative PC2LT002	0	336	544	957	1,001	824	723	706	1,649	1,398
Alternative PC1LT3	0	336	544	957	1,001	824	723	703	1,718	1,402
Alternative PC2LT4	0	336	544	957	1,001	827	733	746	1,792	1,451
Alternative PC3LT5	0	336	544	957	1,001	827	810	815	1,898	1,582
Alternative PC6LT8	0	336	544	957	1,001	909	1,172	1,148	2,344	2,055

Table 135 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	65	117	496	1,258	1,059	903	634	496	457
Alternative PC2LT002	0	65	117	496	1,258	908	755	488	352	262
Alternative PC1LT3	0	65	117	496	1,258	908	755	488	352	257
Alternative PC2LT4	0	65	117	496	1,258	908	755	488	352	315
Alternative PC3LT5	0	65	117	496	1,258	908	755	488	352	257
Alternative PC6LT8	0	65	117	496	1,258	908	755	488	385	348

Table 136 - Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Technology Costs ($), Passenger Car Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	170	1,013	1,202	1,323	1,179	1,273	1,083	1,009	884
Alternative PC2LT002	0	170	1,013	1,202	1,323	1,439	1,452	1,215	1,090	1,226
Alternative PC1LT3	0	170	1,013	1,202	1,323	1,354	1,377	1,158	1,039	930
Alternative PC2LT4	0	170	1,013	1,202	1,323	1,439	1,453	1,224	1,098	1,051
Alternative PC3LT5	0	170	1,013	1,202	1,323	1,439	2,674	2,321	2,091	1,853
Alternative PC6LT8	0	170	1,013	1,202	1,323	1,439	2,870	2,508	2,176	1,994

Table 137 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	377	414	1,627	1,517	987	897	789	712	1,722
Alternative PC2LT002	0	377	414	1,627	1,517	987	957	849	756	1,717
Alternative PC1LT3	0	377	414	1,627	1,517	987	1,009	900	807	1,480
Alternative PC2LT4	0	377	414	1,627	1,517	987	1,009	900	807	1,714
Alternative PC3LT5	0	377	414	1,627	1,517	987	1,009	900	807	2,058
Alternative PC6LT8	0	377	414	1,627	1,517	987	1,009	900	807	2,366

Table 138 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	874	1,591	1,664	1,757	1,428	1,975	2,372	2,132	1,942
Alternative PC2LT002	0	874	1,591	1,664	1,757	1,428	1,974	2,371	2,131	1,942
Alternative PC1LT3	0	874	1,591	1,664	1,757	1,428	2,053	2,442	2,195	2,000
Alternative PC2LT4	0	874	1,591	1,664	1,757	1,445	2,069	2,456	2,207	2,011
Alternative PC3LT5	0	874	1,591	1,664	1,757	1,841	2,403	2,747	2,464	2,267
Alternative PC6LT8	0	874	1,591	1,664	1,757	2,635	3,404	4,183	3,847	3,586

Table 139 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	263	2,086	2,508	2,406	1,979	1,869	1,977	1,947	2,127
Alternative PC2LT002	0	263	2,086	2,508	2,406	2,200	2,070	2,157	2,109	2,276
Alternative PC1LT3	0	263	2,086	2,508	2,406	2,922	2,736	2,738	2,654	2,713
Alternative PC2LT4	0	263	2,086	2,508	2,406	2,966	2,774	2,793	2,693	2,924
Alternative PC3LT5	0	263	2,086	2,508	2,406	3,121	2,915	2,922	2,807	3,425
Alternative PC6LT8	0	263	2,086	2,508	2,406	3,209	3,062	3,060	2,958	4,715

Table 140 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	585	656	1,047	1,324	1,287	1,144	978	925	815
Alternative PC2LT002	0	585	656	1,047	1,324	2,913	2,602	2,264	2,064	1,837
Alternative PC1LT3	0	585	656	1,047	1,324	2,950	2,841	2,882	2,670	2,401
Alternative PC2LT4	0	585	656	1,047	1,324	2,950	2,933	2,972	2,868	2,597
Alternative PC3LT5	0	585	656	1,047	1,324	2,950	3,396	3,085	3,150	2,847
Alternative PC6LT8	0	585	656	1,047	1,324	2,913	2,737	2,835	3,338	3,079

Table 141 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	113	188	1,304	1,062	898	923	1,965	1,868	2,000
Alternative PC2LT002	0	113	188	1,304	1,062	882	895	1,931	1,810	1,894
Alternative PC1LT3	0	113	188	1,304	1,062	1,100	1,191	2,190	2,038	2,103
Alternative PC2LT4	0	113	188	1,304	1,062	1,757	1,917	2,823	2,583	2,296
Alternative PC3LT5	0	113	188	1,304	1,062	2,129	2,004	2,908	2,663	2,388
Alternative PC6LT8	0	113	188	1,304	1,062	1,728	2,123	3,038	2,795	2,987

Table 142 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	213	194	302	916	807	847	736	644	573
Alternative PC2LT002	0	213	194	302	916	791	1,233	1,094	1,210	1,199
Alternative PC1LT3	0	213	194	302	916	791	1,878	1,690	1,897	2,008
Alternative PC2LT4	0	213	194	302	916	791	1,878	1,689	2,024	2,255
Alternative PC3LT5	0	213	194	302	916	791	2,005	1,813	2,332	2,719
Alternative PC6LT8	0	213	194	302	916	791	2,015	1,836	3,238	3,925

Table 143 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,490	2,077	2,106	1,738	1,202	1,029	830	892	588
Alternative PC2LT002	0	1,490	2,077	2,106	1,738	1,203	1,031	833	952	705
Alternative PC1LT3	0	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,142	1,350
Alternative PC2LT4	0	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,142	1,678
Alternative PC3LT5	0	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,142	4,287
Alternative PC6LT8	0	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,142	4,287

Table 144 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 145 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 146 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,153	1,239	1,312	1,415	1,583	1,598	1,445	2,132	1,948
Alternative PC2LT002	0	1,153	1,239	1,312	1,415	1,566	1,409	1,271	1,791	1,485
Alternative PC1LT3	0	1,153	1,239	1,312	1,415	1,566	1,409	1,271	1,791	1,485
Alternative PC2LT4	0	1,153	1,239	1,312	1,415	1,583	1,425	1,336	1,855	1,549
Alternative PC3LT5	0	1,153	1,239	1,312	1,415	1,583	1,425	2,058	2,495	2,161
Alternative PC6LT8	0	1,153	1,239	1,312	1,415	1,603	1,445	2,628	2,878	2,512

Table 147 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	544	574	686	1,178	1,681	3,343	3,079	2,795	2,566
Alternative PC2LT002	0	544	574	686	1,178	1,629	3,255	2,819	2,540	2,233
Alternative PC1LT3	0	544	574	686	1,178	2,556	3,822	3,312	2,966	2,624
Alternative PC2LT4	0	544	574	686	1,178	2,556	3,822	3,312	2,966	2,624
Alternative PC3LT5	0	544	574	686	1,178	2,556	3,822	3,312	2,966	2,624
Alternative PC6LT8	0	544	574	686	1,178	2,505	3,979	3,432	3,357	3,001

Table 148 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	93	208	3,203	2,445	2,266	2,008	1,826	1,679	1,921
Alternative PC2LT002	0	93	208	3,203	2,445	2,265	2,005	1,823	1,675	1,917
Alternative PC1LT3	0	93	208	3,203	2,445	2,265	2,005	1,823	1,675	1,917
Alternative PC2LT4	0	93	208	3,203	2,445	2,265	2,028	1,846	1,698	1,939
Alternative PC3LT5	0	93	208	3,203	2,445	2,265	2,028	1,846	2,447	2,629
Alternative PC6LT8	0	93	208	3,203	2,445	2,265	2,583	2,349	2,906	3,407

Table 149 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	571	769	1,474	1,362	1,304	2,450	2,133	1,838	1,638
Alternative PC2LT002	0	571	769	1,474	1,362	1,680	3,522	3,272	2,913	2,572
Alternative PC1LT3	0	571	769	1,474	1,362	1,680	3,716	3,445	3,071	2,722
Alternative PC2LT4	0	571	769	1,474	1,362	1,680	3,384	2,976	2,648	2,322
Alternative PC3LT5	0	571	769	1,474	1,362	1,680	3,579	3,148	2,886	2,543
Alternative PC6LT8	0	571	769	1,474	1,362	1,680	4,429	3,915	3,734	3,338

Table 150 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	863	1,415	2,337	1,922	1,445	1,367	1,808	1,683	1,561
Alternative PC2LT002	0	863	1,415	2,337	1,922	1,603	1,514	1,952	1,828	1,699
Alternative PC1LT3	0	863	1,415	2,337	1,922	2,021	1,898	2,497	2,331	2,162
Alternative PC2LT4	0	863	1,415	2,337	1,922	2,400	2,244	2,879	2,655	2,460
Alternative PC3LT5	0	863	1,415	2,337	1,922	2,679	2,499	3,040	3,051	2,830
Alternative PC6LT8	0	863	1,415	2,337	1,922	2,845	2,651	3,225	3,901	3,670

Table 151 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	284	337	379	618	736	907	2,418	2,171	1,968
Alternative PC2LT002	0	284	337	379	618	721	883	2,392	2,113	1,847
Alternative PC1LT3	0	284	337	379	618	721	888	2,399	2,120	1,854
Alternative PC2LT4	0	284	337	379	618	720	899	2,411	2,131	1,865
Alternative PC3LT5	0	284	337	379	618	721	1,080	2,155	1,912	1,658
Alternative PC6LT8	0	284	337	379	618	722	1,542	2,557	2,847	2,562

Table 152 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	135	217	297	292	288	283	279	274	270
Alternative PC2LT002	0	135	217	297	292	4	0	0	0	0
Alternative PC1LT3	0	135	217	297	292	4	0	0	0	0
Alternative PC2LT4	0	135	217	297	292	4	0	0	0	0
Alternative PC3LT5	0	135	217	297	292	4	0	0	0	0
Alternative PC6LT8	0	135	217	297	292	4	0	0	0	0

Table 153 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	165	458	567	1,021	649	588	1,019	1,094	1,245
Alternative PC2LT002	0	165	458	567	1,021	649	563	1,012	1,086	1,198
Alternative PC1LT3	0	165	458	567	1,021	649	658	1,124	1,196	1,324
Alternative PC2LT4	0	165	458	567	1,021	687	838	1,198	1,269	1,423
Alternative PC3LT5	0	165	458	567	1,021	649	942	1,352	1,421	1,813
Alternative PC6LT8	0	165	458	567	1,021	649	992	1,343	1,421	3,603

Table 154 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	174	230	1,394	952	522	382	219	1,437	1,237
Alternative PC2LT002	0	174	230	1,394	952	506	366	203	1,479	1,214
Alternative PC1LT3	0	174	230	1,394	952	506	366	203	1,455	1,197
Alternative PC2LT4	0	174	230	1,394	952	506	366	203	1,353	1,118
Alternative PC3LT5	0	174	230	1,394	952	506	366	203	1,450	1,192
Alternative PC6LT8	0	174	230	1,394	952	643	502	424	2,071	1,838

Table 155 - Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Technology Costs ($), Light Truck Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	653	892	1,269	1,118	651	610	542	2,411	2,179
Alternative PC2LT002	0	653	892	1,269	1,118	646	602	533	1,798	1,609
Alternative PC1LT3	0	653	892	1,269	1,118	724	711	671	2,463	2,228
Alternative PC2LT4	0	653	892	1,269	1,118	724	711	671	2,462	2,227
Alternative PC3LT5	0	653	892	1,269	1,118	724	711	671	1,850	1,805
Alternative PC6LT8	0	653	892	1,269	1,118	724	711	671	3,256	3,251

Civil Penalties per Vehicle, by Model Year

Table 156 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	132	34	3	4	7	1	0	0	0	0
Alternative PC2LT002	132	34	3	4	7	2	0	0	0	1
Alternative PC1LT3	132	34	3	4	7	0	0	0	9	0
Alternative PC2LT4	132	34	3	4	7	0	0	4	14	1
Alternative PC3LT5	132	34	3	4	7	1	2	9	21	5
Alternative PC6LT8	132	34	3	4	7	8	29	122	151	63

Table 157 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	194	34	4	0	0	0	0	0	0	0
Alternative PC2LT002	194	34	4	0	0	0	0	0	0	3
Alternative PC1LT3	194	34	4	0	0	0	0	0	0	0
Alternative PC2LT4	194	34	4	0	0	0	0	0	0	3
Alternative PC3LT5	194	34	4	0	0	0	5	0	3	7
Alternative PC6LT8	194	34	4	0	0	0	67	168	38	15

Table 158 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	94	35	3	6	10	1	0	0	0	0
Alternative PC2LT002	94	35	3	6	10	2	0	0	0	0
Alternative PC1LT3	94	35	3	6	10	0	0	0	13	0
Alternative PC2LT4	94	35	3	6	10	0	0	6	21	0
Alternative PC3LT5	94	35	3	6	10	2	0	14	30	4
Alternative PC6LT8	94	35	3	6	10	12	10	99	208	88

Table 159 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	420	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	420	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	420	0	0	0	0	0	0	0	359	0
Alternative PC2LT4	420	0	0	0	0	0	0	162	567	0
Alternative PC3LT5	420	0	0	0	0	0	0	388	739	68
Alternative PC6LT8	420	0	0	0	0	0	262	857	1,307	817

Table 160 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	73	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	73	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	73	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	73	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	73	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	73	0	0	0	0	0	0	0	0	0

Table 161 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	269	145	0	0	0	0	0	0	0	0
Alternative PC2LT002	269	145	0	0	0	0	0	0	0	0
Alternative PC1LT3	269	145	0	0	0	0	0	0	0	0
Alternative PC2LT4	269	145	0	0	0	0	0	0	0	0
Alternative PC3LT5	269	145	0	0	0	0	12	0	0	0
Alternative PC6LT8	269	145	0	0	0	0	71	36	0	0

Table 162 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 163 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 164 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	353	0	0

Table 165 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	478	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	478	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	478	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	478	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	478	0	0	0	0	0	0	0	357	221
Alternative PC6LT8	478	0	0	0	0	0	0	359	2,368	1,710

Table 166 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 167 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 168 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	88	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	88	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	88	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	88	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	88	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	88	0	0	0	0	40	0	0	0

Table 169 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	618	0	0	209	374	40	0	0	0	0
Alternative PC2LT002	618	0	0	209	374	88	0	0	0	0
Alternative PC1LT3	618	0	0	209	374	0	0	0	0	0
Alternative PC2LT4	618	0	0	209	374	0	0	0	0	0
Alternative PC3LT5	618	0	0	209	374	0	0	0	0	0
Alternative PC6LT8	618	0	0	209	374	0	0	0	0	0

Table 170 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	217	149	93	0	0	0	0	0	0	0
Alternative PC2LT002	217	149	93	0	0	0	0	0	0	0
Alternative PC1LT3	217	149	93	0	0	0	0	0	0	0
Alternative PC2LT4	217	149	93	0	0	0	0	0	0	0
Alternative PC3LT5	217	149	93	0	0	0	0	0	0	0
Alternative PC6LT8	217	149	93	0	0	0	0	0	0	0

Table 171 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	33	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	33	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	33	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	33	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	33	0	0	0	0	19	0	0	0	0
Alternative PC6LT8	33	0	0	0	0	120	72	584	0	0

Table 172 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	446	52	24	0	0	0	0	0	0	0
Alternative PC2LT002	446	52	24	0	0	0	0	0	0	9
Alternative PC1LT3	446	52	24	0	0	0	0	0	0	0
Alternative PC2LT4	446	52	24	0	0	0	0	0	0	10
Alternative PC3LT5	446	52	24	0	0	0	0	0	10	20
Alternative PC6LT8	446	52	24	0	0	0	71	109	111	44

Table 173 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 174 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 175 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	572	179

Table 176 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 177 - Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Total Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	283	189	0	0	0	0	0	0	0	0
Alternative PC2LT002	283	189	0	0	0	0	0	0	0	0
Alternative PC1LT3	283	189	0	0	0	0	0	0	0	0
Alternative PC2LT4	283	189	0	0	0	0	0	0	0	0
Alternative PC3LT5	283	189	0	0	0	0	0	0	0	0
Alternative PC6LT8	283	189	0	0	0	0	0	682	19	0

Table 178 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	773	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	773	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	773	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	773	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	773	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	773	0	0	0	0	0	0	0	0	0

Table 179 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 180 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	443	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	443	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	443	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	443	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	443	0	0	0	0	0	57	0	0	0
Alternative PC6LT8	443	0	0	0	0	0	327	169	0	0

Table 181 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	1	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	1	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	1	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	1	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	1	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	1	0	0	0	0	0	0	0	0	0

Table 182 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 183 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 184 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	614

Table 185 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 186 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 187 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	590	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	590	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	590	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	590	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	590	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	590	0	0	0	0	301	0	0	0

Table 188 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	885	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	885	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	885	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	885	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	885	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	885	0	0	0	0	0	0	0	0	0

Table 189 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	386	272	0	0	0	0	0	0	0	0
Alternative PC2LT002	386	272	0	0	0	0	0	0	0	0
Alternative PC1LT3	386	272	0	0	0	0	0	0	0	0
Alternative PC2LT4	386	272	0	0	0	0	0	0	0	0
Alternative PC3LT5	386	272	0	0	0	0	0	0	0	0
Alternative PC6LT8	386	272	0	0	0	0	0	0	0	0

Table 190 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	56	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	56	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	56	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	56	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	56	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	56	0	0	0	0	0	132	1,085	0	0

Table 191 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	1,635	154	87	0	0	0	0	0	0	0
Alternative PC2LT002	1,635	154	87	0	0	0	0	0	0	80
Alternative PC1LT3	1,635	154	87	0	0	0	0	0	0	0
Alternative PC2LT4	1,635	154	87	0	0	0	0	0	0	80
Alternative PC3LT5	1,635	154	87	0	0	0	0	0	87	167
Alternative PC6LT8	1,635	154	87	0	0	0	600	923	937	371

Table 192 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 193 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 194 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 195 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 196 - Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Passenger Car Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	658	468	0	0	0	0	0	0	0	0
Alternative PC2LT002	658	468	0	0	0	0	0	0	0	0
Alternative PC1LT3	658	468	0	0	0	0	0	0	0	0
Alternative PC2LT4	658	468	0	0	0	0	0	0	0	0
Alternative PC3LT5	658	468	0	0	0	0	0	0	0	0
Alternative PC6LT8	658	468	0	0	0	0	0	0	0	0

Table 197 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	715	0
Alternative PC2LT4	0	0	0	0	0	0	0	322	1,127	0
Alternative PC3LT5	0	0	0	0	0	0	0	770	1,466	136
Alternative PC6LT8	0	0	0	0	0	0	520	1,694	2,593	1,629

Table 198 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	83	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	83	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	83	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	83	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	83	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	83	0	0	0	0	0	0	0	0	0

Table 199 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	211	190	0	0	0	0	0	0	0	0
Alternative PC2LT002	211	190	0	0	0	0	0	0	0	0
Alternative PC1LT3	211	190	0	0	0	0	0	0	0	0
Alternative PC2LT4	211	190	0	0	0	0	0	0	0	0
Alternative PC3LT5	211	190	0	0	0	0	0	0	0	0
Alternative PC6LT8	211	190	0	0	0	0	0	0	0	0

Table 200 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 201 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 202 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	755	0	0

Table 203 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	492	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	492	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	492	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	492	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	492	0	0	0	0	0	0	0	366	226
Alternative PC6LT8	492	0	0	0	0	0	0	367	2,423	1,735

Table 204 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 205 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 206 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 207 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	351	0	0	393	697	74	0	0	0	0
Alternative PC2LT002	351	0	0	393	697	163	0	0	0	0
Alternative PC1LT3	351	0	0	393	697	0	0	0	0	0
Alternative PC2LT4	351	0	0	393	697	0	0	0	0	0
Alternative PC3LT5	351	0	0	393	697	0	0	0	0	0
Alternative PC6LT8	351	0	0	393	697	0	0	0	0	0

Table 208 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	204	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	204	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	204	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	204	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	204	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	204	0	0	0	0	0	0	0

Table 209 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	42	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	264	0	0	0	0

Table 210 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	253	36	15	0	0	0	0	0	0	0
Alternative PC2LT002	253	36	15	0	0	0	0	0	0	0
Alternative PC1LT3	253	36	15	0	0	0	0	0	0	0
Alternative PC2LT4	253	36	15	0	0	0	0	0	0	0
Alternative PC3LT5	253	36	15	0	0	0	0	0	0	0
Alternative PC6LT8	253	36	15	0	0	0	0	0	0	0

Table 211 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 212 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 213 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	912	287

Table 214 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 215 - Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Civil Penalties Costs ($), Light Truck Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	14	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	14	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	14	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	14	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	14	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	14	0	0	0	0	0	0	1,083	31	0

Regulatory Costs per Vehicle, by Model Year

Table 216 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	132	503	1,000	1,365	1,375	1,163	1,287	1,517	1,574	1,605
Alternative PC2LT002	132	503	1,000	1,365	1,375	1,310	1,403	1,673	1,706	1,686
Alternative PC1LT3	132	503	1,000	1,365	1,375	1,428	1,596	1,874	1,910	1,826
Alternative PC2LT4	132	503	1,000	1,365	1,375	1,507	1,692	1,969	2,011	1,937
Alternative PC3LT5	132	503	1,000	1,365	1,375	1,638	1,889	2,113	2,179	2,172
Alternative PC6LT8	132	503	1,000	1,365	1,375	1,829	2,168	2,603	2,885	3,104

Table 217 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	152	434	862	1,131	1,081	1,010	1,132	1,196	1,364	1,509
Alternative PC2LT002	152	434	862	1,131	1,081	1,070	1,062	1,271	1,448	1,499
Alternative PC1LT3	152	434	862	1,131	1,081	1,029	1,128	1,283	1,439	1,369
Alternative PC2LT4	152	434	862	1,131	1,081	1,068	1,197	1,379	1,555	1,475
Alternative PC3LT5	152	434	862	1,131	1,081	1,182	1,396	1,537	1,715	1,590
Alternative PC6LT8	152	434	862	1,131	1,081	1,444	1,684	2,114	2,345	2,134

Table 218 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Total)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	119	543	1,078	1,490	1,530	1,242	1,366	1,680	1,680	1,653
Alternative PC2LT002	119	543	1,078	1,490	1,530	1,435	1,577	1,877	1,837	1,780
Alternative PC1LT3	119	543	1,078	1,490	1,530	1,636	1,836	2,175	2,149	2,057
Alternative PC2LT4	119	543	1,078	1,490	1,530	1,735	1,945	2,269	2,243	2,172
Alternative PC3LT5	119	543	1,078	1,490	1,530	1,874	2,140	2,406	2,413	2,467
Alternative PC6LT8	119	543	1,078	1,490	1,530	2,028	2,414	2,849	3,159	3,600

Table 219 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	420	524	1,110	1,714	1,436	1,324	1,229	1,059	1,139	1,541
Alternative PC2LT002	420	524	1,110	1,714	1,436	1,301	1,231	1,058	1,124	1,470
Alternative PC1LT3	420	524	1,110	1,714	1,436	1,302	1,257	1,085	1,510	1,350
Alternative PC2LT4	420	524	1,110	1,714	1,436	1,302	1,257	1,246	1,717	1,468
Alternative PC3LT5	420	524	1,110	1,714	1,436	1,302	1,258	1,472	1,900	1,720
Alternative PC6LT8	420	524	1,110	1,714	1,436	1,350	1,585	1,998	2,509	2,698

Table 220 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	73	787	1,570	1,663	1,694	1,412	1,889	2,230	1,995	1,814
Alternative PC2LT002	73	787	1,570	1,663	1,694	1,458	1,929	2,266	2,027	1,839
Alternative PC1LT3	73	787	1,570	1,663	1,694	1,409	1,956	2,290	2,048	1,858
Alternative PC2LT4	73	787	1,570	1,663	1,694	1,473	2,015	2,342	2,095	1,901
Alternative PC3LT5	73	787	1,570	1,663	1,694	1,829	2,315	2,604	2,326	2,148
Alternative PC6LT8	73	787	1,570	1,663	1,694	2,713	3,381	4,060	3,733	3,478

Table 221 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	269	358	1,880	2,267	2,165	1,798	1,690	1,770	1,786	2,120
Alternative PC2LT002	269	358	1,880	2,267	2,165	1,999	1,875	2,230	2,194	2,481
Alternative PC1LT3	269	358	1,880	2,267	2,165	2,562	2,397	2,699	2,633	2,620
Alternative PC2LT4	269	358	1,880	2,267	2,165	2,597	2,426	2,730	2,651	2,774
Alternative PC3LT5	269	358	1,880	2,267	2,165	2,939	2,762	3,042	2,945	3,359
Alternative PC6LT8	269	358	1,880	2,267	2,165	3,008	2,936	3,265	3,129	4,450

Table 222 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	560	610	1,040	1,144	1,128	1,689	1,621	1,447	1,276
Alternative PC2LT002	0	560	610	1,040	1,144	1,935	1,870	1,784	1,590	1,365
Alternative PC1LT3	0	560	610	1,040	1,144	1,934	2,434	2,411	2,161	1,890
Alternative PC2LT4	0	560	610	1,040	1,144	1,952	2,497	2,472	2,275	2,001
Alternative PC3LT5	0	560	610	1,040	1,144	2,008	2,785	2,451	2,362	2,077
Alternative PC6LT8	0	560	610	1,040	1,144	2,260	2,390	2,576	2,711	2,442

Table 223 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	262	458	937	1,039	945	901	1,472	1,363	1,568
Alternative PC2LT002	0	262	458	937	1,039	1,039	981	1,638	1,495	1,683
Alternative PC1LT3	0	262	458	937	1,039	1,065	1,044	1,590	1,448	1,639
Alternative PC2LT4	0	262	458	937	1,039	1,412	1,421	2,025	1,831	1,859
Alternative PC3LT5	0	262	458	937	1,039	1,643	1,524	2,110	1,965	1,913
Alternative PC6LT8	0	262	458	937	1,039	1,703	1,783	2,702	2,516	2,596

Table 224 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	132	375	514	717	675	665	1,083	1,371	1,519
Alternative PC2LT002	0	132	375	514	717	668	975	1,391	1,736	1,597
Alternative PC1LT3	0	132	375	514	717	663	1,201	1,608	1,907	1,843
Alternative PC2LT4	0	132	375	514	717	667	1,273	1,668	2,006	1,994
Alternative PC3LT5	0	132	375	514	717	668	1,413	1,799	2,000	2,109
Alternative PC6LT8	0	132	375	514	717	1,115	2,130	2,784	3,049	3,343

Table 225 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	478	1,565	2,130	2,151	1,765	1,236	1,060	858	913	612
Alternative PC2LT002	478	1,565	2,130	2,151	1,765	1,234	1,060	858	976	729
Alternative PC1LT3	478	1,565	2,130	2,151	1,765	1,234	1,060	1,050	1,162	1,360
Alternative PC2LT4	478	1,565	2,130	2,151	1,765	1,234	1,060	1,050	1,162	1,680
Alternative PC3LT5	478	1,565	2,130	2,151	1,765	1,234	1,060	1,050	1,520	4,452
Alternative PC6LT8	478	1,565	2,130	2,151	1,765	1,234	1,059	1,408	3,530	5,940

Table 226 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 227 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 228 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,102	1,198	1,281	1,354	1,485	1,499	1,712	2,257	2,059
Alternative PC2LT002	0	1,102	1,198	1,281	1,354	1,499	1,366	1,572	1,960	1,657
Alternative PC1LT3	0	1,102	1,198	1,281	1,354	1,499	1,366	1,573	1,961	1,658
Alternative PC2LT4	0	1,102	1,198	1,281	1,354	1,513	1,380	1,629	2,016	1,713
Alternative PC3LT5	0	1,102	1,198	1,281	1,354	1,513	1,381	2,254	2,571	2,244
Alternative PC6LT8	0	1,102	1,198	1,281	1,354	1,531	1,438	2,748	2,903	2,549

Table 229 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	618	925	947	1,358	1,926	1,746	2,506	2,293	2,102	1,919
Alternative PC2LT002	618	925	947	1,358	1,926	1,690	2,381	2,076	1,883	1,653
Alternative PC1LT3	618	925	947	1,358	1,926	2,102	2,686	2,299	2,017	1,762
Alternative PC2LT4	618	925	947	1,358	1,926	2,103	2,687	2,314	2,031	1,776
Alternative PC3LT5	618	925	947	1,358	1,926	2,119	2,704	2,330	2,110	1,883
Alternative PC6LT8	618	925	947	1,358	1,926	2,104	2,804	2,690	2,715	2,549

Table 230 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	217	233	1,377	2,723	2,018	1,846	1,630	1,448	1,298	1,355
Alternative PC2LT002	217	233	1,377	2,723	2,018	1,834	1,626	1,443	1,294	1,629
Alternative PC1LT3	217	233	1,377	2,723	2,018	1,833	1,617	1,434	1,285	1,341
Alternative PC2LT4	217	233	1,377	2,723	2,018	1,833	1,637	1,454	1,304	1,639
Alternative PC3LT5	217	233	1,377	2,723	2,018	1,834	1,637	1,454	1,979	1,978
Alternative PC6LT8	217	233	1,377	2,723	2,018	1,834	2,180	1,948	2,433	2,702

Table 231 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	33	651	860	1,319	1,241	1,151	1,623	1,422	1,388	1,666
Alternative PC2LT002	33	651	860	1,319	1,241	1,451	2,350	2,159	2,200	2,295
Alternative PC1LT3	33	651	860	1,319	1,241	1,451	2,318	2,133	2,061	2,177
Alternative PC2LT4	33	651	860	1,319	1,241	1,451	2,285	2,021	2,077	2,180
Alternative PC3LT5	33	651	860	1,319	1,241	1,470	2,376	2,102	2,193	2,283
Alternative PC6LT8	33	651	860	1,319	1,241	1,571	2,876	3,080	2,915	2,700

Table 232 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	446	898	1,659	2,476	2,029	1,579	1,487	1,889	1,762	1,739
Alternative PC2LT002	446	898	1,659	2,476	2,029	1,714	1,622	2,035	1,912	1,877
Alternative PC1LT3	446	898	1,659	2,476	2,029	2,081	1,960	2,487	2,332	2,256
Alternative PC2LT4	446	898	1,659	2,476	2,029	2,414	2,265	2,852	2,641	2,549
Alternative PC3LT5	446	898	1,659	2,476	2,029	2,660	2,490	3,000	3,025	2,835
Alternative PC6LT8	446	898	1,659	2,476	2,029	2,806	2,695	3,278	3,951	3,696

Table 233 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	460	494	638	757	841	1,047	2,425	2,161	1,948
Alternative PC2LT002	0	460	494	638	757	815	1,012	2,383	2,087	1,819
Alternative PC1LT3	0	460	494	638	757	815	1,016	2,389	2,093	1,825
Alternative PC2LT4	0	460	494	638	757	815	1,026	2,399	2,102	1,834
Alternative PC3LT5	0	460	494	638	757	815	1,228	2,224	1,956	1,698
Alternative PC6LT8	0	460	494	638	757	816	1,625	2,570	2,766	2,479

Table 234 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	7	11	16	16	15	15	15	15	15
Alternative PC2LT002	0	7	11	16	16	0	0	0	0	0
Alternative PC1LT3	0	7	11	16	16	0	0	0	0	0
Alternative PC2LT4	0	7	11	16	16	0	0	0	0	0
Alternative PC3LT5	0	7	11	16	16	0	0	0	0	0
Alternative PC6LT8	0	7	11	16	16	0	0	0	0	0

Table 235 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	234	492	717	1,014	740	668	931	1,326	1,386
Alternative PC2LT002	0	234	492	717	1,014	715	623	897	1,296	1,273
Alternative PC1LT3	0	234	492	717	1,014	715	682	967	1,391	1,354
Alternative PC2LT4	0	234	492	717	1,014	740	799	1,029	1,465	1,433
Alternative PC3LT5	0	234	492	717	1,014	716	893	1,152	1,599	1,727
Alternative PC6LT8	0	234	492	717	1,014	747	1,059	1,270	2,337	3,201

Table 236 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	140	195	1,128	1,041	677	531	337	1,169	1,016
Alternative PC2LT002	0	140	195	1,128	1,041	622	477	284	1,158	944
Alternative PC1LT3	0	140	195	1,128	1,041	623	478	285	1,140	929
Alternative PC2LT4	0	140	195	1,128	1,041	623	478	285	1,068	889
Alternative PC3LT5	0	140	195	1,128	1,041	622	477	284	1,137	926
Alternative PC6LT8	0	140	195	1,128	1,041	720	574	442	1,592	1,411

Table 237 - Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($), Total Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	283	647	940	1,243	1,196	850	858	744	1,889	1,698
Alternative PC2LT002	283	647	940	1,243	1,196	946	920	787	1,534	1,467
Alternative PC1LT3	283	647	940	1,243	1,196	962	961	853	1,932	1,744
Alternative PC2LT4	283	647	940	1,243	1,196	995	989	877	1,953	1,789
Alternative PC3LT5	283	647	940	1,243	1,196	994	1,445	1,286	1,940	1,823
Alternative PC6LT8	283	647	940	1,243	1,196	994	1,515	2,033	2,873	2,781

Table 238 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	594	655	1,742	1,797	1,356	1,658	1,564	1,332	1,571	1,357
Alternative PC2LT002	594	655	1,742	1,797	1,356	1,612	1,507	1,271	1,498	1,218
Alternative PC1LT3	594	655	1,742	1,797	1,356	1,613	1,507	1,271	1,799	1,218
Alternative PC2LT4	594	655	1,742	1,797	1,356	1,613	1,507	1,435	1,964	1,218
Alternative PC3LT5	594	655	1,742	1,797	1,356	1,614	1,509	1,659	2,116	1,306
Alternative PC6LT8	594	655	1,742	1,797	1,356	1,710	1,904	2,189	2,575	2,124

Table 239 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	127	93	1,401	1,657	1,130	1,270	1,113	939	746	640
Alternative PC2LT002	127	93	1,401	1,657	1,130	1,726	1,520	1,301	1,070	895
Alternative PC1LT3	127	93	1,401	1,657	1,130	1,237	1,074	902	709	563
Alternative PC2LT4	127	93	1,401	1,657	1,130	1,726	1,520	1,301	1,070	895
Alternative PC3LT5	127	93	1,401	1,657	1,130	1,718	1,513	1,294	1,064	1,059
Alternative PC6LT8	127	93	1,401	1,657	1,130	3,409	3,169	2,929	2,685	2,493

Table 240 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	391	268	1,209	1,435	1,319	1,154	1,041	1,014	1,200	2,093
Alternative PC2LT002	391	268	1,209	1,435	1,319	1,286	1,170	2,498	2,501	3,227
Alternative PC1LT3	391	268	1,209	1,435	1,319	1,286	1,175	2,559	2,560	2,282
Alternative PC2LT4	391	268	1,209	1,435	1,319	1,286	1,170	2,498	2,501	2,226
Alternative PC3LT5	391	268	1,209	1,435	1,319	2,292	2,171	3,477	3,448	3,120
Alternative PC6LT8	391	268	1,209	1,435	1,319	2,292	2,270	3,894	3,754	3,494

Table 241 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	538	568	1,033	966	969	2,244	2,277	1,982	1,751
Alternative PC2LT002	0	538	568	1,033	966	957	1,126	1,293	1,104	879
Alternative PC1LT3	0	538	568	1,033	966	921	2,022	1,932	1,642	1,366
Alternative PC2LT4	0	538	568	1,033	966	957	2,056	1,962	1,669	1,392
Alternative PC3LT5	0	538	568	1,033	966	1,066	2,162	1,803	1,553	1,288
Alternative PC6LT8	0	538	568	1,033	966	1,606	2,035	2,308	2,069	1,796

Table 242 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	362	642	671	1,022	981	885	1,097	978	1,236
Alternative PC2LT002	0	362	642	671	1,022	1,157	1,046	1,414	1,254	1,522
Alternative PC1LT3	0	362	642	671	1,022	1,039	932	1,135	999	1,286
Alternative PC2LT4	0	362	642	671	1,022	1,157	1,046	1,418	1,258	1,525
Alternative PC3LT5	0	362	642	671	1,022	1,280	1,160	1,502	1,431	1,549
Alternative PC6LT8	0	362	642	671	1,022	1,685	1,524	2,443	2,302	2,300

Table 243 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	70	515	687	550	563	508	1,384	2,004	2,344
Alternative PC2LT002	0	70	515	687	550	563	752	1,650	2,193	1,945
Alternative PC1LT3	0	70	515	687	550	555	618	1,537	1,915	1,699
Alternative PC2LT4	0	70	515	687	550	563	752	1,650	1,990	1,767
Alternative PC3LT5	0	70	515	687	550	563	902	1,786	1,711	1,578
Alternative PC6LT8	0	70	515	687	550	1,392	2,230	3,248	2,884	2,841

Table 244 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	1,114	4,386	4,186	3,979	2,885	2,693	2,419	2,077	1,820	1,652
Alternative PC2LT002	1,114	4,386	4,186	3,979	2,885	2,571	2,300	1,966	2,031	1,784
Alternative PC1LT3	1,114	4,386	4,186	3,979	2,885	2,571	2,298	1,964	2,029	1,783
Alternative PC2LT4	1,114	4,386	4,186	3,979	2,885	2,571	2,300	1,964	2,029	1,782
Alternative PC3LT5	1,114	4,386	4,186	3,979	2,885	2,572	2,301	1,965	2,343	2,051
Alternative PC6LT8	1,114	4,386	4,186	3,979	2,885	2,569	2,298	2,304	4,153	3,887

Table 245 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT002	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC1LT3	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC2LT4	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC3LT5	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776
Alternative PC6LT8	0	0	0	0	-3,300	-3,693	-3,948	-4,296	-4,602	-4,776

Table 246 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 247 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	810	959	1,089	971	854	856	3,461	3,078	2,791
Alternative PC2LT002	0	810	959	1,089	971	1,069	1,088	3,541	3,073	2,790
Alternative PC1LT3	0	810	959	1,089	971	1,069	1,088	3,541	3,073	2,790
Alternative PC2LT4	0	810	959	1,089	971	1,069	1,089	3,541	3,073	2,789
Alternative PC3LT5	0	810	959	1,089	971	1,069	1,089	3,541	3,073	2,789
Alternative PC6LT8	0	810	959	1,089	971	1,070	1,143	3,541	3,073	2,790

Table 248 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	876	1,324	1,347	1,931	2,363	1,778	1,506	1,350	1,269	1,139
Alternative PC2LT002	876	1,324	1,347	1,931	2,363	1,668	1,335	1,182	1,092	953
Alternative PC1LT3	876	1,324	1,347	1,931	2,363	1,571	1,335	1,087	880	726
Alternative PC2LT4	876	1,324	1,347	1,931	2,363	1,573	1,337	1,119	910	757
Alternative PC3LT5	876	1,324	1,347	1,931	2,363	1,605	1,369	1,150	1,078	990
Alternative PC6LT8	876	1,324	1,347	1,931	2,363	1,632	1,393	1,789	1,941	2,010

Table 249 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	330	297	2,308	2,296	1,630	1,460	1,277	1,092	941	821
Alternative PC2LT002	330	297	2,308	2,296	1,630	1,438	1,273	1,086	935	1,357
Alternative PC1LT3	330	297	2,308	2,296	1,630	1,438	1,255	1,069	918	799
Alternative PC2LT4	330	297	2,308	2,296	1,630	1,438	1,273	1,086	935	1,357
Alternative PC3LT5	330	297	2,308	2,296	1,630	1,438	1,273	1,086	1,539	1,365
Alternative PC6LT8	330	297	2,308	2,296	1,630	1,438	1,802	1,567	1,986	2,045

Table 250 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	29	710	929	1,194	1,142	1,024	925	819	1,006	1,690
Alternative PC2LT002	29	710	929	1,194	1,142	1,261	1,362	1,215	1,594	2,059
Alternative PC1LT3	29	710	929	1,194	1,142	1,261	1,144	1,025	1,208	1,715
Alternative PC2LT4	29	710	929	1,194	1,142	1,261	1,362	1,215	1,594	2,059
Alternative PC3LT5	29	710	929	1,194	1,142	1,281	1,362	1,215	1,605	2,063
Alternative PC6LT8	29	710	929	1,194	1,142	1,387	1,510	1,989	2,218	2,163

Table 251 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	1,144	866	3,153	3,455	2,795	2,558	2,374	2,487	2,353	3,069
Alternative PC2LT002	1,144	866	3,153	3,455	2,795	2,516	2,418	2,649	2,540	3,143
Alternative PC1LT3	1,144	866	3,153	3,455	2,795	2,516	2,418	2,414	2,337	2,958
Alternative PC2LT4	1,144	866	3,153	3,455	2,795	2,516	2,418	2,649	2,540	3,140
Alternative PC3LT5	1,144	866	3,153	3,455	2,795	2,516	2,418	2,703	2,759	2,726
Alternative PC6LT8	1,144	866	3,153	3,455	2,795	2,516	2,534	2,922	3,551	3,566

Table 252 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,417	1,370	2,163	1,589	1,479	1,912	2,469	2,103	1,821
Alternative PC2LT002	0	1,417	1,370	2,163	1,589	1,388	1,809	2,324	1,923	1,643
Alternative PC1LT3	0	1,417	1,370	2,163	1,589	1,388	1,809	2,324	1,923	1,644
Alternative PC2LT4	0	1,417	1,370	2,163	1,589	1,388	1,809	2,324	1,923	1,644
Alternative PC3LT5	0	1,417	1,370	2,163	1,589	1,388	2,146	2,652	2,237	1,946
Alternative PC6LT8	0	1,417	1,370	2,163	1,589	1,388	2,146	2,652	2,260	1,969

Table 253 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 254 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	336	544	957	1,001	890	803	782	1,717	1,623
Alternative PC2LT002	0	336	544	957	1,001	824	723	706	1,649	1,398
Alternative PC1LT3	0	336	544	957	1,001	824	723	703	1,718	1,402
Alternative PC2LT4	0	336	544	957	1,001	827	733	746	1,792	1,451
Alternative PC3LT5	0	336	544	957	1,001	827	810	815	1,898	1,582
Alternative PC6LT8	0	336	544	957	1,001	909	1,172	1,148	2,801	2,224

Table 255 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	65	117	496	1,258	1,059	903	634	496	457
Alternative PC2LT002	0	65	117	496	1,258	908	755	488	352	262
Alternative PC1LT3	0	65	117	496	1,258	908	755	488	352	257
Alternative PC2LT4	0	65	117	496	1,258	908	755	488	352	315
Alternative PC3LT5	0	65	117	496	1,258	908	755	488	352	257
Alternative PC6LT8	0	65	117	496	1,258	908	755	488	385	348

Table 256 - Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($), Passenger Car Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	407	449	1,013	1,202	1,323	1,179	1,273	1,083	1,009	884
Alternative PC2LT002	407	449	1,013	1,202	1,323	1,439	1,452	1,215	1,090	1,226
Alternative PC1LT3	407	449	1,013	1,202	1,323	1,354	1,377	1,158	1,039	930
Alternative PC2LT4	407	449	1,013	1,202	1,323	1,439	1,453	1,224	1,098	1,051
Alternative PC3LT5	407	449	1,013	1,202	1,323	1,439	2,674	2,321	2,091	1,853
Alternative PC6LT8	407	449	1,013	1,202	1,323	1,439	2,870	2,973	2,195	1,994

Table 257 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (BMW)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	213	377	414	1,627	1,517	987	897	789	712	1,722
Alternative PC2LT002	213	377	414	1,627	1,517	987	957	849	756	1,717
Alternative PC1LT3	213	377	414	1,627	1,517	987	1,009	900	1,225	1,480
Alternative PC2LT4	213	377	414	1,627	1,517	987	1,009	1,060	1,473	1,714
Alternative PC3LT5	213	377	414	1,627	1,517	987	1,009	1,288	1,686	2,128
Alternative PC6LT8	213	377	414	1,627	1,517	987	1,270	1,811	2,445	3,268

Table 258 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Ford)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	66	874	1,591	1,664	1,757	1,428	1,975	2,372	2,132	1,942
Alternative PC2LT002	66	874	1,591	1,664	1,757	1,428	1,974	2,371	2,131	1,942
Alternative PC1LT3	66	874	1,591	1,664	1,757	1,428	2,053	2,442	2,195	2,000
Alternative PC2LT4	66	874	1,591	1,664	1,757	1,445	2,069	2,456	2,207	2,011
Alternative PC3LT5	66	874	1,591	1,664	1,757	1,841	2,403	2,747	2,464	2,267
Alternative PC6LT8	66	874	1,591	1,664	1,757	2,635	3,404	4,183	3,847	3,586

Table 259 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (GM)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	228	386	2,086	2,508	2,406	1,979	1,869	1,977	1,947	2,127
Alternative PC2LT002	228	386	2,086	2,508	2,406	2,200	2,070	2,157	2,109	2,276
Alternative PC1LT3	228	386	2,086	2,508	2,406	2,922	2,736	2,738	2,654	2,713
Alternative PC2LT4	228	386	2,086	2,508	2,406	2,966	2,774	2,793	2,693	2,924
Alternative PC3LT5	228	386	2,086	2,508	2,406	3,121	2,925	2,922	2,807	3,425
Alternative PC6LT8	228	386	2,086	2,508	2,406	3,209	3,119	3,094	2,958	4,715

Table 260 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Honda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	585	656	1,047	1,324	1,287	1,144	978	925	815
Alternative PC2LT002	0	585	656	1,047	1,324	2,913	2,602	2,264	2,064	1,837
Alternative PC1LT3	0	585	656	1,047	1,324	2,950	2,841	2,882	2,670	2,401
Alternative PC2LT4	0	585	656	1,047	1,324	2,950	2,933	2,972	2,868	2,597
Alternative PC3LT5	0	585	656	1,047	1,324	2,950	3,396	3,085	3,150	2,847
Alternative PC6LT8	0	585	656	1,047	1,324	2,913	2,737	2,835	3,338	3,079

Table 261 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Hyundai)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	113	188	1,304	1,062	898	923	1,965	1,868	2,000
Alternative PC2LT002	0	113	188	1,304	1,062	882	895	1,931	1,810	1,894
Alternative PC1LT3	0	113	188	1,304	1,062	1,100	1,191	2,190	2,038	2,103
Alternative PC2LT4	0	113	188	1,304	1,062	1,757	1,917	2,823	2,583	2,296
Alternative PC3LT5	0	113	188	1,304	1,062	2,129	2,004	2,908	2,663	2,388
Alternative PC6LT8	0	113	188	1,304	1,062	1,728	2,123	3,038	2,795	2,987

Table 262 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (KIA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	213	194	302	916	807	847	736	644	573
Alternative PC2LT002	0	213	194	302	916	791	1,233	1,094	1,210	1,199
Alternative PC1LT3	0	213	194	302	916	791	1,878	1,690	1,897	2,008
Alternative PC2LT4	0	213	194	302	916	791	1,878	1,689	2,024	2,255
Alternative PC3LT5	0	213	194	302	916	791	2,005	1,813	2,332	2,719
Alternative PC6LT8	0	213	194	302	916	791	2,015	2,255	3,238	3,925

Table 263 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (JLR)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	461	1,490	2,077	2,106	1,738	1,202	1,029	830	892	588
Alternative PC2LT002	461	1,490	2,077	2,106	1,738	1,203	1,031	833	952	705
Alternative PC1LT3	461	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,142	1,350
Alternative PC2LT4	461	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,142	1,678
Alternative PC3LT5	461	1,490	2,077	2,106	1,738	1,202	1,031	1,029	1,501	4,507
Alternative PC6LT8	461	1,490	2,077	2,106	1,738	1,202	1,031	1,388	3,516	5,988

Table 264 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Karma)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 265 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Lucid)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT002	0	0	0	0	0	0	0	0	0	0
Alternative PC1LT3	0	0	0	0	0	0	0	0	0	0
Alternative PC2LT4	0	0	0	0	0	0	0	0	0	0
Alternative PC3LT5	0	0	0	0	0	0	0	0	0	0
Alternative PC6LT8	0	0	0	0	0	0	0	0	0	0

Table 266 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mazda)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	1,153	1,239	1,312	1,415	1,583	1,598	1,445	2,132	1,948
Alternative PC2LT002	0	1,153	1,239	1,312	1,415	1,566	1,409	1,271	1,791	1,485
Alternative PC1LT3	0	1,153	1,239	1,312	1,415	1,566	1,409	1,271	1,791	1,485
Alternative PC2LT4	0	1,153	1,239	1,312	1,415	1,583	1,425	1,336	1,855	1,549
Alternative PC3LT5	0	1,153	1,239	1,312	1,415	1,583	1,425	2,058	2,495	2,161
Alternative PC6LT8	0	1,153	1,239	1,312	1,415	1,603	1,483	2,628	2,878	2,512

Table 267 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mercedes-Benz)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	360	544	574	854	1,550	1,719	3,343	3,079	2,795	2,566
Alternative PC2LT002	360	544	574	854	1,550	1,710	3,255	2,819	2,540	2,233
Alternative PC1LT3	360	544	574	854	1,550	2,556	3,822	3,312	2,966	2,624
Alternative PC2LT4	360	544	574	854	1,550	2,556	3,822	3,312	2,966	2,624
Alternative PC3LT5	360	544	574	854	1,550	2,556	3,822	3,312	2,966	2,624
Alternative PC6LT8	360	544	574	854	1,550	2,505	3,979	3,432	3,357	3,001

Table 268 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Mitsubishi)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	71	155	269	3,203	2,445	2,266	2,008	1,826	1,679	1,921
Alternative PC2LT002	71	155	269	3,203	2,445	2,265	2,005	1,823	1,675	1,917
Alternative PC1LT3	71	155	269	3,203	2,445	2,265	2,005	1,823	1,675	1,917
Alternative PC2LT4	71	155	269	3,203	2,445	2,265	2,028	1,846	1,698	1,939
Alternative PC3LT5	71	155	269	3,203	2,445	2,265	2,028	1,846	2,447	2,629
Alternative PC6LT8	71	155	269	3,203	2,445	2,265	2,583	2,349	2,906	3,407

Table 269 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Nissan)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	38	571	769	1,474	1,362	1,304	2,450	2,133	1,838	1,638
Alternative PC2LT002	38	571	769	1,474	1,362	1,680	3,522	3,272	2,913	2,572
Alternative PC1LT3	38	571	769	1,474	1,362	1,680	3,716	3,445	3,071	2,722
Alternative PC2LT4	38	571	769	1,474	1,362	1,680	3,384	2,976	2,648	2,322
Alternative PC3LT5	38	571	769	1,474	1,362	1,698	3,579	3,148	2,886	2,543
Alternative PC6LT8	38	571	769	1,474	1,362	1,793	4,486	4,353	3,734	3,338

Table 270 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Stellantis)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	333	903	1,435	2,337	1,922	1,445	1,367	1,808	1,683	1,561
Alternative PC2LT002	333	903	1,435	2,337	1,922	1,603	1,514	1,952	1,828	1,708
Alternative PC1LT3	333	903	1,435	2,337	1,922	2,021	1,898	2,497	2,331	2,162
Alternative PC2LT4	333	903	1,435	2,337	1,922	2,400	2,244	2,879	2,655	2,470
Alternative PC3LT5	333	903	1,435	2,337	1,922	2,679	2,499	3,040	3,061	2,849
Alternative PC6LT8	333	903	1,435	2,337	1,922	2,845	2,716	3,325	4,005	3,714

Table 271 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Subaru)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	284	337	379	618	736	907	2,418	2,171	1,968
Alternative PC2LT002	0	284	337	379	618	721	883	2,392	2,113	1,847
Alternative PC1LT3	0	284	337	379	618	721	888	2,399	2,120	1,854
Alternative PC2LT4	0	284	337	379	618	720	899	2,411	2,131	1,865
Alternative PC3LT5	0	284	337	379	618	721	1,080	2,155	1,912	1,658
Alternative PC6LT8	0	284	337	379	618	722	1,542	2,557	2,847	2,562

Table 272 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Tesla)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	135	217	297	292	288	283	279	274	270
Alternative PC2LT002	0	135	217	297	292	4	0	0	0	0
Alternative PC1LT3	0	135	217	297	292	4	0	0	0	0
Alternative PC2LT4	0	135	217	297	292	4	0	0	0	0
Alternative PC3LT5	0	135	217	297	292	4	0	0	0	0
Alternative PC6LT8	0	135	217	297	292	4	0	0	0	0

Table 273 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Toyota)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	165	458	567	1,021	649	588	1,019	1,094	1,245
Alternative PC2LT002	0	165	458	567	1,021	649	563	1,012	1,086	1,198
Alternative PC1LT3	0	165	458	567	1,021	649	658	1,124	1,196	1,324
Alternative PC2LT4	0	165	458	567	1,021	687	838	1,198	1,269	1,423
Alternative PC3LT5	0	165	458	567	1,021	649	942	1,352	1,421	1,813
Alternative PC6LT8	0	165	458	567	1,021	649	992	1,343	2,062	3,788

Table 274 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (Volvo)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	0	174	230	1,394	952	522	382	219	1,437	1,237
Alternative PC2LT002	0	174	230	1,394	952	506	366	203	1,479	1,214
Alternative PC1LT3	0	174	230	1,394	952	506	366	203	1,455	1,197
Alternative PC2LT4	0	174	230	1,394	952	506	366	203	1,353	1,118
Alternative PC3LT5	0	174	230	1,394	952	506	366	203	1,450	1,192
Alternative PC6LT8	0	174	230	1,394	952	643	502	424	2,071	1,838

Table 275 - Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($), Light Truck Fleet for Manufacturer (VWA)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
No Action Alternative (Baseline)	194	782	892	1,269	1,118	651	610	542	2,411	2,179
Alternative PC2LT002	194	782	892	1,269	1,118	646	602	533	1,798	1,609
Alternative PC1LT3	194	782	892	1,269	1,118	724	711	671	2,463	2,228
Alternative PC2LT4	194	782	892	1,269	1,118	724	711	671	2,462	2,227
Alternative PC3LT5	194	782	892	1,269	1,118	724	711	671	1,850	1,805
Alternative PC6LT8	194	782	892	1,269	1,118	724	711	1,481	3,275	3,251

Incremental Societal Impacts

Table 276 - Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 3%

Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-0.3	-0.1	-0.1	-0.1	-0.1	2.9	2.1	3.1	2.7	2.0	12.2
Alternative PC1LT3	-0.1	-0.1	-0.1	-0.1	-0.1	5.3	6.3	7.8	7.2	5.1	31.3
Alternative PC2LT4	0.3	0.0	0.0	0.0	0.0	6.9	8.5	9.8	9.3	7.4	42.0
Alternative PC3LT5	2.1	0.1	0.1	0.1	0.1	9.3	12.2	12.4	12.2	11.0	59.7
Alternative PC6LT8	9.8	0.8	0.8	0.8	0.8	13.3	17.0	18.3	20.8	23.4	105.7

Table 277 - Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 3%

Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-0.1	0.0	0.0	0.0	0.0	0.6	-0.6	0.3	0.5	0.1	0.6
Alternative PC1LT3	0.1	0.0	0.0	0.0	0.0	0.7	0.6	1.1	1.0	-0.2	3.2
Alternative PC2LT4	0.3	0.0	0.0	0.0	0.0	1.1	1.1	1.7	1.8	0.6	6.4
Alternative PC3LT5	1.3	0.0	0.0	0.0	0.0	1.2	1.6	1.9	1.9	0.8	9.0
Alternative PC6LT8	5.5	0.3	0.3	0.3	0.3	2.4	2.1	2.7	4.3	4.2	22.4

Table 278 - Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 3%

Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-0.2	0.0	-0.1	-0.1	-0.1	2.3	2.7	2.9	2.3	1.9	11.6
Alternative PC1LT3	-0.1	0.0	0.0	0.0	0.0	4.6	5.7	6.7	6.1	5.3	28.1
Alternative PC2LT4	0.0	0.0	0.0	0.0	0.0	5.8	7.4	8.1	7.5	6.8	35.6
Alternative PC3LT5	0.8	0.1	0.1	0.1	0.1	8.1	10.6	10.4	10.3	10.2	50.7
Alternative PC6LT8	4.3	0.5	0.5	0.5	0.6	10.9	14.9	15.6	16.4	19.2	83.3

Table 279 - Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 7%

Incremental Total Societal Costs ($b) by Year and Alternative for Total Fleet, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-0.1	0.0	0.0	0.0	0.0	2.2	1.5	2.1	1.8	1.2	8.4
Alternative PC1LT3	0.0	0.0	0.0	0.0	0.0	3.9	4.4	5.2	4.6	3.1	21.1
Alternative PC2LT4	0.2	0.0	0.0	0.0	0.0	5.1	5.9	6.5	5.9	4.5	28.1
Alternative PC3LT5	1.3	0.1	0.1	0.1	0.1	6.8	8.6	8.3	7.8	6.8	39.8
Alternative PC6LT8	5.9	0.4	0.4	0.4	0.4	9.6	11.9	12.3	13.5	14.8	69.7

Table 280 - Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 7%

Incremental Total Societal Costs ($b) by Year and Alternative for Passenger Car Fleet, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.0	0.0	0.0	0.0	0.0	0.4	-0.4	0.2	0.3	0.0	0.5
Alternative PC1LT3	0.1	0.0	0.0	0.0	0.0	0.5	0.4	0.7	0.6	-0.2	2.0
Alternative PC2LT4	0.2	0.0	0.0	0.0	0.0	0.7	0.7	1.1	1.1	0.3	4.1
Alternative PC3LT5	0.8	0.0	0.0	0.0	0.0	0.9	1.2	1.3	1.3	0.5	6.0
Alternative PC6LT8	3.4	0.2	0.2	0.2	0.2	1.8	1.6	2.0	2.9	2.5	14.9

Table 281 - Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 7%

Incremental Total Societal Costs ($b) by Year and Alternative for Light Truck Fleet, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	-0.1	0.0	0.0	0.0	0.0	1.7	1.9	1.9	1.5	1.2	7.9
Alternative PC1LT3	-0.1	0.0	0.0	0.0	0.0	3.4	4.1	4.5	4.0	3.3	19.1
Alternative PC2LT4	0.0	0.0	0.0	0.0	0.0	4.3	5.2	5.4	4.8	4.2	24.0
Alternative PC3LT5	0.5	0.0	0.0	0.0	0.0	5.9	7.4	6.9	6.6	6.3	33.8
Alternative PC6LT8	2.5	0.2	0.3	0.3	0.3	7.8	10.3	10.3	10.6	12.3	54.8

Table 282 - Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.4	0.1	0.1	0.1	0.1	8.2	5.7	9.0	8.4	6.9	38.8
Alternative PC1LT3	0.1	0.1	0.1	0.1	0.1	14.8	17.9	23.4	23.2	18.1	97.8
Alternative PC2LT4	-0.2	0.0	0.0	0.0	0.0	18.8	23.5	28.9	29.6	25.5	126.3
Alternative PC3LT5	-1.8	-0.1	-0.1	-0.1	-0.1	24.6	33.2	35.7	37.6	36.4	165.5
Alternative PC6LT8	-8.6	-0.6	-0.6	-0.5	-0.5	32.3	43.5	50.2	61.1	71.4	247.8

Table 283 - Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.1	0.0	0.0	0.0	0.0	1.6	-1.3	1.7	2.2	0.9	5.3
Alternative PC1LT3	0.0	0.0	0.0	0.0	0.0	0.7	0.3	2.5	2.5	-1.6	4.5
Alternative PC2LT4	-0.2	0.0	0.0	0.0	0.0	1.4	1.7	4.5	5.0	0.9	13.3
Alternative PC3LT5	-1.0	0.0	0.0	0.0	0.0	2.2	4.0	5.9	6.4	1.4	18.8
Alternative PC6LT8	-4.4	-0.2	-0.2	-0.1	-0.1	5.1	6.1	10.3	12.0	6.2	34.8

Table 284 - Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.3	0.0	0.0	0.0	0.0	6.6	7.0	7.3	6.2	6.0	33.5
Alternative PC1LT3	0.2	0.0	0.0	0.0	0.0	14.1	17.5	20.9	20.7	19.6	93.3
Alternative PC2LT4	0.0	0.0	0.0	0.0	0.0	17.4	21.8	24.4	24.6	24.6	112.9
Alternative PC3LT5	-0.8	-0.1	0.0	0.0	0.0	22.4	29.2	29.8	31.2	35.0	146.7
Alternative PC6LT8	-4.1	-0.4	-0.4	-0.4	-0.4	27.2	37.4	39.9	49.1	65.2	213.0

Table 285 - Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.3	0.1	0.1	0.0	0.1	6.9	4.7	7.4	6.8	5.6	31.8
Alternative PC1LT3	0.1	0.0	0.0	0.0	0.0	12.4	14.8	19.3	19.0	14.6	80.4
Alternative PC2LT4	-0.2	0.0	0.0	0.0	0.0	15.7	19.5	23.8	24.2	20.6	103.7
Alternative PC3LT5	-1.4	-0.1	-0.1	0.0	0.0	20.7	27.5	29.3	30.7	29.3	135.9
Alternative PC6LT8	-6.8	-0.5	-0.4	-0.4	-0.4	27.1	36.0	41.0	49.5	57.3	202.5

Table 286 - Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.1	0.0	0.0	0.0	0.0	1.3	-1.1	1.4	1.8	0.8	4.3
Alternative PC1LT3	0.0	0.0	0.0	0.0	0.0	0.6	0.3	2.1	2.1	-1.3	3.8
Alternative PC2LT4	-0.1	0.0	0.0	0.0	0.0	1.2	1.4	3.7	4.1	0.7	10.9
Alternative PC3LT5	-0.8	0.0	0.0	0.0	0.0	1.8	3.3	4.8	5.2	1.0	15.3
Alternative PC6LT8	-3.5	-0.1	-0.1	-0.1	-0.1	4.3	5.0	8.3	9.7	4.9	28.2

Table 287 - Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.2	0.0	0.0	0.0	0.0	5.5	5.7	6.0	5.1	4.8	27.5
Alternative PC1LT3	0.1	0.0	0.0	0.0	0.0	11.9	14.5	17.2	16.9	15.9	76.6
Alternative PC2LT4	0.0	0.0	0.0	0.0	0.0	14.6	18.1	20.1	20.1	19.9	92.8
Alternative PC3LT5	-0.6	0.0	0.0	0.0	0.0	18.8	24.2	24.5	25.5	28.3	120.6
Alternative PC6LT8	-3.3	-0.3	-0.3	-0.3	-0.3	22.8	31.0	32.7	39.8	52.4	174.2

Table 288 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.7	0.2	0.2	0.2	0.2	5.3	3.6	5.8	5.7	4.9	26.7
Alternative PC1LT3	0.2	0.1	0.1	0.1	0.1	9.5	11.6	15.6	16.1	13.0	66.4
Alternative PC2LT4	-0.5	0.1	0.1	0.1	0.1	11.9	15.1	19.1	20.3	18.1	84.2
Alternative PC3LT5	-3.8	-0.2	-0.2	-0.2	-0.2	15.3	21.0	23.3	25.4	25.3	105.8
Alternative PC6LT8	-18.3	-1.4	-1.4	-1.3	-1.4	19.0	26.5	31.9	40.4	48.0	142.1

Table 289 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.2	0.1	0.1	0.1	0.1	1.0	-0.7	1.4	1.7	0.8	4.7
Alternative PC1LT3	-0.1	0.0	0.0	0.0	0.1	0.0	-0.3	1.4	1.5	-1.4	1.3
Alternative PC2LT4	-0.4	0.0	0.0	0.0	0.0	0.3	0.6	2.8	3.2	0.3	6.9
Alternative PC3LT5	-2.3	-0.1	-0.1	0.0	0.0	1.0	2.3	4.0	4.5	0.5	9.9
Alternative PC6LT8	-9.9	-0.5	-0.5	-0.4	-0.4	2.7	4.0	7.6	7.7	2.0	12.4

Table 290 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 3%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.5	0.1	0.1	0.1	0.1	4.3	4.3	4.4	4.0	4.1	22.0
Alternative PC1LT3	0.3	0.1	0.1	0.1	0.1	9.5	11.8	14.2	14.6	14.3	65.1
Alternative PC2LT4	0.0	0.0	0.0	0.0	0.0	11.6	14.4	16.3	17.1	17.7	77.3
Alternative PC3LT5	-1.6	-0.1	-0.1	-0.1	-0.1	14.3	18.6	19.3	21.0	24.8	96.0
Alternative PC6LT8	-8.4	-0.9	-0.9	-0.9	-1.0	16.3	22.5	24.3	32.7	46.0	129.7

Table 291 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Total Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.4	0.1	0.1	0.1	0.1	4.7	3.2	5.3	5.1	4.4	23.4
Alternative PC1LT3	0.1	0.1	0.1	0.1	0.1	8.5	10.3	14.1	14.4	11.6	59.3
Alternative PC2LT4	-0.4	0.0	0.0	0.0	0.0	10.7	13.6	17.3	18.2	16.1	75.6
Alternative PC3LT5	-2.7	-0.1	-0.1	-0.1	-0.1	13.8	18.9	21.1	22.9	22.5	96.1
Alternative PC6LT8	-12.6	-0.9	-0.9	-0.8	-0.8	17.5	24.1	28.7	36.0	42.5	132.8

Table 292 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Passenger Car Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.1	0.0	0.0	0.0	0.0	0.9	-0.7	1.2	1.5	0.7	3.8
Alternative PC1LT3	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1	1.4	1.4	-1.1	1.8
Alternative PC2LT4	-0.3	0.0	0.0	0.0	0.0	0.5	0.7	2.6	3.0	0.4	6.9
Alternative PC3LT5	-1.6	0.0	0.0	0.0	0.0	1.0	2.1	3.5	3.9	0.6	9.2
Alternative PC6LT8	-6.9	-0.3	-0.3	-0.3	-0.2	2.5	3.3	6.3	6.8	2.4	13.3

Table 293 - Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%

Incremental Total Societal Net Benefits ($b) by Year and Alternative for Light Truck Fleet, SC-GHG 2% Level, Discounted at 7%											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	0.3	0.1	0.1	0.1	0.1	3.8	3.8	4.1	3.6	3.6	19.5
Alternative PC1LT3	0.2	0.0	0.0	0.1	0.1	8.4	10.4	12.7	13.0	12.6	57.5
Alternative PC2LT4	0.0	0.0	0.0	0.0	0.0	10.2	12.8	14.7	15.3	15.6	68.7
Alternative PC3LT5	-1.1	-0.1	-0.1	-0.1	-0.1	12.9	16.8	17.6	19.0	22.0	86.8
Alternative PC6LT8	-5.7	-0.6	-0.6	-0.6	-0.6	15.0	20.8	22.4	29.2	40.2	119.5

Labor Impacts

Table 294 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	880	880	880	880	880	880
2023	937	937	937	937	937	937
2024	944	944	944	944	944	944
2025	915	915	915	915	915	915
2026	922	922	922	922	922	922
2027	946	949	952	954	956	959
2028	969	971	975	977	980	983
2029	973	976	980	982	984	988
2030	959	961	966	967	970	978
2031	948	949	953	955	959	972

Table 295 - Estimated Labor Utilization (1000s of Person-Years), Passenger Car Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Passenger Car Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	298	298	298	298	298	298
2023	305	305	305	305	305	305
2024	302	302	302	302	302	302
2025	281	281	281	281	281	281
2026	279	279	279	279	279	279
2027	285	285	285	285	285	285
2028	289	287	290	290	289	288
2029	288	287	289	289	288	287
2030	285	285	286	286	286	286
2031	282	281	282	282	282	284

Table 296 - Estimated Labor Utilization (1000s of Person-Years), Light Truck Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Light Truck Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	583	583	583	583	583	583
2023	632	632	632	632	632	632
2024	642	642	642	642	642	642
2025	634	634	634	634	634	634
2026	643	643	643	643	643	643
2027	661	665	667	668	671	674
2028	680	683	686	687	690	695
2029	685	688	692	693	695	701
2030	673	677	680	681	685	692
2031	666	668	671	673	677	689

Table 297 - Estimated Labor Utilization (1000s of Person-Years), Domestic Car Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Domestic Car Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	185	185	185	185	185	185
2023	190	190	190	190	190	190
2024	189	189	189	189	189	189
2025	176	176	176	176	176	176
2026	174	174	174	174	174	174
2027	178	178	178	178	178	179
2028	181	179	181	181	181	180
2029	181	180	181	181	181	180
2030	179	179	180	180	180	180
2031	177	176	177	177	177	178

Table 298 - Estimated Labor Utilization (1000s of Person-Years), Imported Car Fleet for Manufacturer (Total)

Estimated Labor Utilization (1000s of Person-Years), Imported Car Fleet for Manufacturer (Total)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	112	112	112	112	112	112
2023	115	115	115	115	115	115
2024	113	113	113	113	113	113
2025	105	105	105	105	105	105
2026	105	105	105	105	105	105
2027	107	107	107	107	107	107
2028	108	108	108	108	108	108
2029	108	108	108	108	108	107
2030	106	106	106	106	106	106
2031	105	105	105	105	105	106

Table 299 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (BMW)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (BMW)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	17	17	17	17	17	17
2023	18	18	18	18	18	18
2024	18	18	18	18	18	18
2025	18	18	18	18	18	18
2026	18	18	18	18	18	18
2027	19	19	18	18	18	18
2028	19	19	19	19	19	19
2029	19	19	19	19	19	19
2030	19	19	19	19	19	19
2031	19	19	19	19	19	19

Table 300 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Ford)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Ford)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	139	139	139	139	139	139
2023	151	151	151	151	151	151
2024	152	152	152	152	152	152
2025	149	149	149	149	149	149
2026	151	151	151	151	151	151
2027	155	155	155	155	156	158
2028	159	159	159	159	160	163
2029	161	161	161	161	162	165
2030	158	158	158	158	159	162
2031	156	156	156	156	156	158

Table 301 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (GM)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (GM)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	125	125	125	125	125	125
2023	134	134	134	134	134	134
2024	138	138	138	138	138	138
2025	135	135	135	135	135	135
2026	136	136	136	136	136	136
2027	140	140	142	142	142	143
2028	143	143	145	145	145	146
2029	143	144	146	146	146	146
2030	141	142	143	143	143	143
2031	140	141	142	142	143	145

Table 302 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Honda)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Honda)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	118	118	118	118	118	118
2023	125	125	125	125	125	125
2024	124	124	124	124	124	124
2025	119	119	119	119	119	119
2026	120	120	120	120	120	120
2027	124	126	126	126	127	127
2028	128	129	130	130	130	130
2029	127	128	130	130	129	130
2030	125	126	127	128	127	129
2031	123	123	125	125	125	126

Table 303 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Hyundai)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Hyundai)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	21	21	21	21	21	21
2023	22	22	22	22	22	22
2024	21	21	21	21	21	21
2025	20	20	20	20	20	20
2026	21	21	21	21	21	21
2027	21	21	21	21	21	21
2028	21	21	21	21	21	21
2029	22	22	22	22	22	22
2030	22	22	22	22	22	22
2031	22	22	22	22	21	22

Table 304 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (KIA)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (KIA)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	24	24	24	24	24	24
2023	26	26	26	26	26	26
2024	26	26	26	26	26	26
2025	24	24	24	24	24	24
2026	25	25	25	25	25	25
2027	25	25	25	25	25	25
2028	26	26	26	26	26	26
2029	26	26	26	26	26	26
2030	25	26	26	26	26	26
2031	25	25	25	26	26	27

Table 305 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (JLR)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (JLR)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	1	1	1	1	1	1
2023	1	1	1	1	1	1
2024	1	1	1	1	1	1
2025	1	1	1	1	1	1
2026	1	1	1	1	1	1
2027	1	1	1	1	1	1
2028	1	1	1	1	1	1
2029	1	1	1	1	1	1
2030	1	1	1	1	1	1
2031	1	1	1	1	1	1

Table 306 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Karma)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Karma)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	0	0	0	0	0	0

Table 307 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Lucid)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Lucid)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	0	0	0	0	0	0

Table 308 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mazda)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mazda)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	2	2	2	2	2	2
2023	2	2	2	2	2	2
2024	2	2	2	2	2	2
2025	2	2	2	2	2	2
2026	2	2	2	2	2	2
2027	2	2	2	2	2	2
2028	2	2	2	2	2	2
2029	2	2	2	2	2	2
2030	2	2	2	2	2	2
2031	2	2	2	2	2	2

Table 309 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mercedes-Benz)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mercedes-Benz)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	9	9	9	9	9	9
2023	9	9	9	9	9	9
2024	9	9	9	9	9	9
2025	9	9	9	9	9	9
2026	9	9	9	9	9	9
2027	10	10	10	10	10	10
2028	11	11	11	11	11	11
2029	10	10	11	11	11	11
2030	10	10	10	10	10	10
2031	10	10	10	10	10	10

Table 310 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mitsubishi)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Mitsubishi)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	2	2	2	2	2	2
2023	2	2	2	2	2	2
2024	2	2	2	2	2	2
2025	2	2	2	2	2	2
2026	2	2	2	2	2	2
2027	2	2	2	2	2	2
2028	2	2	2	2	2	2
2029	2	2	2	2	2	2
2030	2	2	2	2	2	2
2031	2	2	2	2	2	2

Table 311 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Nissan)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Nissan)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	59	59	59	59	59	59
2023	62	62	62	62	62	62
2024	62	62	62	62	62	62
2025	60	60	60	60	60	60
2026	60	60	60	60	60	60
2027	61	61	61	61	61	61
2028	63	63	63	63	63	64
2029	63	63	63	63	63	64
2030	62	62	62	62	62	63
2031	62	62	62	62	62	62

Table 312 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Stellantis)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Stellantis)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	90	90	90	90	90	90
2023	100	100	100	100	100	100
2024	103	103	103	103	103	103
2025	103	103	103	103	103	103
2026	103	103	103	103	103	103
2027	105	105	107	108	109	110
2028	107	108	109	110	111	112
2029	109	110	111	112	113	113
2030	107	108	108	110	111	114
2031	106	106	107	108	109	111

Table 313 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Subaru)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Subaru)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	39	39	39	39	39	39
2023	42	42	42	42	42	42
2024	42	42	42	42	42	42
2025	40	40	40	40	40	40
2026	41	41	41	41	41	41
2027	42	42	42	42	42	42
2028	43	43	43	43	43	43
2029	43	43	43	43	44	44
2030	43	43	43	43	43	43
2031	42	42	42	42	42	43

Table 314 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Tesla)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Tesla)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	59	59	59	59	59	59
2023	60	60	60	60	60	60
2024	59	59	59	59	59	59
2025	55	55	55	55	55	55
2026	55	55	55	55	55	55
2027	56	56	56	56	56	56
2028	56	56	56	56	56	56
2029	56	56	56	56	56	56
2030	55	55	55	55	55	55
2031	54	54	55	55	55	55

Table 315 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Toyota)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Toyota)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	165	165	165	165	165	165
2023	173	173	173	173	173	173
2024	173	173	173	173	173	173
2025	166	166	166	166	166	166
2026	168	168	168	168	168	168
2027	172	172	172	172	172	172
2028	175	175	175	176	176	176
2029	176	176	176	176	177	177
2030	175	175	175	175	176	175
2031	173	173	173	173	175	179

Table 316 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Volvo)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (Volvo)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	3	3	3	3	3	3
2023	3	3	3	3	3	3
2024	3	3	3	3	3	3
2025	3	3	3	3	3	3
2026	3	3	3	3	3	3
2027	3	3	3	3	3	3
2028	3	3	3	3	3	3
2029	3	3	3	3	3	3
2030	3	3	3	3	3	3
2031	3	3	3	3	3	3

Table 317 - Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (VWA)

Estimated Labor Utilization (1000s of Person-Years), Total Fleet for Manufacturer (VWA)						
Model Year	Regulatory Alternative					
	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
2022	8	8	8	8	8	8
2023	8	8	8	8	8	8
2024	8	8	8	8	8	8
2025	8	8	8	8	8	8
2026	8	8	8	8	8	8
2027	8	8	8	8	8	8
2028	8	8	8	8	8	8
2029	8	8	8	8	8	8
2030	8	8	8	8	8	8
2031	8	8	8	8	8	8

Table 318 - Changes in Work Loss Days (thousand instances), Total Fleet through MY 2031

Changes in Work Loss Days (thousand instances), Total Fleet through MY 2031					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Work Loss Days from Upstream Emissions	-1.9	-4.2	-5.8	-7.5	-12.7
Work Loss Days from Tailpipe Emissions	-20.8	-52.6	-69.1	-87.9	-126.6
Total Work Loss Days	-22.7	-56.8	-74.9	-95.4	-139.3

Table 319 - Changes in Work Loss Days (thousand instances), Passenger Car Fleet through MY 2031

Changes in Work Loss Days (thousand instances), Passenger Car Fleet through MY 2031					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Work Loss Days from Upstream Emissions	-0.4	-0.1	-0.7	-1.3	-2.2
Work Loss Days from Tailpipe Emissions	0.1	-1.4	-6.4	-7.2	-13.4
Total Work Loss Days	-0.4	-1.5	-7.1	-8.5	-15.6

Table 320 - Changes in Work Loss Days (thousand instances), Light Truck Fleet through MY 2031

Changes in Work Loss Days (thousand instances), Light Truck Fleet through MY 2031					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Work Loss Days from Upstream Emissions	-1.5	-4.1	-5.1	-6.2	-10.5
Work Loss Days from Tailpipe Emissions	-20.8	-51.2	-62.7	-80.7	-113.2
Total Work Loss Days	-22.3	-55.3	-67.8	-87.0	-123.7

Compliance Impacts

Table 321 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	47.3	47.5	48.4	49.4	50.4	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	51.4	52.4	55.6	56.1	58.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	1.8	2.4	2.0	1.2	9.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.4	-0.5	-0.9	-2.4
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.9	1.5	2.0	1.5	0.3	7.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	1.8	2.4	2.0	1.2	9.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.003	-0.004	-0.002	-9E-04	0.0027	0.0

Table 322 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	60.0	61.2	62.5	63.7	65.1	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	63.0	68.8	69.5	69.8	73.7	76.7	82.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	-0.4	0.4	0.4	-0.1	0.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.3	-0.6	-1.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	-0.6	0.1	0.1	-0.7	-1.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	-0.4	0.4	0.4	-0.1	0.7
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.003	-0.002	-0.006	-0.005	-2E-04	0.0

Table 323 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	42.6	42.6	43.5	44.3	45.2	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	4%	6%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.0	43.6	45.3	46.5	49.5	49.4	50.5	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.9	2.1	2.0	1.6	1.3	8.9
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	-0.6
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.8	2.1	1.9	1.4	0.9	8.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.9	2.1	2.0	1.6	1.3	8.9
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.006	-0.002	0.0046	0.004	0.003	0.0

Table 324 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	59.2	60.4	61.7	62.9	64.2	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	67.3	72.2	72.2	71.9	77.6	82.1	89.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	-0.6	0.1	0.2	-0.1	-0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.8
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	-0.7	-0.1	0.0	-0.4	-1.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	-0.6	0.1	0.2	-0.1	-0.1
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0015	-9E-04	-0.003	-0.002	-1E-04	0.0

Table 325 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	60.7	62.0	63.3	64.6	65.9	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	9%	11%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.7	67.1	67.8	70.2	72.1	76.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.0	0.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.1	0.0	-0.3	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.0	0.8
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0015	-9E-04	-0.003	-0.002	-1E-04	0.0

Table 326 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	48.2	49.4	50.6	51.8	53.1	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	3%	5%	8%	10%	13%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	52.5	54.3	58.0	58.4	60.0	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.0	4.7	5.5	5.0	3.3	22.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.5	-0.5	-0.9	-2.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.7	4.4	5.0	4.4	2.4	19.9
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.0	4.7	5.5	5.1	3.3	22.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.006	-0.005	0.0005	-8E-05	0.0026	0.0

Table 327 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	59.4	60.0	60.6	61.2	61.8	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	3%	4%	5%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	63.0	68.8	68.9	71.4	74.6	77.2	80.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.3	-0.7	0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.4	-0.6	-1.8
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	0.1	-0.1	-1.3	-1.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.4	-0.7	0.3
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0126	0.0131	0.0089	0.0101	0.0133	0.1

Table 328 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	43.9	45.3	46.7	48.1	49.6	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	16%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.0	43.6	46.7	48.4	52.1	52.0	53.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.9	4.7	5.0	4.6	4.0	22.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.8	4.7	4.9	4.4	3.7	21.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	3.9	4.7	5.0	4.7	4.0	22.3
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.019	-0.018	-0.008	-0.01	-0.011	-0.1

Table 329 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	58.6	59.2	59.8	60.4	61.0	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	3%	4%	5%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	67.3	72.2	71.4	77.2	82.4	86.1	91.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.4	-0.1	0.9
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.3	0.2	-0.4	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.4	-0.1	0.9
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0062	0.0065	0.0044	0.005	0.0066	0.0

Table 330 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC1LT3

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC1LT3											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	60.1	60.7	61.3	62.0	62.6	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	3%	4%	5%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.7	66.6	66.5	68.3	70.2	71.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.2	-0.2	-0.9	-1.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0064	0.0066	0.0045	0.0051	0.0067	0.0

Table 331 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	48.7	50.4	52.2	54.0	55.9	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	4%	7%	11%	15%	19%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	53.2	55.2	58.9	59.5	61.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	5.2	6.2	6.9	6.4	5.0	29.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.5	-0.5	-0.9	-2.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.9	5.9	6.4	5.8	4.0	27.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.3
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	5.2	6.2	6.9	6.6	5.0	29.9
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.009	-0.006	-0.001	-0.002	0.0009	0.0

Table 332 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	60.0	61.2	62.5	63.7	65.1	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	63.0	68.8	69.5	72.5	76.3	79.4	82.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.9	0.9	-0.2	2.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.4	-0.6	-1.8
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	0.5	-0.8	0.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.4	1.0	1.0	-0.2	2.5
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0135	0.0117	0.0063	0.0079	0.0134	0.1

Table 333 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	44.3	46.2	48.1	50.1	52.2	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	4%	8%	13%	18%	23%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.0	43.6	47.3	49.2	52.8	52.7	54.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.9	5.9	6.0	5.5	5.1	27.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.8	5.8	5.8	5.3	4.8	26.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.3
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	4.8	5.9	6.0	5.6	5.1	27.5
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.022	-0.018	-0.007	-0.009	-0.013	-0.1

Table 334 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	59.2	60.4	61.7	62.9	64.2	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	67.3	72.2	72.2	78.0	83.6	88.4	94.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.6	0.6	0.1	1.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.4	-0.2	0.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.6	0.6	0.1	1.7
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0067	0.0058	0.0031	0.0039	0.0066	0.0

Table 335 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT4

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC2LT4											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	60.7	62.0	63.3	64.6	65.9	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	9%	11%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.7	67.1	67.9	70.3	72.2	74.1	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	-0.3	0.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	0.2	0.1	-0.6	-0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	-0.3	0.8
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0068	0.0059	0.0032	0.004	0.0068	0.0

Table 336 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	49.2	51.4	53.8	56.3	58.9	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	5%	10%	15%	20%	26%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	54.1	56.8	60.1	60.8	63.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.1	9.2	9.0	8.8	8.4	42.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.5	-0.5	-0.9	-2.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	6.8	8.9	8.5	8.2	7.4	39.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.6
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.1	9.2	9.1	9.1	8.4	43.1
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.016	-0.014	-0.01	-0.011	-0.014	-0.1

Table 337 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	60.6	62.5	64.4	66.4	68.5	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	16%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	63.0	68.8	70.0	74.2	77.3	80.4	83.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.9	1.4	1.7	1.7	0.4	6.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.4	-0.6	-1.8
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.6	1.1	1.3	1.3	-0.2	4.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.9	1.4	1.7	1.8	0.4	6.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0013	-0.003	-0.009	-0.01	0.0044	0.0

Table 338 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	44.8	47.2	49.7	52.3	55.0	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	5%	11%	17%	23%	29%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.0	43.6	48.4	50.7	54.0	54.1	56.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	6.2	7.8	7.3	7.2	8.0	36.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	6.2	7.8	7.2	7.0	7.6	35.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.5
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	6.2	7.9	7.4	7.4	8.0	36.9
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.017	-0.011	-0.001	-6E-04	-0.018	0.0

Table 339 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	59.9	61.7	63.6	65.5	67.6	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	17%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	67.3	72.2	72.7	78.7	82.8	88.0	92.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.9	1.0	0.4	3.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.7	0.8	0.0	2.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.9	1.0	0.4	3.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0007	-0.002	-0.004	-0.005	0.0022	0.0

Table 340 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	61.4	63.3	65.2	67.2	69.3	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	3%	6%	10%	13%	16%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.7	67.5	70.3	72.7	74.2	75.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.8	0.7	0.0	2.4
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.5	-0.3	1.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.9	0.8	0.1	2.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0007	-0.002	-0.005	-0.005	0.0022	0.0

Table 341 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Total Fleet, Alternative PC3LT5											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	35.8	36.2	39.1	42.4	47.0	49.2	51.4	53.8	56.3	58.9	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	5%	10%	15%	20%	26%	N/A
Average Achieved (mpg)	36.5	38.9	43.1	46.7	49.9	54.1	56.8	60.1	60.8	63.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.1	9.2	9.0	8.8	8.4	42.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.5	-0.5	-0.9	-2.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	6.8	8.9	8.5	8.2	7.4	39.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.6
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.1	9.2	9.1	9.1	8.4	43.1
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.016	-0.014	-0.01	-0.011	-0.014	-0.1

Table 342 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Passenger Car Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.1	44.8	48.7	52.9	58.8	62.5	66.5	70.8	75.3	80.1	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	6%	13%	20%	28%	36%	N/A
Average Achieved (mpg)	47.1	51.6	58.4	63.0	68.8	72.4	75.6	80.8	85.8	88.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.1	2.6	3.8	4.3	2.9	15.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.4	-0.6	-1.8
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.9	2.4	3.5	3.9	2.2	13.9
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.2	0.1	1.5
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	2.2	2.8	4.6	4.9	3.2	17.7
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.012	-0.031	-0.055	-0.031	0.0119	-0.1

Table 343 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Light Truck Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.1	32.6	35.2	38.3	42.6	46.3	50.3	54.7	59.4	64.6	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	9%	18%	28%	39%	52%	N/A
Average Achieved (mpg)	32.1	34.0	37.5	41.0	43.6	49.4	52.5	56.3	57.8	63.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.7	10.4	10.9	13.1	18.4	60.4
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.7	10.3	10.7	12.9	18.0	59.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.0	2.1	0.9	4.2
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	7.8	10.7	11.9	14.7	19.0	64.1
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.014	-0.004	0.0025	-0.035	-0.093	-0.1

Table 344 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Domestic Car Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	43.5	44.2	48.1	52.3	58.0	61.7	65.7	69.9	74.3	79.1	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	6%	13%	21%	28%	36%	N/A
Average Achieved (mpg)	48.9	52.4	60.9	67.3	72.2	76.6	77.2	83.9	91.6	93.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.5	0.8	1.5	2.0	1.2	7.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.8
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.4	0.7	1.4	1.8	0.8	6.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.1	0.0	1.1
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.5	0.9	1.9	2.0	1.2	7.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.006	-0.015	-0.027	-0.015	0.0059	-0.1

Table 345 - Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC6LT8

Compliance Impacts and Cumulative Industry Costs by Model Year for Total and Imported Car Fleet, Alternative PC6LT8											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	44.7	45.4	49.3	53.6	59.5	63.3	67.4	71.7	76.2	81.1	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	6%	13%	21%	28%	36%	N/A
Average Achieved (mpg)	45.5	51.0	56.2	59.4	65.7	68.7	74.1	78.0	80.8	84.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	1.8	2.3	2.3	1.7	8.8
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-1.0
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.5	1.6	2.1	2.1	1.4	7.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.4
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.7	1.9	2.8	2.9	2.0	10.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-0.006	-0.016	-0.028	-0.016	0.006	-0.1

Table 346 - Compliance Impacts and Cumulative Industry Costs by Model Year for BMW and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for BMW and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.6	38.0	41.3	44.7	49.6	50.0	50.4	51.3	52.4	53.5	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	35.3	38.1	41.8	46.4	52.8	54.2	54.1	52.9	54.6	61.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	9.1	11.1	11.9	12.5	12.5	7.1	6.9	6.9	6.1	3.9	87.9
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	6.0	6.0	6.1	6.1	4.4	4.4	4.4	4.0	3.1	50.5
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-2E-05	-1E-04	-2E-04	-1E-04	-6E-06	0.0

Table 347 - Compliance Impacts and Cumulative Industry Costs by Model Year for Ford and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Ford and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	31.4	31.9	34.3	37.3	41.4	41.4	41.5	42.4	43.2	44.0	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	4%	7%	N/A
Average Achieved (mpg)	30.9	32.7	37.4	38.4	41.5	43.9	47.1	52.8	50.6	50.3	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.9	13.6	14.5	14.5	14.5	7.7	6.8	5.6	5.6	4.5	97.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	7.0	7.0	7.0	7.0	5.5	4.8	4.0	4.0	4.0	57.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.3
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-8E-04	-4E-04	0.0005	0.0005	0.0005	0.0

Table 348 - Compliance Impacts and Cumulative Industry Costs by Model Year for GM and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for GM and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.5	33.0	35.4	38.4	42.6	42.7	42.7	43.6	44.5	45.4	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	0%	3%	5%	7%	N/A
Average Achieved (mpg)	30.8	31.0	37.3	41.4	43.0	45.0	44.2	46.2	45.9	50.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.9	0.8	0.7	3.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	9.6	12.0	12.9	13.9	13.9	8.0	8.0	7.0	6.7	4.2	96.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.5	6.7	6.7	6.7	6.7	5.4	5.4	4.9	4.7	3.7	57.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.9	0.8	0.7	3.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.9	0.8	0.7	3.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-6E-04	-4E-04	0.0002	0.0002	0.0004	0.0

Table 349 - Compliance Impacts and Cumulative Industry Costs by Model Year for Honda and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Honda and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	39.1	39.5	42.9	46.5	51.5	51.9	52.3	53.3	54.4	55.6	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	40.0	44.4	44.5	48.3	52.0	61.6	62.8	63.0	61.4	60.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.2	0.3	0.2	0.2	0.1	2.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.4
Off-Cycle Credits	7.8	10.0	10.8	12.5	12.5	6.6	6.2	5.8	5.7	4.5	82.4
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.5	5.8	6.1	6.1	6.1	3.9	3.6	3.4	3.4	3.4	47.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.2	0.2	0.2	0.1	0.0	1.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	1.2	0.3	0.2	0.2	0.1	2.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-8E-06	-4E-04	-6E-04	-4E-04	0.0002	0.0

Table 350 - Compliance Impacts and Cumulative Industry Costs by Model Year for Hyundai and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Hyundai and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	39.6	40.1	43.5	47.1	52.3	52.8	53.2	54.3	55.4	56.5	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	41.4	43.5	46.2	50.4	53.9	54.8	54.4	62.1	60.8	66.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.5
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Off-Cycle Credits	6.4	6.6	6.6	7.4	8.1	6.7	6.6	5.4	5.3	4.2	63.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	4.4	4.7	5.2	5.4	5.8	4.8	4.7	3.9	3.8	3.3	46.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.5
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	7E-05	-3E-04	-5E-04	-3E-04	0.0001	0.0

Table 351 - Compliance Impacts and Cumulative Industry Costs by Model Year for KIA and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for KIA and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	39.5	39.9	43.4	47.0	52.1	52.5	53.0	54.0	55.1	56.2	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	40.9	43.6	47.3	49.3	52.9	52.3	54.3	59.7	64.7	65.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.7
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	6.6	7.1	6.8	6.5	7.3	6.5	6.1	5.3	4.5	3.7	60.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	4.8	5.4	5.9	6.0	6.0	5.0	4.6	4.0	3.4	3.3	48.3
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.7
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	3E-05	-2E-04	-3E-04	-2E-04	7E-05	0.0

Table 352 - Compliance Impacts and Cumulative Industry Costs by Model Year for JLR and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for JLR and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	32.9	33.4	36.2	39.4	43.7	43.8	43.8	44.7	45.6	46.5	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	4%	6%	N/A
Average Achieved (mpg)	29.0	37.9	41.8	42.0	48.5	47.1	45.6	44.3	45.1	46.5	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.9	11.9	12.9	13.9	14.8	6.8	6.8	6.8	6.3	5.0	95.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	7.1	7.1	7.1	7.1	7.1	4.8	4.8	4.8	4.5	4.5	59.3
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-5E-05	-2E-05	3E-05	3E-05	2E-05	0.0

Table 353 - Compliance Impacts and Cumulative Industry Costs by Model Year for Karma and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Karma and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	40.6	41.1	44.3	48.1	53.5	55.2	56.3	57.5	58.6	59.8	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	106.8	106.8	106.8	106.8	542.6	328.4	207.1	151.2	119.0	119.0	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0	0	0	0	0	0.0

Table 354 - Compliance Impacts and Cumulative Industry Costs by Model Year for Lucid and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Lucid and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	40.6	41.1	44.3	48.1	53.5	55.2	56.3	57.5	58.6	59.8	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	11%	N/A
Average Achieved (mpg)	742.5	742.5	742.5	742.5	742.5	394.4	248.6	181.5	142.9	142.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	25.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0	-4E-06	-8E-06	-8E-06	-4E-06	0.0

Table 355 - Compliance Impacts and Cumulative Industry Costs by Model Year for Mazda and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Mazda and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.3	37.8	41.1	44.6	49.5	49.6	49.7	50.7	51.7	52.7	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	36.5	47.1	49.5	50.3	53.0	56.3	55.4	58.1	64.2	63.7	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	6.5	7.5	8.4	9.4	10.3	7.4	7.4	6.9	5.5	4.4	73.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	3.0	4.0	5.0	5.9	6.7	5.4	5.4	5.0	4.0	4.0	48.3
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-8E-05	-3E-05	5E-05	6E-05	6E-05	0.0

Table 356 - Compliance Impacts and Cumulative Industry Costs by Model Year for Mercedes-Benz and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Mercedes-Benz and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	36.8	37.3	40.4	43.8	48.6	49.0	49.3	50.3	51.3	52.4	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	1%	4%	6%	8%	N/A
Average Achieved (mpg)	32.8	39.5	40.4	42.0	49.4	52.2	63.8	61.7	59.7	60.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3
Off-Cycle Credits	2.5	3.0	3.5	4.8	5.8	5.2	4.0	4.2	4.1	3.4	40.4
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	6.1	6.1	6.2	6.2	4.3	3.2	3.1	3.1	3.0	47.5
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-1E-05	-7E-05	-8E-05	-5E-05	5E-05	0.0

Table 357 - Compliance Impacts and Cumulative Industry Costs by Model Year for Mitsubishi and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Mitsubishi and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	42.0	42.6	46.2	50.0	55.5	56.0	56.4	57.6	58.8	59.9	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	40.3	40.6	48.6	62.3	62.3	61.2	65.7	64.2	62.9	69.6	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	3.7	3.7	3.8	4.0	4.2	2.9	2.9	2.9	2.9	2.5	33.5
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.7	6.0	6.0	6.0	6.0	4.2	4.2	4.2	4.2	3.6	50.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	2E-06	-3E-05	-5E-05	-3E-05	2E-05	0.0

Table 358 - Compliance Impacts and Cumulative Industry Costs by Model Year for Nissan and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Nissan and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	38.9	39.4	42.7	46.3	51.3	51.8	52.2	53.2	54.3	55.4	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	2%	4%	6%	8%	N/A
Average Achieved (mpg)	38.6	42.4	45.0	48.7	52.7	52.9	62.4	62.1	64.6	69.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.8	0.8	0.6	3.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3
Off-Cycle Credits	5.4	5.9	6.4	7.5	8.3	6.5	4.9	4.7	4.4	3.5	57.5
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.6	5.9	5.9	6.0	6.0	5.0	3.8	3.7	3.4	3.0	48.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.7	0.8	0.5	3.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.8	0.8	0.6	3.3
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	6E-05	-3E-04	-5E-04	-3E-04	0.0001	0.0

Table 359 - Compliance Impacts and Cumulative Industry Costs by Model Year for Stellantis and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Stellantis and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	31.9	32.3	35.0	38.1	42.3	42.3	42.4	43.2	44.1	45.0	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	0%	2%	5%	7%	N/A
Average Achieved (mpg)	28.9	30.9	34.9	41.7	42.4	42.9	42.7	46.5	45.8	46.4	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.2	1.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.4	13.9	14.0	14.1	14.1	7.8	7.8	7.0	7.0	5.5	100.5
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.7	6.9	6.9	6.9	6.9	5.6	5.6	5.0	5.0	4.9	60.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	1.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.2	1.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-8E-04	-4E-04	0.0004	0.0004	0.0005	0.0

Table 360 - Compliance Impacts and Cumulative Industry Costs by Model Year for Subaru and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Subaru and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.8	38.2	41.5	45.1	50.1	50.2	50.3	51.3	52.3	53.4	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	39.0	43.7	46.3	48.9	51.5	53.2	56.1	73.0	69.7	69.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Off-Cycle Credits	7.7	8.2	9.1	10.2	11.2	8.1	7.6	5.0	5.0	4.0	76.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.4	6.9	6.9	6.9	6.9	5.9	5.5	3.6	3.6	3.6	56.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-3E-04	-2E-04	0.0002	0.0002	0.0002	0.0

Table 361 - Compliance Impacts and Cumulative Industry Costs by Model Year for Tesla and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Tesla and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	40.7	41.3	44.8	48.7	54.1	55.2	56.2	57.3	58.4	59.7	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	2%	4%	6%	8%	10%	N/A
Average Achieved (mpg)	699.0	707.6	710.6	714.2	714.6	380.6	239.9	175.2	137.9	137.9	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.1	5.1	5.2	5.2	0.0	0.0	0.0	0.0	0.0	25.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.1	5.1	5.1	5.1	0.0	0.0	0.0	0.0	0.0	25.4
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	0.0003	-2E-04	-6E-04	-4E-04	-8E-06	0.0

Table 362 - Compliance Impacts and Cumulative Industry Costs by Model Year for Toyota and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Toyota and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.1	37.5	40.6	43.9	48.7	49.0	49.2	50.2	51.2	52.2	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	39.1	41.0	45.3	47.5	52.3	51.7	51.1	53.9	58.1	60.2	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.6
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.5
Off-Cycle Credits	8.3	8.8	10.6	11.5	13.1	8.3	8.3	7.4	6.2	4.4	86.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.3	6.3	6.3	6.4	6.4	5.3	5.3	4.7	4.0	3.5	54.6
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.1	-0.5	-1.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.6
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-4E-04	-6E-04	-4E-04	-3E-04	0.0004	0.0

Table 363 - Compliance Impacts and Cumulative Industry Costs by Model Year for Volvo and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for Volvo and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	36.0	36.4	39.5	42.8	47.6	47.8	48.0	48.9	49.9	51.0	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	0%	1%	3%	5%	7%	N/A
Average Achieved (mpg)	43.8	47.1	47.5	53.4	60.3	57.1	54.9	53.1	63.3	63.5	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	7.7	8.4	9.5	10.4	11.3	5.9	5.9	5.9	4.2	3.4	72.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	6.4	6.5	6.5	6.6	4.2	4.3	4.3	3.0	3.0	50.8
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-4E-05	-3E-05	-3E-06	1E-06	3E-05	0.0

Table 364 - Compliance Impacts and Cumulative Industry Costs by Model Year for VWA and Total Fleet, Alternative PC2LT002

Compliance Impacts and Cumulative Industry Costs by Model Year for VWA and Total Fleet, Alternative PC2LT002											
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Fuel Economy											
Average Required (mpg)	37.9	38.3	41.6	45.0	50.0	50.2	50.5	51.6	52.6	53.7	N/A
Change from Baseline (%)	0%	0%	0%	0%	0%	1%	1%	3%	6%	8%	N/A
Average Achieved (mpg)	36.3	38.5	45.6	49.0	52.5	52.6	52.5	51.3	59.0	60.8	N/A
Total Regulatory Costs											
Tech. (non-Off-Cycle/non-AC) Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.2	-0.1	-0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Off-Cycle Credits	8.3	10.7	11.2	11.8	12.3	7.0	6.9	6.9	4.8	3.8	83.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.7	6.3	6.3	6.4	6.4	4.9	4.8	4.8	3.3	3.1	52.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.2	-0.1	-0.2
Sales Impacts											
Sales Change from Baseline (m)	0	0	0	0	0	-9E-05	-2E-04	-1E-04	-7E-05	0.0001	0.0

Table 365 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	46.9	50.4	53.1	55.9	58.9	69.1
Percent Change from Baseline	0%	7%	13%	19%	26%	47%
Average Achieved (mpg)	60.0	58.1	60.0	61.3	63.2	70.2
Total Regulatory Costs						
Technology Application Costs ($b)	48.0	1.2	3.3	5.0	8.4	21.2
Off-Cycle Technology Costs ($b)	1.3	2.5	2.5	2.5	2.5	2.5
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.1	0.1	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	49.3	3.8	5.9	7.5	10.9	23.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.1	0.9
Total Regulatory Costs ($b)	48.0	1.2	3.3	5.0	8.4	22.2
Sales Impacts						
Sales Change from Baseline (m)	0.00	-0.01	-0.01	-0.02	-0.06	-0.26

Table 366 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Passenger Car Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Passenger Car Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	58.8	65.1	61.8	65.1	68.5	80.1
Percent Change from Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	88.5	82.6	80.4	82.9	83.2	88.7
Total Regulatory Costs						
Technology Application Costs ($b)	15.1	-0.1	-0.7	-0.2	0.4	2.9
Off-Cycle Technology Costs ($b)	0.9	1.9	1.9	1.9	1.9	1.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	16.1	1.8	1.2	1.7	2.3	4.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	15.1	-0.1	-0.7	-0.2	0.4	3.2
Sales Impacts						
Sales Change from Baseline (m)	0.00	-0.01	0.06	0.05	-0.02	-0.12

Table 367 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Light Truck Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Light Truck Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	42.6	45.2	49.6	52.2	55.0	64.6
Percent Change from Baseline	0%	6%	16%	23%	29%	52%
Average Achieved (mpg)	51.6	50.5	53.1	54.2	56.4	63.4
Total Regulatory Costs						
Technology Application Costs ($b)	32.8	1.3	4.0	5.1	8.0	18.4
Off-Cycle Technology Costs ($b)	0.3	0.7	0.7	0.7	0.7	0.7
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.1	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	33.2	1.9	4.7	5.8	8.7	19.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.9
Total Regulatory Costs ($b)	32.8	1.3	4.0	5.1	8.0	19.0
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	-0.07	-0.07	-0.05	-0.14

Table 368 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Domestic Car Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Domestic Car Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	58.0	64.2	61.0	64.2	67.6	79.1
Percent Change from Baseline	0%	11%	5%	11%	17%	36%
Average Achieved (mpg)	100.6	89.6	91.8	94.4	92.3	93.6
Total Regulatory Costs						
Technology Application Costs ($b)	9.0	-0.1	-0.1	0.1	0.4	1.2
Off-Cycle Technology Costs ($b)	0.4	0.9	0.9	0.9	0.9	0.9
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	9.4	0.8	0.8	1.0	1.3	2.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	9.0	-0.1	-0.1	0.1	0.4	1.2
Sales Impacts						
Sales Change from Baseline (m)	0.00	-0.01	0.03	0.03	-0.01	-0.06

Table 369 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Imported Car Fleet by Alternative for Manufacturer (Total)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Imported Car Fleet by Alternative for Manufacturer (Total)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	59.5	65.9	62.6	65.9	69.3	81.1
Percent Change from Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	79.3	76.8	71.8	74.1	75.9	84.3
Total Regulatory Costs						
Technology Application Costs ($b)	6.2	0.0	-0.6	-0.3	0.0	1.7
Off-Cycle Technology Costs ($b)	0.5	1.0	1.0	1.0	1.0	1.0
Off-Cycle Credits	0.0	0.0	0.0	0.0	0.0	0.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Technology Costs ($b)	6.7	1.0	0.4	0.7	1.0	2.7
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	6.2	0.0	-0.6	-0.3	0.1	2.0
Sales Impacts						
Sales Change from Baseline (m)	0.00	-0.01	0.03	0.03	-0.01	-0.06

Table 370 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (BMW)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (BMW)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	49.5	53.5	55.1	58.0	61.0	71.7
Percent Change from Baseline	0%	8%	11%	17%	23%	45%
Average Achieved (mpg)	66.3	61.9	60.0	61.9	63.0	64.7
Total Regulatory Costs						
Technology Application Costs ($b)	1.1	0.0	-0.1	0.0	0.0	0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	10.0	13.9	14.1	13.9	13.8	13.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	9.2	9.4	9.2	9.1	9.0
Subtotal Technology Costs ($b)	1.1	0.0	0.0	0.0	0.1	0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.3
Total Regulatory Costs ($b)	1.1	0.0	-0.1	0.0	0.1	0.4
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 371 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Ford)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Ford)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	41.3	44.0	47.8	50.3	53.1	62.3
Percent Change from Baseline	0%	7%	16%	22%	29%	51%
Average Achieved (mpg)	52.5	50.3	50.6	51.0	53.5	62.3
Total Regulatory Costs						
Technology Application Costs ($b)	6.4	0.0	0.1	0.2	0.6	2.9
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	10.0	14.5	14.5	14.4	14.1	13.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	7.0	11.0	10.9	10.9	10.5	10.1
Subtotal Technology Costs ($b)	6.4	0.1	0.1	0.2	0.6	2.9
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	6.4	0.0	0.1	0.2	0.6	2.9
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	-0.01	-0.01	-0.01	-0.03

Table 372 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (GM)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (GM)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	42.5	45.4	48.7	51.2	54.0	63.3
Percent Change from Baseline	0%	7%	15%	20%	27%	49%
Average Achieved (mpg)	49.3	50.4	51.8	53.0	55.5	63.7
Total Regulatory Costs						
Technology Application Costs ($b)	8.2	0.7	1.0	1.3	2.4	4.5
Off-Cycle Technology Costs ($b)	0.0	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	10.0	14.2	14.2	14.2	14.3	14.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.7	10.4	10.4	10.4	10.5	10.2
Subtotal Technology Costs ($b)	8.3	0.8	1.1	1.4	2.5	4.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	8.2	0.7	1.0	1.3	2.4	4.5
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	-0.01	-0.01	-0.01	-0.03

Table 373 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Honda)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Honda)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	51.4	55.6	57.3	60.3	63.5	74.4
Percent Change from Baseline	0%	8%	11%	17%	24%	45%
Average Achieved (mpg)	63.5	60.9	72.0	74.5	75.6	74.2
Total Regulatory Costs						
Technology Application Costs ($b)	3.7	0.1	0.9	1.1	1.2	1.7
Off-Cycle Technology Costs ($b)	0.2	0.4	0.4	0.4	0.4	0.4
Off-Cycle Credits	10.0	14.5	13.4	13.4	13.3	14.1
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	9.5	8.7	8.7	8.5	9.1
Subtotal Technology Costs ($b)	4.0	0.6	1.3	1.5	1.6	2.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	3.7	0.1	0.9	1.1	1.2	1.7
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	-0.01	-0.03

Table 374 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Hyundai)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Hyundai)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	52.1	56.5	57.6	60.7	63.9	74.9
Percent Change from Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	66.4	66.2	65.7	68.1	68.5	75.6
Total Regulatory Costs						
Technology Application Costs ($b)	2.8	0.1	0.1	0.3	0.3	0.9
Off-Cycle Technology Costs ($b)	0.1	0.2	0.2	0.2	0.2	0.2
Off-Cycle Credits	8.3	12.5	12.4	12.0	12.1	11.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	9.3	9.2	8.9	9.0	8.7
Subtotal Technology Costs ($b)	2.9	0.3	0.3	0.5	0.5	1.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	2.8	0.1	0.1	0.3	0.3	0.9
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.02

Table 375 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (KIA)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (KIA)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	51.9	56.2	57.7	60.7	63.9	74.9
Percent Change from Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	69.1	65.6	68.1	70.1	70.1	82.5
Total Regulatory Costs						
Technology Application Costs ($b)	1.9	0.0	0.2	0.3	0.4	1.1
Off-Cycle Technology Costs ($b)	0.1	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	7.9	11.5	11.4	11.3	11.5	11.1
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	9.3	9.1	9.0	9.2	8.9
Subtotal Technology Costs ($b)	1.9	0.2	0.3	0.4	0.5	1.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	1.9	0.0	0.2	0.3	0.4	1.1
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 376 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (JLR)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (JLR)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	43.7	46.5	50.9	53.6	56.4	66.2
Percent Change from Baseline	0%	6%	16%	23%	29%	51%
Average Achieved (mpg)	47.3	46.5	50.9	53.6	54.6	54.6
Total Regulatory Costs						
Technology Application Costs ($b)	0.1	0.0	0.1	0.1	0.3	0.3
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	10.0	15.0	14.2	13.8	13.7	13.7
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	7.2	11.6	10.9	10.6	10.5	10.5
Subtotal Technology Costs ($b)	0.1	0.0	0.1	0.1	0.3	0.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	0.1	0.0	0.1	0.1	0.3	0.4
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 377 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Karma)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Karma)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	54.1	59.8	56.9	59.8	63.0	73.7
Percent Change from Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	137.4	119.0	119.0	119.0	119.0	119.0
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	5.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	5.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 378 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Lucid)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Lucid)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	54.1	59.8	56.9	59.8	63.0	73.7
Percent Change from Baseline	0%	11%	5%	11%	16%	36%
Average Achieved (mpg)	170.3	142.9	142.9	142.9	142.9	142.9
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.0	5.0	5.0	5.0	5.0	5.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.0	5.0	5.0	5.0	5.0	5.0
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 379 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mazda)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mazda)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	49.4	52.7	56.9	60.0	63.2	74.2
Percent Change from Baseline	0%	7%	15%	21%	28%	50%
Average Achieved (mpg)	70.9	63.7	63.7	64.6	71.4	77.9
Total Regulatory Costs						
Technology Application Costs ($b)	0.8	-0.1	-0.1	-0.1	0.0	0.1
Off-Cycle Technology Costs ($b)	0.0	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	9.5	13.9	13.9	13.9	13.2	12.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	10.9	10.9	10.9	10.3	9.7
Subtotal Technology Costs ($b)	0.8	0.0	0.0	0.0	0.1	0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.8	-0.1	-0.1	-0.1	0.0	0.1
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 380 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mercedes-Benz)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mercedes-Benz)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	48.5	52.4	54.2	57.1	60.1	70.5
Percent Change from Baseline	0%	8%	12%	18%	24%	45%
Average Achieved (mpg)	63.5	60.2	60.8	61.2	62.6	71.2
Total Regulatory Costs						
Technology Application Costs ($b)	1.0	-0.1	0.0	0.0	0.0	0.2
Off-Cycle Technology Costs ($b)	0.1	0.2	0.2	0.2	0.2	0.2
Off-Cycle Credits	8.2	11.6	11.4	11.4	11.4	10.8
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.2	9.2	9.0	9.0	9.0	8.5
Subtotal Technology Costs ($b)	1.2	0.2	0.2	0.2	0.2	0.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	1.0	-0.1	0.0	0.0	0.0	0.2
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 381 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mitsubishi)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Mitsubishi)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	55.4	59.9	61.5	64.7	68.2	79.9
Percent Change from Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	67.2	69.6	65.4	70.0	73.9	81.5
Total Regulatory Costs						
Technology Application Costs ($b)	0.3	0.0	0.0	0.0	0.1	0.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	4.2	6.7	6.8	6.7	6.4	6.1
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.1	9.7	10.0	9.7	9.3	8.8
Subtotal Technology Costs ($b)	0.3	0.0	0.0	0.0	0.1	0.2
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.3	0.0	0.0	0.0	0.1	0.2
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 382 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Nissan)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Nissan)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	51.2	55.4	56.8	59.7	62.9	73.8
Percent Change from Baseline	0%	8%	11%	17%	23%	44%
Average Achieved (mpg)	69.3	69.4	67.4	68.1	69.8	75.0
Total Regulatory Costs						
Technology Application Costs ($b)	3.3	0.6	0.5	0.5	0.6	1.0
Off-Cycle Technology Costs ($b)	0.2	0.3	0.3	0.3	0.3	0.3
Off-Cycle Credits	7.8	11.3	11.5	11.5	11.3	11.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.0	9.0	9.2	9.2	9.0	8.8
Subtotal Technology Costs ($b)	3.5	1.0	0.9	0.9	1.0	1.4
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	3.3	0.6	0.5	0.5	0.6	1.0
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.02

Table 383 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Stellantis)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Stellantis)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	42.2	45.0	48.7	51.2	54.0	63.4
Percent Change from Baseline	0%	7%	15%	21%	28%	50%
Average Achieved (mpg)	46.9	46.4	49.7	52.4	54.1	58.8
Total Regulatory Costs						
Technology Application Costs ($b)	6.0	0.2	0.9	1.4	1.8	3.2
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.7	15.2	14.7	14.3	14.1	14.0
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	11.8	11.3	11.0	10.8	10.8
Subtotal Technology Costs ($b)	6.0	0.3	0.9	1.4	1.9	3.3
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.1
Total Regulatory Costs ($b)	6.0	0.2	0.9	1.4	1.9	3.3
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	-0.01	-0.01	-0.01	-0.03

Table 384 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Subaru)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Subaru)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	50.0	53.4	57.6	60.6	63.9	75.0
Percent Change from Baseline	0%	7%	15%	21%	28%	50%
Average Achieved (mpg)	74.2	69.2	69.3	69.6	67.9	80.2
Total Regulatory Costs						
Technology Application Costs ($b)	3.1	-0.1	-0.1	-0.1	-0.2	0.4
Off-Cycle Technology Costs ($b)	0.1	0.2	0.2	0.2	0.2	0.2
Off-Cycle Credits	9.5	13.5	13.5	13.5	13.8	12.9
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.9	10.5	10.5	10.5	10.7	10.0
Subtotal Technology Costs ($b)	3.2	0.1	0.1	0.1	0.0	0.6
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	3.1	-0.1	-0.1	-0.1	-0.2	0.4
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Table 385 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Tesla)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Tesla)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	54.1	59.7	57.3	60.3	63.4	74.2
Percent Change from Baseline	0%	10%	6%	11%	17%	37%
Average Achieved (mpg)	164.3	137.9	137.9	137.9	137.9	137.9
Total Regulatory Costs						
Technology Application Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	5.2	5.2	5.2	5.2	5.2	5.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	5.1	5.1	5.1	5.1	5.1	5.1
Subtotal Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.01	0.00	0.00	-0.01

Table 386 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Toyota)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Toyota)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	48.6	52.2	54.8	57.7	60.8	71.3
Percent Change from Baseline	0%	7%	13%	19%	25%	47%
Average Achieved (mpg)	64.4	60.2	61.1	61.8	64.7	73.5
Total Regulatory Costs						
Technology Application Costs ($b)	6.7	-0.3	-0.1	0.1	0.8	3.9
Off-Cycle Technology Costs ($b)	0.3	0.6	0.6	0.6	0.6	0.6
Off-Cycle Credits	10.0	14.4	14.3	14.3	14.2	13.2
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.4	9.9	9.9	9.8	9.8	9.0
Subtotal Technology Costs ($b)	7.0	0.3	0.5	0.7	1.4	4.5
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.4
Total Regulatory Costs ($b)	6.7	-0.3	-0.1	0.1	0.8	4.4
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	-0.01	-0.04

Table 387 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Volvo)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (Volvo)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	47.5	51.0	53.9	56.8	59.8	70.2
Percent Change from Baseline	0%	7%	13%	20%	26%	48%
Average Achieved (mpg)	68.6	63.5	63.2	63.0	63.2	67.9
Total Regulatory Costs						
Technology Application Costs ($b)	0.3	0.0	0.0	0.0	0.0	0.1
Off-Cycle Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Off-Cycle Credits	9.1	12.6	12.6	12.6	12.6	12.6
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.6	9.6	9.6	9.6	9.6	9.6
Subtotal Technology Costs ($b)	0.3	0.0	0.0	0.0	0.0	0.1
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	0.3	0.0	0.0	0.0	0.0	0.1
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	0.00

Table 388 - Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (VWA)

Compliance Impacts and Cumulative Industry Costs for MY 2022 to 2031 Total Fleet by Alternative for Manufacturer (VWA)						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Economy						
Average Required (mpg)	49.8	53.7	56.2	59.2	62.4	73.1
Percent Change from Baseline	0%	8%	13%	19%	25%	47%
Average Achieved (mpg)	67.2	60.8	63.7	64.6	66.1	73.7
Total Regulatory Costs						
Technology Application Costs ($b)	2.1	-0.1	0.0	0.1	0.1	0.7
Off-Cycle Technology Costs ($b)	0.0	0.1	0.1	0.1	0.1	0.1
Off-Cycle Credits	9.3	13.1	12.9	12.9	12.7	12.3
A/C Efficiency Technology Costs ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Avg. A/C Efficiency	6.4	9.5	9.3	9.2	9.2	8.9
Subtotal Technology Costs ($b)	2.2	-0.1	0.1	0.1	0.2	0.8
Total Civil Penalties ($b)	0.0	0.0	0.0	0.0	0.0	0.0
Total Regulatory Costs ($b)	2.1	-0.1	0.0	0.1	0.1	0.7
Sales Impacts						
Sales Change from Baseline (m)	0.00	0.00	0.00	0.00	0.00	-0.01

Powertrain Technology Penetration Rate, by Model Year

Table 389 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	24	21	19	18
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	31	29	29	26	24	23	21
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	43	40	37	34	29	28	26
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	0.9	0.8	0.3	0.2	0.2
Strong Hybrid Powertrains Total	6.9	6.9	10.7	14.4	14.7	18.2	17.8	17.1	15.6	14.3
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	1.4	1.4	1.4	1.3	0.6
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.5	20.7	22.6	27.5	34.8	39.8	45.3
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.0	4.5	4.5	4.6
BEV 200 Mile Range	1.6	2.8	5.8	8.0	10.7	11.3	12.5	13.0	13.4	13.7
BEV 300 Mile Range	2.7	2.8	2.9	4.0	5.3	6.6	10.2	16.5	21.2	26.2
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	2	2	2	2	1	1
CVT Transmissions	22	22	21	20	19	19	16	14	13	12
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	25	23	22	22	20	18	17
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	14	13	11	11	10

Table 390 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	32	34	31	26	23
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	23	18	17	16	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	29	25	24	22	19
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.8	0.5	0.5	0.4	0.2	0.2
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.2	6.4	7.1	5.8	5.6	4.6	4.0
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.9	32.0	32.9	39.0	44.1	51.8	59.5
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.2	8.6	8.6	8.9
BEV 200 Mile Range	3.8	5.0	8.4	10.8	14.3	14.4	14.9	15.5	15.7	16.1
BEV 300 Mile Range	5.6	5.7	5.8	6.3	7.3	8.1	13.5	17.7	25.1	32.1
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	2	2
CVT Transmissions	40	38	36	35	33	33	29	26	23	21
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	20	20	20	19	15	12
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	3	3	3	2	1

Table 391 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	19	16	16	16
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	33	33	32	33	30	27	27	25
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	49	46	41	39	32	31	30
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.0	1.0	0.2	0.2	0.2
Strong Hybrid Powertrains Total	7.8	8.1	13.3	18.8	19.1	23.9	23.9	22.9	21.2	19.6
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.1	2.1	2.1	2.0	0.9
Battery Electric Vehicles (BEVs)	1.3	4.1	7.2	10.9	14.8	17.3	21.6	30.1	33.7	38.1
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.9	2.4	2.4	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.6	8.8	9.8	11.2	11.7	12.2	12.5
BEV 300 Mile Range	0.9	1.1	1.3	2.8	4.3	5.8	8.5	16.0	19.1	23.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	11	9	7	7	7
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	26	24	24	23	21	20	19
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	26	20	18	16	15	14

Table 392 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	30	22	17
Cylinder Deactivation	2	2	2	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	22	14	14	14	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	29	21	20	20	19
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	5.7	6.7	6.4	3.8	3.8	3.6	2.8
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	31.4	34.7	35.7	46.1	52.0	60.2	67.9
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	6.5	6.7	6.7	6.7
BEV 200 Mile Range	1.4	2.3	6.2	9.1	11.7	11.7	11.8	12.3	12.4	12.7
BEV 300 Mile Range	10.5	10.6	10.6	11.5	11.6	12.6	23.0	28.2	36.2	43.6
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	37	29	24	23	19
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	17	17	16	9	8
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	4	3	3	3	3	1

Table 393 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	34	34	32	30	28
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	23	22	20	17	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	29	28	27	24	19
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	0.9	0.4	0.4
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.1	7.8	7.8	7.4	5.6	5.1
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.4	30.2	32.0	36.5	43.7	51.3
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	9.7	10.4	10.4	11.0
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	18.0	18.7	18.9	19.5
BEV 300 Mile Range	0.9	0.9	1.1	1.3	3.0	3.7	4.3	7.4	14.3	20.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	10	9	9	7	7	6	5	4	3
CVT Transmissions	35	32	32	31	30	30	29	28	24	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	23	23	22	21	16
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	2	2	2	2	1

Table 394 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	24	21	19	18
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	31	29	28	26	22	22	20
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	43	40	35	34	28	27	25
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	0.9	0.8	0.3	0.5	0.5
Strong Hybrid Powertrains Total	6.9	6.9	10.7	14.4	14.7	17.8	17.6	16.8	15.4	14.2
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	1.4	1.4	1.4	1.3	0.6
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.5	20.7	24.6	28.4	36.8	41.7	46.8
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.0	4.5	4.5	4.5
BEV 200 Mile Range	1.6	2.8	5.8	8.0	10.7	11.3	11.7	12.4	12.8	13.0
BEV 300 Mile Range	2.7	2.8	2.9	4.0	5.3	8.6	11.9	19.1	23.6	28.4
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	2	2	2	2	1	1
CVT Transmissions	22	22	21	20	19	18	16	14	13	12
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	25	23	21	20	18	16	15
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	14	12	12	10

Table 395 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	19	16	16	16
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	33	33	32	30	28	25	25	23
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	49	46	39	37	30	29	28
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.0	1.0	0.2	0.6	0.6
Strong Hybrid Powertrains Total	7.8	8.1	13.3	18.8	19.1	23.5	23.6	22.5	20.8	19.3
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.1	2.1	2.1	2.0	0.9
Battery Electric Vehicles (BEVs)	1.3	4.1	7.2	10.9	14.8	19.8	24.2	32.9	36.1	40.5
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.4	2.4	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.6	8.8	9.7	10.0	10.7	11.1	11.4
BEV 300 Mile Range	0.9	1.1	1.3	2.8	4.3	8.4	12.3	19.8	22.7	26.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	8	6	6	6
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	26	24	23	22	20	18	17
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	26	20	19	16	17	15

Table 396 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	32	35	31	25	23
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	22	21	17	16	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	28	27	24	22	19
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.8	0.5	0.5	0.4	0.2	0.2
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.2	6.4	6.9	5.9	5.7	4.6	4.0
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.9	32.0	33.7	36.7	44.6	52.7	59.2
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.2	8.7	8.7	8.7
BEV 200 Mile Range	3.8	5.0	8.4	10.8	14.3	14.4	15.1	16.0	16.2	16.4
BEV 300 Mile Range	5.6	5.7	5.8	6.3	7.3	8.9	11.1	17.6	25.5	31.8
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	2	2
CVT Transmissions	40	38	36	35	33	33	32	29	26	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	20	17	16	15	12	10
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	3	3	1

Table 397 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	29	21	17
Cylinder Deactivation	2	2	2	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	22	20	16	16	14
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	28	27	22	22	20
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	5.7	6.7	6.2	4.7	4.7	4.5	3.6
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	31.4	34.7	36.5	39.1	49.6	58.6	65.5
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	6.5	6.7	6.7	6.7
BEV 200 Mile Range	1.4	2.3	6.2	9.1	11.7	11.7	11.7	12.7	12.8	13.2
BEV 300 Mile Range	10.5	10.6	10.6	11.5	11.6	13.4	16.1	25.4	34.2	40.8
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	37	36	30	29	25
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	12	11	11	4	4
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	4	7	8	3	3	1

Table 398 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	34	34	32	30	28
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	21	18	15	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	28	28	25	22	17
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	0.9	0.4	0.3
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.1	7.7	7.1	6.6	4.8	4.3
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.4	31.1	34.3	39.8	46.9	53.0
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	9.8	10.5	10.5	10.5
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	18.3	19.2	19.4	19.5
BEV 300 Mile Range	0.9	0.9	1.1	1.3	3.0	4.6	6.2	10.0	17.0	23.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	10	9	9	7	7	6	4	3	3
CVT Transmissions	35	32	32	31	30	30	28	27	23	22
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	21	21	20	19	16
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	3	2	2	2

Table 399 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	24	21	19	18
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	31	29	27	24	21	20	19
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	43	40	35	32	26	25	24
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	0.9	0.8	0.4	0.3	0.3
Strong Hybrid Powertrains Total	6.9	6.9	10.7	14.4	14.7	16.6	16.2	15.2	14.1	12.9
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	1.7	1.7	1.7	1.6	1.0
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.5	20.7	25.9	31.1	40.0	44.9	48.8
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.0	4.5	4.5	4.5
BEV 200 Mile Range	1.6	2.8	5.8	8.0	10.7	11.3	11.7	12.8	13.0	13.2
BEV 300 Mile Range	2.7	2.8	2.9	4.0	5.3	9.8	14.6	21.9	26.6	30.3
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	2	2	2	2	1	1
CVT Transmissions	22	22	21	20	19	18	16	14	13	12
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	25	23	20	18	15	13	13
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	15	12	12	11

Table 400 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	32	35	31	26	24
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	22	19	15	14	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	29	25	22	20	19
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.8	0.6	0.6	0.7	0.4	0.4
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.2	6.4	6.8	5.3	5.2	4.1	3.8
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.9	32.0	33.3	39.0	46.2	53.7	57.4
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.2	8.7	8.7	8.7
BEV 200 Mile Range	3.8	5.0	8.4	10.8	14.3	14.4	15.1	15.4	15.6	15.8
BEV 300 Mile Range	5.6	5.7	5.8	6.3	7.3	8.5	13.4	19.7	27.0	30.5
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	2	2
CVT Transmissions	40	38	36	35	33	33	30	27	25	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	20	17	16	16	12	11
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	3	3	3

Table 401 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	18	16	15	15
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	33	33	32	30	27	24	23	21
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	49	46	39	36	29	27	26
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.0	1.0	0.2	0.2	0.2
Strong Hybrid Powertrains Total	7.8	8.1	13.3	18.8	19.1	21.6	21.8	20.3	19.2	17.5
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.5	2.5	2.5	2.4	1.5
Battery Electric Vehicles (BEVs)	1.3	4.1	7.2	10.9	14.8	22.0	27.1	36.8	40.4	44.4
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.4	2.4	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.6	8.8	9.7	10.0	11.4	11.6	11.9
BEV 300 Mile Range	0.9	1.1	1.3	2.8	4.3	10.5	15.2	23.0	26.4	30.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	9	7	7	7
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	26	24	22	18	15	14	13
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	26	21	20	17	16	15

Table 402 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	30	22	19
Cylinder Deactivation	2	2	2	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	22	15	11	11	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	29	22	17	17	17
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.4	0.4	0.4
Strong Hybrid Powertrains Total	3.1	3.2	4.6	5.7	6.7	6.2	3.6	3.6	3.3	2.9
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	31.4	34.7	35.9	45.2	54.8	63.0	68.1
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	6.5	6.7	6.7	6.7
BEV 200 Mile Range	1.4	2.3	6.2	9.1	11.7	11.7	11.7	12.1	12.4	12.7
BEV 300 Mile Range	10.5	10.6	10.6	11.5	11.6	12.8	22.1	31.1	39.1	43.8
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	37	30	25	24	21
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	13	11	11	4	4
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	4	7	8	4	4	3

Table 403 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	34	34	32	30	29
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	23	22	19	16	16
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	29	28	26	23	21
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.1	1.1	1.0	0.5	0.4
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.1	7.4	7.0	6.8	4.9	4.7
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.4	30.8	32.9	37.7	44.5	46.9
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	9.8	10.5	10.5	10.5
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	18.3	18.6	18.8	18.9
BEV 300 Mile Range	0.9	0.9	1.1	1.3	3.0	4.3	4.8	8.6	15.2	17.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	10	9	9	7	7	6	5	4	4
CVT Transmissions	35	32	32	31	30	30	29	28	25	25
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	22	21	21	20	18
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	3	2	2	2

Table 404 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	23	21	19	18
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	31	29	27	23	20	18	17
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	43	40	35	31	25	23	21
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	0.9	0.8	0.3	0.5	0.5
Strong Hybrid Powertrains Total	6.9	6.9	10.7	14.4	14.7	16.3	16.3	15.2	14.6	13.5
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	1.6	1.5	1.5	1.4	1.3
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.5	20.7	26.9	32.6	41.3	46.4	50.2
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.0	4.4	4.4	4.4
BEV 200 Mile Range	1.6	2.8	5.8	8.0	10.7	11.1	12.1	12.8	13.1	13.3
BEV 300 Mile Range	2.7	2.8	2.9	4.0	5.3	11.0	15.7	23.3	28.2	31.7
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DCT Transmissions	4	4	3	3	2	2	2	1	1	1
CVT Transmissions	22	22	21	20	19	18	16	13	13	12
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	25	23	20	17	15	12	12
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	15	12	11	10

Table 405 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	32	35	31	26	23
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	22	18	14	13	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	28	25	21	19	18
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.8	0.5	0.5	0.4	0.2	0.1
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.2	6.4	6.9	5.3	5.4	4.3	4.3
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.9	32.0	33.7	40.0	47.5	55.5	59.1
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.2	8.4	8.4	8.4
BEV 200 Mile Range	3.8	5.0	8.4	10.8	14.3	14.4	15.1	15.7	15.9	16.1
BEV 300 Mile Range	5.6	5.7	5.8	6.3	7.3	8.9	14.3	20.9	28.8	32.2
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	4	3	2	2
CVT Transmissions	40	38	36	35	33	34	29	26	24	22
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	20	17	16	15	11	10
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	3	3	2

Table 406 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	18	15	15	14
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	33	33	32	29	26	22	21	19
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	49	46	38	34	27	25	23
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.0	1.0	0.2	0.7	0.7
Strong Hybrid Powertrains Total	7.8	8.1	13.3	18.8	19.1	21.2	21.9	20.3	19.8	18.2
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.4	2.4	2.4	2.2	2.0
Battery Electric Vehicles (BEVs)	1.3	4.1	7.2	10.9	14.8	23.3	28.8	38.2	41.9	45.7
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.4	2.4	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.6	8.8	9.5	10.5	11.4	11.6	11.9
BEV 300 Mile Range	0.9	1.1	1.3	2.8	4.3	12.1	16.4	24.5	27.9	31.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	9	7	7	6
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	26	24	21	17	15	13	13
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	26	21	20	17	15	14

Table 407 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	30	21	18
Cylinder Deactivation	2	2	2	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	22	15	11	11	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	28	21	17	17	16
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	5.7	6.7	6.2	3.5	3.5	3.3	2.9
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	31.4	34.7	36.5	45.7	55.6	64.8	69.8
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	6.5	6.6	6.6	6.6
BEV 200 Mile Range	1.4	2.3	6.2	9.1	11.7	11.7	11.7	12.2	12.3	12.7
BEV 300 Mile Range	10.5	10.6	10.6	11.5	11.6	13.4	22.7	32.0	41.0	45.6
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	37	30	25	24	20
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	12	11	11	3	3
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	4	7	8	4	4	3

Table 408 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	34	34	33	31	29
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	21	17	14	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	28	28	25	22	19
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	0.9	0.4	0.3
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.1	7.7	7.1	7.1	5.2	5.7
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.4	31.1	34.3	39.5	46.4	48.8
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	9.8	10.2	10.2	10.2
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	18.3	19.2	19.4	19.4
BEV 300 Mile Range	0.9	0.9	1.1	1.3	3.0	4.6	6.2	10.2	16.9	19.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	10	9	9	7	7	6	4	3	3
CVT Transmissions	35	32	32	31	30	30	29	27	24	24
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	21	21	20	18	16
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	3	2	2	2

Table 409 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	23	21	19	18
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	31	29	26	22	18	17	16
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	43	40	34	29	24	22	21
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	0.9	0.8	0.5	0.7	0.7
Strong Hybrid Powertrains Total	6.9	6.9	10.7	14.4	14.7	16.1	15.8	15.3	13.4	11.6
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	1.6	1.5	1.5	1.8	3.1
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.5	20.7	28.2	34.8	42.5	47.8	51.2
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.0	4.4	4.4	4.4
BEV 200 Mile Range	1.6	2.8	5.8	8.0	10.7	11.3	11.9	12.4	13.0	13.3
BEV 300 Mile Range	2.7	2.8	2.9	4.0	5.3	12.1	18.0	24.9	29.6	32.6
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9
DCT Transmissions	4	4	3	3	2	2	2	1	1	1
CVT Transmissions	22	22	21	20	19	17	16	14	13	12
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	25	23	19	14	10	7	6
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	17	15	15	15

Table 410 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	32	34	32	27	25
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	20	16	12	10	10
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	27	22	17	17	16
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.8	0.5	0.5	1.2	1.0	1.0
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.2	6.4	8.3	6.7	6.8	5.7	5.5
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.9	32.0	33.9	41.3	47.9	55.5	58.3
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.2	8.4	8.4	8.4
BEV 200 Mile Range	3.8	5.0	8.4	10.8	14.3	14.4	14.6	15.5	15.6	16.1
BEV 300 Mile Range	5.6	5.7	5.8	6.3	7.3	9.1	16.1	21.6	29.1	31.3
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
DCT Transmissions	7	7	6	6	4	4	3	2	1	1
CVT Transmissions	40	38	36	35	33	32	28	26	24	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	20	17	16	14	9	7
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	6	3	4	6

Table 411 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	17	17	15	15	14
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	33	33	32	28	25	22	21	19
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	49	46	37	33	27	25	23
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.0	1.0	0.2	0.6	0.6
Strong Hybrid Powertrains Total	7.8	8.1	13.3	18.8	19.1	20.2	20.5	19.6	17.3	14.7
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.4	2.4	2.4	2.6	4.7
Battery Electric Vehicles (BEVs)	1.3	4.1	7.2	10.9	14.8	25.2	31.4	39.8	44.0	47.5
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.4	2.4	2.4
BEV 200 Mile Range	0.3	1.5	4.3	6.6	8.8	9.7	10.6	10.8	11.7	11.9
BEV 300 Mile Range	0.9	1.1	1.3	2.8	4.3	13.7	19.0	26.6	29.9	33.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	9	8	8	7
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	26	24	21	13	8	6	6
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	26	21	22	21	21	19

Table 412 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	32	23	19
Cylinder Deactivation	2	2	2	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	19	12	8	8	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	25	18	14	14	14
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	5.7	6.7	9.1	6.5	6.5	6.1	6.1
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	31.4	34.7	36.5	45.7	54.0	63.3	67.1
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	6.5	6.6	6.6	6.6
BEV 200 Mile Range	1.4	2.3	6.2	9.1	11.7	11.7	11.7	12.6	12.8	13.2
BEV 300 Mile Range	10.5	10.6	10.6	11.5	11.6	13.4	22.7	29.9	39.1	42.5
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	34	27	25	24	20
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	12	11	9	2	0
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	4	7	8	4	4	5

Table 413 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	34	33	32	31	30
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	19	16	12	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	28	25	21	20	19
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	2.4	1.9	1.9
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.1	7.6	7.0	7.0	5.2	5.0
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.4	31.4	36.9	41.9	47.9	49.7
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	9.8	10.1	10.1	10.1
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.4	18.3	18.4	19.0
BEV 300 Mile Range	0.9	0.9	1.1	1.3	3.0	4.9	9.7	13.5	19.3	20.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DCT Transmissions	11	10	9	9	7	7	4	3	2	1
CVT Transmissions	35	32	32	31	30	30	28	27	25	25
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	21	20	19	15	13
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	3	2	5	6

Table 414 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	12	17	20	22	22	22	18	16	14
Cylinder Deactivation	5	4	3	1	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	32	30	31	29	24	19	15	12	8
Variable Geometry Turbo	1	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	52	51	47	43	40	32	26	20	16	12
Mild Hybrid Powertrains	3.6	3.6	2.3	2.1	1.1	0.9	0.8	0.5	0.5	0.5
Strong Hybrid Powertrains Total	6.9	6.9	10.7	14.4	14.7	15.8	18.1	17.3	15.6	13.7
Plug-In Hybrid Powertrains	1.7	1.4	2.2	1.4	1.4	2.2	2.4	3.7	6.0	8.6
Battery Electric Vehicles (BEVs)	5.5	9.4	13.2	16.5	20.7	29.7	36.1	44.1	50.2	55.3
BEV 100 Mile Range	0.3	2.9	3.6	3.6	3.9	3.9	4.0	4.4	4.4	4.4
BEV 200 Mile Range	1.6	2.8	5.8	8.0	10.7	11.3	12.2	12.6	13.1	13.6
BEV 300 Mile Range	2.7	2.8	2.9	4.0	5.3	13.7	18.8	25.4	30.5	32.1
BEV 400 Mile Range	0.9	0.9	0.9	0.8	0.8	0.8	1.1	1.7	2.3	5.1
DCT Transmissions	4	4	3	3	2	2	2	1	1	1
CVT Transmissions	22	22	21	20	19	19	16	14	11	10
5-Speed Automatic	1	1	0	0	0	0	0	0	0	0
6-Speed Automatic	6	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	29	28	27	25	23	17	9	4	2	2
9-Speed Automatic	11	8	8	4	0	0	0	0	0	0
10-Speed Automatic	12	14	15	16	18	15	16	15	14	10

Table 415 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	17	20	23	26	31	31	32	27	21	20
Cylinder Deactivation	1	1	1	1	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	30	26	26	23	19	15	11	8	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	38	36	33	32	30	25	20	14	13	12
Mild Hybrid Powertrains	2.1	2.1	1.7	2.0	0.8	0.5	0.5	1.1	0.9	1.0
Strong Hybrid Powertrains Total	5.4	4.9	6.0	6.2	6.4	6.8	10.3	11.1	10.0	11.0
Plug-In Hybrid Powertrains	1.2	0.6	0.5	0.1	0.1	1.0	0.9	2.1	2.1	2.2
Battery Electric Vehicles (BEVs)	12.4	18.4	23.8	26.9	32.0	36.0	41.0	48.6	58.1	59.9
BEV 100 Mile Range	0.6	5.4	7.3	7.4	8.0	8.1	8.2	8.4	8.4	8.4
BEV 200 Mile Range	3.8	5.0	8.4	10.8	14.3	14.4	14.6	15.7	16.4	17.4
BEV 300 Mile Range	5.6	5.7	5.8	6.3	7.3	11.2	14.9	20.7	29.2	29.8
BEV 400 Mile Range	2.4	2.4	2.4	2.4	2.4	2.4	3.3	3.7	4.1	4.2
DCT Transmissions	7	7	6	6	4	4	4	3	2	2
CVT Transmissions	40	38	36	35	33	36	31	26	20	19
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	5	4	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	23	22	22	22	20	11	6	5	2	1
9-Speed Automatic	4	3	3	1	0	0	0	0	0	0
10-Speed Automatic	3	2	2	3	3	5	7	4	5	5

Table 416 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	7	8	13	17	18	18	16	14	13	11
Cylinder Deactivation	8	6	3	2	1	1	1	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	32	33	33	33	32	26	22	18	14	9
Variable Geometry Turbo	2	1	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	1	0	0	0	0	0	0	0	0	0
Diesel Engines	1	1	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	61	60	55	49	46	36	29	23	18	12
Mild Hybrid Powertrains	4.6	4.5	2.6	2.2	1.2	1.0	1.0	0.2	0.3	0.3
Strong Hybrid Powertrains Total	7.8	8.1	13.3	18.8	19.1	20.4	22.0	20.5	18.5	15.0
Plug-In Hybrid Powertrains	1.9	1.9	3.1	2.1	2.1	2.7	3.1	4.4	8.0	11.7
Battery Electric Vehicles (BEVs)	1.3	4.1	7.2	10.9	14.8	26.5	33.6	41.9	46.2	53.0
BEV 100 Mile Range	0.1	1.5	1.6	1.6	1.7	1.7	1.8	2.3	2.3	2.3
BEV 200 Mile Range	0.3	1.5	4.3	6.6	8.8	9.7	10.9	11.1	11.4	11.7
BEV 300 Mile Range	0.9	1.1	1.3	2.8	4.3	15.0	20.8	27.8	31.2	33.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.4	5.6
DCT Transmissions	2	2	2	2	2	1	1	1	1	1
CVT Transmissions	12	13	13	12	12	9	9	8	6	6
5-Speed Automatic	2	2	0	0	0	0	0	0	0	0
6-Speed Automatic	7	5	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	32	32	30	26	24	19	10	4	2	2
9-Speed Automatic	15	11	10	5	0	0	0	0	0	0
10-Speed Automatic	18	21	21	23	26	20	21	21	19	12

Table 417 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	11	15	19	24	29	29	35	28	16	15
Cylinder Deactivation	2	2	2	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	29	27	23	24	23	17	10	6	6	5
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	35	34	31	31	29	23	16	11	11	11
Mild Hybrid Powertrains	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	3.1	3.2	4.6	5.7	6.7	6.2	11.2	13.2	12.5	13.5
Plug-In Hybrid Powertrains	0.7	0.7	0.8	0.1	0.1	2.0	2.0	2.0	2.0	2.0
Battery Electric Vehicles (BEVs)	17.0	21.0	27.6	31.4	34.7	39.5	41.3	51.2	63.2	64.2
BEV 100 Mile Range	0.3	3.3	6.0	6.0	6.5	6.5	6.5	7.0	7.0	7.0
BEV 200 Mile Range	1.4	2.3	6.2	9.1	11.7	11.7	11.7	13.3	13.5	14.0
BEV 300 Mile Range	10.5	10.6	10.6	11.5	11.6	16.4	16.4	23.7	35.0	35.5
BEV 400 Mile Range	4.8	4.8	4.8	4.8	4.8	4.8	6.6	7.1	7.7	7.7
DCT Transmissions	3	3	3	2	1	1	1	1	1	1
CVT Transmissions	45	43	40	39	37	40	33	26	16	15
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	6	6	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	18	17	18	18	17	4	3	1	0	0
9-Speed Automatic	3	3	3	1	0	0	0	0	0	0
10-Speed Automatic	5	4	3	3	4	7	8	5	5	4

Table 418 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	23	25	27	27	33	33	30	26	25	24
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	34	32	29	28	23	22	19	16	11	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	38	36	34	30	27	23	17	15	13
Mild Hybrid Powertrains	3.7	3.7	3.1	3.6	1.7	1.0	1.0	2.2	1.7	1.9
Strong Hybrid Powertrains Total	7.6	6.6	7.3	6.8	6.1	7.4	9.4	9.1	7.5	8.6
Plug-In Hybrid Powertrains	1.7	0.4	0.3	0.1	0.1	0.1	0.0	2.3	2.3	2.4
Battery Electric Vehicles (BEVs)	7.9	16.0	20.2	22.4	29.4	32.7	40.8	46.0	53.2	55.6
BEV 100 Mile Range	1.0	7.4	8.5	8.7	9.5	9.5	9.8	9.8	9.8	9.8
BEV 200 Mile Range	6.1	7.6	10.6	12.4	16.9	16.9	17.4	18.1	19.2	20.8
BEV 300 Mile Range	0.9	0.9	1.1	1.3	3.0	6.2	13.5	17.8	23.5	24.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.9
DCT Transmissions	11	10	9	9	7	7	6	4	3	3
CVT Transmissions	35	32	32	31	30	32	29	26	23	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	3	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	28	27	26	26	24	18	10	8	5	2
9-Speed Automatic	5	4	3	1	0	0	0	0	0	0
10-Speed Automatic	0	1	2	4	3	3	5	4	6	6

Table 419 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	19	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	23	19	7
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	1.3	36.9	41.8	42.1	42.1	41.7	41.0
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	22.9	24.8	29.4	30.9	31.4	38.8	51.7
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.1
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	10.3	10.8	12.2	12.2
BEV 300 Mile Range	2.3	2.3	3.4	9.8	9.8	14.5	15.4	15.6	21.5	34.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	22	21	19	7
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	1	0	0	0

Table 420 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	45	36	27	27	27
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	43	34	25	25	25
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	30.6	30.4	27.7	27.7	27.7
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	21.9	31.3	42.9	42.9	42.9
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	6.0	6.0	6.0
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	11.7	11.6	12.2	12.2	12.2
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	6.9	16.4	24.7	24.7	24.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	11	11	11	11	11
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	35	25	18	18	18

Table 421 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	8	8	8	7	7	7
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	35	32	32	32	29	26	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	47	44	35	34	33	31	22
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	2.1	18.5	20.2	31.6	31.7	31.7	31.4	31.0
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	10.6	10.7	10.7	9.9	4.8
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	14.2	17.2	18.1	18.0	21.7	25.2	39.9
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.0
BEV 200 Mile Range	1.6	1.5	9.6	10.0	11.2	11.3	11.3	12.1	12.4	13.7
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.9	2.6	2.6	5.6	8.8	22.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	19	19	19	19	16	16	16
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	26	28	15	16	16	15	8

Table 422 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	13	13	13
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	57	44	44	43	43
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	67	54	54	53	53
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	4.5	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	20.7	38.6	42.7	43.6	43.5
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	4.0	3.9	3.9	3.9
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	10.2	10.9	11.8	11.8
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	6.6	24.4	27.9	27.9	27.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	49	35	31	31	31
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	25	25	25	25

Table 423 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	59	59	54	53	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	13	12	7	7	5
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	60	59	50	49	41
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	8.5	8.6	6.4	6.4	6.4
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.6	19.6	20.2	32.6	33.6	41.2
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	12.4	12.5	13.5	13.5
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.9	3.9	3.8	16.1	16.1	23.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	8	8	7	3	3	3
CVT Transmissions	22	28	28	24	24	24	24	24	23	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	40	40	34	34	27
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 424 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	60	49	39	39
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	17	16	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	27	19	19
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	3.4	3.4	3.4	3.4
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	17.4	17.4	18.5	30.5	41.5	51.0
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	3.2	3.2	3.2
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	14.5	14.5	14.5	16.7
BEV 300 Mile Range	0.7	0.7	0.7	0.7	1.2	1.2	1.2	12.9	23.8	31.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	6	6	6	6	6	6
CVT Transmissions	32	31	30	28	30	30	30	19	8	8
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	43	42	41	41	32
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 425 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	30	30	30	30	26	21
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	10	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	30	30	30	30	26	21
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	27.8	27.8	27.8	27.8	27.8	42.4
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	32.4	32.4	32.4	32.4	36.8	36.8
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
BEV 300 Mile Range	0.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	12.4	12.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	27	10	10	10	10	10
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	13	30	30	30	25	11

Table 426 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 427 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 428 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	63	61	54	52	52
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	14.6	14.1	14.1	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	22.1	24.8	32.0	48.5	48.5
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	11.3	11.3	11.8	11.8
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	10.5	12.5	12.5	14.8	14.8
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	1.0	8.2	21.8	21.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	1	1	1
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	61	59	52	50	50
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 429 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	25	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	25	24
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.2
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	19.3	24.3	22.8	22.8	22.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	32.7	48.4	50.0	51.8	52.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	9.1	9.1
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.8	13.8
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	9.7	25.5	27.1	28.9	29.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	16	16	16	14	9	6	6	6	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	21	20

Table 430 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.4	32.4	36.3
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.1	13.1	13.1	17.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	64
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 431 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	44	47	44	34
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	14	14	14	14
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.7	0.8	0.8	1.4	1.4	1.4	1.4	1.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.5	13.4	16.1	17.0	32.2	32.2	34.7	45.1
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	20.7	20.7	20.7	20.7
BEV 300 Mile Range	0.0	0.0	0.4	0.8	0.8	1.8	6.0	6.0	8.5	18.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	42	42	39	29
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	25	25	25	25

Table 432 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	12	12	12
Cylinder Deactivation	20	20	6	5	5	5	5	1	1	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	25	25	23	23	22
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	33	32	24	24	24
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.5	32.6	32.6	32.6	38.0	37.3	36.5
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	18.0	18.3	18.9	26.3	27.0	29.4
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.8	3.4	3.4	3.4	3.4
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.7	11.4	11.7
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.1	5.3	5.3	12.2	12.2	14.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	31	30	30	30	25	25	23
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	18	11	11	11

Table 433 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	57	33	33	33
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	17	17	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	40	40	40
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	22.3	49.3	49.3	49.3
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.3	3.3	3.3
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	12.7	13.5	13.5	13.5
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.4	32.6	32.6	32.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	1	1	1
CVT Transmissions	95	90	90	89	86	81	75	50	50	50
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 434 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.3
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 435 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	36	35	28	27
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	24	29	29	27	25	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	25	23	23	23
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	16.2	16.2	10.7	8.2	1.0
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	7.3	14.5	16.9	17.1	26.0	37.9	46.1
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	3.6	4.6	4.6	4.8
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	10.9	11.0	12.1	12.1	12.4
BEV 300 Mile Range	0.0	0.3	0.3	1.2	1.9	2.5	2.6	9.3	21.3	28.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	13	13	13	13	13
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	48	47	47	47	44	35	34
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	6	6	6	6

Table 436 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	40	40
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	4.7	3.0
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.5	38.4	55.5	57.2
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.1	21.6	21.6
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.2	27.7	29.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	40	40
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 437 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, No Action Alternative (Baseline)

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	5	5
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	48	46	40	38	36	36	33	31
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	56	53	49	48	47	47	38	36
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.3	0.3
Strong Hybrid Powertrains Total	0.0	0.0	22.3	22.7	26.0	27.9	28.0	28.0	9.5	9.5
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	18.6	22.9	22.9	24.7	24.6	52.4	54.2
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	5.9	5.9	5.8	7.6
BEV 200 Mile Range	4.1	5.1	9.6	11.3	15.6	15.5	15.4	15.4	15.8	15.8
BEV 300 Mile Range	0.2	0.2	0.2	1.7	1.7	1.7	3.3	3.3	30.8	30.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	15	15	14	14
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	35	33	32	30	30	21	19
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	2	2	0	1	2	3	2	2

Table 438 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	20	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	23	20	7
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	1.3	36.9	41.8	42.1	42.1	41.9	41.2
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	22.9	24.8	29.4	30.9	31.4	38.5	51.5
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.1
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	10.3	10.7	12.2	12.2
BEV 300 Mile Range	2.3	2.3	3.4	9.8	9.8	14.5	15.4	15.5	21.2	34.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	8	8	6	6
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	14	14	13	1

Table 439 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	44	35	26	26	26
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	43	34	25	25	25
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	30.6	30.4	27.7	27.7	27.7
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	22.5	31.9	43.5	43.5	43.5
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	6.0	6.0	6.0
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	11.7	11.6	12.2	12.2	12.2
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	7.6	17.0	25.3	25.3	25.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	11	11	11	10	10
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	35	25	18	18	18

Table 440 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	8	8	8	7	7	7
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	35	32	32	32	23	21	12
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	47	44	35	34	27	26	17
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	2.1	18.5	20.2	29.5	29.6	29.6	29.3	28.9
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	10.6	10.7	10.7	9.9	4.8
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	14.2	17.2	20.2	20.1	29.5	33.0	47.7
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.0
BEV 200 Mile Range	1.6	1.5	9.6	10.0	11.2	11.2	11.2	12.2	12.5	13.8
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.9	4.9	4.9	13.3	16.4	29.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	19	19	13	14	11	11	11
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	26	28	21	22	16	15	8

Table 441 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	13	13	13
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	44	42	42	41	41
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	55	52	52	51	51
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	4.5	2.0	2.0	2.0	2.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	33.6	38.2	42.5	43.4	43.5
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	10.2	10.9	11.9	11.9
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	19.4	24.1	27.6	27.6	27.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	36	34	29	29	29
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	25	25	24	24

Table 442 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	59	59	54	53	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	11	10	4	4	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	58	58	46	46	38
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	9.3	9.4	7.3	7.3	7.3
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.6	20.6	21.3	35.0	36.0	43.9
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	12.4	12.5	13.5	13.5
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.9	4.9	4.9	18.5	18.5	26.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	8	8	7	1	1	1
CVT Transmissions	22	28	28	24	24	24	24	24	23	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	38	38	32	32	25
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 443 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	59	48	36	36
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	17	16	15	14
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	10	10
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	0.7	0.7	0.7	0.0
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	17.4	17.4	23.3	36.1	48.0	49.7
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	3.2	3.2	3.2
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	14.8	14.8	14.8	15.5
BEV 300 Mile Range	0.7	0.7	0.7	0.7	1.2	1.2	5.6	18.1	29.9	31.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	6	6	6	6	6	5
CVT Transmissions	32	31	30	28	30	30	37	26	14	14
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	31	31	31	31
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	0	0

Table 444 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	30	30	30	30	26	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	10	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	30	30	30	30	26	18
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	27.8	27.8	27.8	27.8	27.8	44.4
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	32.4	32.4	32.4	32.4	36.8	37.2
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
BEV 300 Mile Range	0.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	12.5	12.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	27	10	10	10	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	13	30	30	30	35	18

Table 445 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 446 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 447 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	63	63	56	56	56
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	14.6	14.6	14.6	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	22.1	22.1	29.6	44.2	44.2
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	10.9	10.9	10.9	10.9
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	10.5	10.5	10.5	15.1	15.1
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.7	8.1	18.2	18.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	6	5	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	56	55	53	53	53
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 448 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	25	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	25	24
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.2
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	19.3	24.3	22.8	22.8	22.9
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	32.7	48.4	49.9	51.8	52.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	9.1	9.1
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.8	13.8
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	9.7	25.5	27.1	28.9	29.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	16	16	16	14	9	6	6	6	4	4
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	21	20

Table 449 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	32.4	42.0
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.1	13.1	13.1	22.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	58
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 450 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	44	45	41	32
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	14	12	12	12
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.5	13.4	16.1	17.7	34.9	36.6	41.1	49.4
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	10.4	12.1	12.1	12.1
BEV 300 Mile Range	0.0	0.0	0.4	0.8	0.8	2.4	19.0	19.1	23.5	31.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	40	39	35	27
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	25	23	23	23

Table 451 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	5	5	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	24	24	22	22	21
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	33	32	24	24	24
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.5	32.6	32.7	32.7	38.0	37.7	37.0
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	18.0	19.9	20.5	28.2	28.6	31.0
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.8	3.4	3.4	3.4	3.4
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.8	11.0	11.6
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.1	6.9	6.9	14.0	14.1	16.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	31	30	29	27	21	16	16
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	12	17	16

Table 452 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	57	33	33	33
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	17	17	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	40	40	40
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	22.3	49.3	49.3	49.3
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.3	3.3	3.3
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	12.7	13.5	13.5	13.5
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.4	32.6	32.6	32.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	1	1	1
CVT Transmissions	95	90	90	89	86	81	75	50	50	50
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 453 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.3	24.3
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 454 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	36	35	28	28
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	24	29	29	27	24	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	25	23	23	23
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	16.2	16.3	10.7	8.2	1.2
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	7.3	14.5	16.9	16.8	26.0	38.0	45.5
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	3.5	4.6	4.6	4.5
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	10.9	10.9	12.1	12.1	12.1
BEV 300 Mile Range	0.0	0.3	0.3	1.2	1.9	2.5	2.5	9.3	21.4	28.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	13	13	13	13	13
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	48	47	47	47	44	35	34
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	6	6	6	6

Table 455 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	40	40
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	4.7	3.8
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.5	38.4	55.5	56.3
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.1	19.8	20.6
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.2	29.5	29.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	40	40
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 456 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	11	11
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	48	46	40	38	36	36	33	29
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	56	53	49	48	47	47	43	40
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.3	0.0
Strong Hybrid Powertrains Total	0.0	0.0	22.3	22.7	26.0	26.1	26.2	26.3	7.8	7.8
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	18.6	22.9	25.1	26.9	26.8	48.5	52.4
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	6.4	6.4	6.4	6.4
BEV 200 Mile Range	4.1	5.1	9.6	11.3	15.6	15.5	15.4	15.4	15.4	15.5
BEV 300 Mile Range	0.2	0.2	0.2	1.7	1.7	4.0	5.0	5.0	26.7	30.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	14	14	14	14
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	35	33	32	30	30	27	24
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	2	2	0	1	2	3	3	3

Table 457 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	20	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	23	20	11
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	1.3	36.9	41.7	42.0	42.1	41.9	41.0
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	22.9	24.8	29.4	30.9	31.5	38.6	48.4
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.1
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	10.4	10.8	12.2	12.2
BEV 300 Mile Range	2.3	2.3	3.4	9.8	9.8	14.5	15.4	15.6	21.2	31.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	8	8	6	6
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	14	14	13	4

Table 458 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	45	35	26	26	26
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	43	33	24	24	24
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	30.6	30.4	27.7	27.7	27.7
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	21.9	32.3	43.9	43.9	43.9
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	6.0	6.0	6.0
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	11.7	11.6	12.2	12.2	12.2
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	7.0	17.4	25.7	25.7	25.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	11	11	11	11	11
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	35	25	17	17	17

Table 459 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	8	8	8	7	7	7
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	35	32	32	32	23	21	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	47	44	35	34	27	26	22
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	2.1	18.5	20.2	21.9	21.9	21.9	21.6	21.8
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	12.7	12.7	12.7	11.9	6.8
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	14.2	17.2	25.8	25.8	35.2	38.6	47.1
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.1
BEV 200 Mile Range	1.6	1.5	9.6	10.0	11.2	11.2	11.2	12.5	12.5	13.8
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.9	10.4	10.5	18.6	22.1	29.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	19	19	13	14	11	11	10
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	26	28	21	22	16	15	12

Table 460 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	14	14	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	44	32	28	24	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	55	42	38	34	34
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	4.6	0.1	0.1	4.4	4.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	33.3	50.5	57.6	57.6	57.6
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	10.2	13.8	13.8	13.8
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	19.1	36.3	39.8	39.8	39.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	36	24	21	21	21
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	24	20	16	16

Table 461 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	59	59	54	53	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	12	11	6	6	3
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	59	58	48	47	39
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.7	0.7	0.3	0.3	0.3
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	6.9	7.0	4.8	4.8	4.8
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.6	21.7	23.0	35.4	36.3	44.3
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	12.6	12.6	13.6	13.6
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.9	6.0	6.4	18.7	18.7	26.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	8	8	7	2	2	2
CVT Transmissions	22	28	28	24	24	24	24	24	23	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	39	39	34	34	26
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 462 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	54	43	33	31
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	18	16	16	16
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	16	16
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	1.6	1.6	1.6	0.9
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	2.5
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	17.4	17.4	26.5	39.3	49.8	50.5
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	3.2	3.2	3.2
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	14.8	14.8	14.8	15.5
BEV 300 Mile Range	0.7	0.7	0.7	0.7	1.2	1.2	8.8	21.3	31.7	31.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	6	6	6	6	6	6
CVT Transmissions	32	31	30	28	30	30	30	22	14	12
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	42	34	31	29	29
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	1	1	0	0	0

Table 463 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	30	30	30	30	26	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	10	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	30	30	30	30	26	18
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	27.8	27.8	27.8	27.8	27.8	34.1
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	32.4	32.4	32.4	32.4	36.8	47.5
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
BEV 300 Mile Range	0.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	12.5	23.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	27	10	10	10	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	13	30	30	30	35	18

Table 464 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 465 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 466 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	63	63	56	56	56
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	14.6	14.6	14.6	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	22.1	22.1	29.6	44.2	44.2
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	10.9	10.9	10.9	10.9
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	10.5	10.5	10.5	15.1	15.1
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.7	8.1	18.2	18.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	6	5	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	56	55	53	53	53
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 467 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	27	27	27
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	27	27	27
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.9	0.2	0.2	0.2	0.2
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	12.2	18.9	18.9	18.8	19.3
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	39.8	53.9	53.9	53.9	53.9
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.2	9.1	9.1	9.1
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.8	13.8
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	16.8	30.9	31.0	31.0	31.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	16	16	16	14	9	6	6	6	6	6
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	21	21	21

Table 468 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	32.5	36.3
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.0	13.1	13.1	17.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	64
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 469 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	43	44	41	33
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	13	11	11	11
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.5	13.4	16.1	17.7	33.9	35.7	38.1	46.5
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	10.4	12.1	12.1	12.1
BEV 300 Mile Range	0.0	0.0	0.4	0.8	0.8	2.4	18.0	18.1	20.6	28.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	42	42	39	31
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	24	22	22	22

Table 470 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	12	12	12
Cylinder Deactivation	20	20	6	5	5	5	5	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	20	20	18	18	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	31	30	22	22	22
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.5	0.5	0.5
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.5	32.6	32.6	32.6	35.4	34.8	34.0
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	18.0	24.0	24.7	34.4	35.1	37.5
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.8	3.4	3.4	3.4	3.4
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.7	11.0	11.5
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.1	11.0	11.0	20.3	20.6	22.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	31	30	25	23	17	14	14
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	13	16	14

Table 471 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	57	33	33	33
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	17	17	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	40	40	40
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	22.3	49.3	49.3	49.3
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.1	3.2	3.3	3.3	3.3
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	12.7	13.5	13.5	13.5
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.3	32.6	32.6	32.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	1	1	1
CVT Transmissions	95	90	90	89	86	81	75	50	50	50
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 472 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 473 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	36	35	27	28
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	24	29	29	27	24	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	25	23	23	23
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	16.2	16.3	10.7	8.2	1.1
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	7.3	14.5	16.9	16.9	26.2	38.7	45.8
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	3.5	4.6	4.6	4.6
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	10.9	10.9	12.1	12.1	12.1
BEV 300 Mile Range	0.0	0.3	0.3	1.2	1.9	2.5	2.5	9.5	22.0	29.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	13	19	19	19	19
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	48	47	47	37	34	24	24
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	10	10	10	10

Table 474 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	40	40
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	4.7	4.4
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.7	38.5	38.4	55.5	55.8
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.4	17.2	17.1	20.7	20.7
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.1	28.6	28.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	40	40
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 475 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC1LT3

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	5	5
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	48	46	40	38	36	36	33	33
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	56	53	49	48	47	47	38	38
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.3	0.0
Strong Hybrid Powertrains Total	0.0	0.0	22.3	22.7	26.0	26.3	26.4	26.5	8.0	8.1
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	18.6	22.9	24.6	26.4	26.4	53.7	53.9
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	6.4	6.4	6.4	6.3
BEV 200 Mile Range	4.1	5.1	9.6	11.3	15.6	15.5	15.5	15.4	15.5	15.5
BEV 300 Mile Range	0.2	0.2	0.2	1.7	1.7	3.5	4.5	4.5	31.9	31.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	30	26	22	21	18	16	14	14	14	14
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	35	33	21	16	11	11	11
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	2	2	0	12	17	22	13	13

Table 476 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	20	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	23	20	6
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	1.3	36.9	41.7	42.0	42.1	41.9	43.0
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	22.9	24.8	29.4	30.9	31.4	38.6	50.8
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.1
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	10.4	10.8	12.2	12.2
BEV 300 Mile Range	2.3	2.3	3.4	9.8	9.8	14.5	15.4	15.6	21.2	33.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	8	8	6	6
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	14	14	13	0

Table 477 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	44	34	25	25	25
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	43	32	24	24	24
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	30.6	30.4	27.7	27.7	27.7
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	22.7	33.1	44.7	44.7	44.7
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	6.0	6.0	6.0
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	11.7	11.6	12.2	12.2	12.2
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	7.8	18.2	26.5	26.5	26.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	11	11	11	11	11
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	34	24	17	17	17

Table 478 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	8	8	8	7	7	7
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	35	32	32	32	23	21	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	47	44	35	34	27	26	23
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	2.1	18.5	20.2	21.9	21.9	21.9	21.6	18.2
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	11.9	11.9	11.9	11.1	9.6
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	14.2	17.2	26.6	26.6	36.0	39.5	47.4
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.1	4.1
BEV 200 Mile Range	1.6	1.5	9.6	10.0	11.2	11.2	11.2	12.2	12.5	13.8
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.9	11.3	11.3	19.7	22.9	29.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	19	19	13	14	11	11	11
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	26	28	21	22	16	15	12

Table 479 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	14	14	14
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	44	28	24	17	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	55	38	35	23	23
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	4.5	3.8	3.8	11.7	11.7
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	33.5	50.7	57.8	57.8	57.8
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	10.2	13.8	13.8	13.8
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	19.3	36.6	40.1	40.1	40.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	36	24	21	21	21
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	20	17	9	9

Table 480 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	59	59	54	53	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	11	9	3	3	2
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	58	56	45	44	38
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	3.0	3.0	0.8	0.8	0.8
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.6	26.9	29.0	42.7	43.7	49.4
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	12.6	12.6	13.6	13.6
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.9	11.2	12.3	26.1	26.1	31.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	8	8	6	0	0	0
CVT Transmissions	22	28	28	24	24	24	24	24	23	23
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	38	38	32	32	27
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 481 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	54	43	32	26
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	17	16	15	14
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	16	16
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	0.7	0.7	0.7	4.2
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	2.5
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	17.4	17.4	27.7	40.5	52.0	52.7
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	3.2	3.2	3.2
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	14.8	14.8	14.8	15.5
BEV 300 Mile Range	0.7	0.7	0.7	0.7	1.2	1.2	10.0	22.5	33.9	33.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	6	6	6	6	6	5
CVT Transmissions	32	31	30	28	30	30	30	22	14	9
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	34	31	27	27
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	0	0

Table 482 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	30	30	30	30	26	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	10	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	30	30	30	30	26	18
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	27.8	27.8	27.8	27.8	27.8	29.2
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	32.4	32.4	32.4	32.4	36.8	52.3
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
BEV 300 Mile Range	0.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	12.5	27.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	27	10	10	10	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	13	30	30	30	35	18

Table 483 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 484 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 485 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	63	63	56	56	56
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	14.6	14.6	14.6	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	22.1	22.1	29.6	44.2	44.2
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	10.9	10.9	10.9	10.9
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	10.5	10.5	10.5	15.1	15.1
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.7	8.1	18.2	18.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	6	5	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	56	55	53	53	53
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 486 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	44	27	25	25	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	41	27	25	25	24
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.8	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	12.4	19.0	21.2	21.2	21.7
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	39.8	53.9	53.9	53.9	53.9
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.2	9.1	9.1	9.1
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.8	13.8
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	16.8	30.9	31.0	31.0	31.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	16	16	16	14	9	6	6	6	6	6
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	19	19	18

Table 487 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	58	58
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	32.5	42.0
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.0	13.1	13.1	22.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	68	58
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 488 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	44	47	42	34
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	14	14	14	14
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.5	13.4	16.1	17.7	34.9	34.9	39.4	47.7
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	13.3	13.3	13.3	13.3
BEV 300 Mile Range	0.0	0.0	0.4	0.8	0.8	2.4	16.0	16.0	20.5	28.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	40	40	35	27
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	25	25	25	25

Table 489 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	5	5	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	16	16	14	14	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	27	27	18	18	18
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.5	32.6	32.6	32.6	34.5	34.2	33.5
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	18.0	27.9	28.6	39.7	40.1	42.5
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.8	3.4	3.4	3.4	3.4
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.8	11.0	11.6
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.1	14.9	15.0	25.5	25.6	27.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	31	30	21	19	13	11	11
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	12	15	13

Table 490 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	57	33	33	33
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	17	17	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	64	40	40	40
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	22.3	49.3	49.3	49.3
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.1	3.2	3.3	3.3	3.3
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	12.7	13.5	13.5	13.5
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	6.3	32.6	32.6	32.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	3	1	1	1
CVT Transmissions	95	90	90	89	86	81	75	50	50	50
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 491 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 492 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	34	34	26	27
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	24	29	29	27	24	22
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	23	21	21	19
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	16.2	16.3	11.0	8.4	3.6
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	7.3	14.5	16.9	18.7	26.8	39.6	46.4
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	3.5	3.9	3.9	3.9
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	9.8	11.6	12.2	12.2	12.2
BEV 300 Mile Range	0.0	0.3	0.3	1.2	1.9	3.6	3.6	10.6	23.5	30.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	14	18	17	17	17
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	48	47	47	37	34	24	24
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	10	10	10	8

Table 493 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	41	41
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	4.7	3.0
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.7	38.5	38.4	54.4	56.1
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.4	17.2	17.1	20.7	20.7
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.1	27.5	29.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	41	41
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 494 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT4

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	5	5
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	48	46	40	38	36	36	33	31
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	56	53	49	48	47	47	38	36
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.3	0.0
Strong Hybrid Powertrains Total	0.0	0.0	22.3	22.7	26.0	26.1	26.2	26.3	7.8	9.6
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	18.6	22.9	25.1	26.9	26.8	54.2	54.4
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	6.4	6.4	6.4	6.4
BEV 200 Mile Range	4.1	5.1	9.6	11.3	15.6	15.5	15.5	15.4	15.4	15.6
BEV 300 Mile Range	0.2	0.2	0.2	1.7	1.7	4.0	5.0	5.0	32.4	32.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
DCT Transmissions	30	26	22	21	18	16	14	14	14	14
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	35	33	21	16	11	11	9
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	2	2	0	12	17	22	13	13

Table 495 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	20	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	23	20	6
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	1.3	36.9	41.7	42.0	42.1	41.9	40.7
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	22.9	24.8	29.4	30.9	31.4	38.5	53.1
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.1
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	10.3	10.7	11.5	11.8
BEV 300 Mile Range	2.3	2.3	3.4	9.8	9.8	14.5	15.4	15.6	21.9	33.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	8	8	6	6
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	14	14	13	0

Table 496 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	43	33	24	24	24
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	42	32	23	23	23
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	26.6	26.4	23.7	23.7	23.7
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	27.6	37.7	49.3	49.3	49.3
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	6.0	6.0	6.0
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	11.7	11.6	12.2	12.2	12.2
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	12.7	22.8	31.1	31.1	31.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	11	11	11	10	4
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	33	24	16	16	23

Table 497 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	8	8	8	7	7	7
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	35	32	32	32	23	21	21
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	47	44	35	34	27	26	26
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	2.1	18.5	20.2	20.5	20.5	20.5	20.2	8.3
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	11.9	11.9	11.9	11.1	18.1
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	14.2	17.2	28.0	28.0	37.4	40.9	45.9
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.1	4.0	4.1
BEV 200 Mile Range	1.6	1.5	9.6	10.0	11.2	11.2	11.2	11.9	12.7	13.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.9	12.7	12.7	21.4	24.1	28.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	19	19	13	14	11	9	9
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	26	28	21	22	16	17	17

Table 498 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	17	17	17
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	39	23	19	15	15
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	49	33	30	25	25
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	9.6	5.1	8.6	8.6	8.6
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	33.5	54.5	55.3	58.7	58.7
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	10.2	10.9	14.3	14.3
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	19.4	40.4	40.4	40.4	40.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	31	19	19	19	19
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	20	17	12	12

Table 499 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	57	56	50	49	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	11	9	4	4	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	56	54	39	38	35
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	4.4	4.4	4.4
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	2.2	3.9	1.7	1.7	1.7
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.6	30.2	30.6	43.8	44.7	47.7
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	12.0	12.6	13.6	13.6
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.9	14.5	14.5	27.2	27.2	30.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	11	11	10	10	8	8	6	1	1	1
CVT Transmissions	22	28	28	24	24	24	24	23	22	22
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	35	35	30	21	15
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	9	12

Table 500 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	53	42	36	30
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	17	16	15	13
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	13	13
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	7.2
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	0.7	0.7	1.7	3.5
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	17.4	17.4	28.7	41.6	47.4	49.2
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	3.2	3.2	3.2
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	14.8	14.8	14.8	16.0
BEV 300 Mile Range	0.7	0.7	0.7	0.7	1.2	1.2	11.0	23.5	29.4	30.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	6	6	6	6	6	3
CVT Transmissions	32	31	30	28	30	30	46	38	32	26
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	16	13	13	13
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	0	0

Table 501 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	30	30	30	30	26	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	10	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	30	30	30	30	26	18
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	27.8	27.8	27.8	27.8	27.8	27.8
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	32.4	32.4	32.4	32.4	36.8	53.8
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
BEV 300 Mile Range	0.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	12.5	29.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	27	10	10	10	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	13	30	30	30	35	18

Table 502 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 503 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 504 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	63	63	48	48	48
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	14.6	14.6	14.6	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	22.1	22.1	37.6	52.2	52.2
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	10.9	10.9	10.9	10.9
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	10.5	10.5	10.5	15.1	15.1
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.7	16.1	26.2	26.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	6	5	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	56	55	45	45	45
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 505 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	42	25	23	21	20
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	39	25	23	21	20
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.8	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	14.0	20.7	22.9	24.1	25.7
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	39.8	53.9	53.9	54.4	54.7
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	9.1	9.1
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.8	13.8
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	16.8	30.9	31.0	31.0	31.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8
DCT Transmissions	16	16	16	14	9	5	4	4	3	3
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	19	19	17

Table 506 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	58	58	47	47
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	32.5	32.5	43.7	47.6
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.4	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	13.1	13.1	24.3	28.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	68	68	56	52
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 507 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	43	46	41	33
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	11	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	13	13	13	13
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.7	0.8	0.8	0.8	0.8	0.8	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.5	13.4	16.1	17.7	36.0	36.0	41.3	49.6
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	13.3	13.3	13.3	13.3
BEV 300 Mile Range	0.0	0.0	0.4	0.8	0.8	2.4	17.1	17.2	22.4	30.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	40	39	35	27
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	24	24	24	24

Table 508 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	5	5	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	13	13	11	11	11
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	24	24	15	15	15
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.5	32.6	32.6	32.6	35.4	31.1	31.0
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	1.8	1.8
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	18.0	30.8	31.5	41.8	44.2	44.8
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.8	3.4	3.4	3.4	3.4
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.8	11.0	11.6
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.1	17.8	17.9	27.6	29.8	29.8
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	2	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	31	30	18	16	9	6	6
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	12	15	15

Table 509 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	53	38	38	38
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	16	16	16
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	61	46	46	46
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	25.8	45.9	45.8	45.8
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.2	3.2	3.2
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	13.5	13.5	13.5	13.4
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	9.1	29.2	29.2	29.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	4	4	4	3	3	3	2	0	0	0
CVT Transmissions	95	90	90	89	86	81	72	54	54	54
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 510 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.4	24.3	24.3
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 511 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	34	33	26	24
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	24	29	29	27	24	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	23	21	21	14
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	16.2	16.3	11.0	8.4	6.8
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	7.3	14.5	16.9	19.1	27.1	40.3	47.6
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	3.5	3.9	3.9	3.9
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	10.9	10.9	11.4	11.4	11.8
BEV 300 Mile Range	0.0	0.3	0.3	1.2	1.9	2.5	4.8	11.8	25.0	31.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	14	17	17	17	17
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	48	47	47	26	15	5	5
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	21	29	29	22

Table 512 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	40	40
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	4.7	4.4
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.5	38.4	55.5	55.8
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.1	20.7	20.7
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.1	15.2	28.6	28.9
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	57	57	57	40	40
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 513 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC3LT5

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	11	11
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	48	46	40	38	29	29	26	25
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	56	53	49	48	40	40	37	35
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.3	0.3
Strong Hybrid Powertrains Total	0.0	0.0	22.3	22.7	26.0	26.1	26.2	26.3	9.0	7.6
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	18.6	22.9	25.1	33.7	33.6	54.1	56.7
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	6.4	6.4	6.4	6.4
BEV 200 Mile Range	4.1	5.1	9.6	11.3	15.6	15.5	15.4	15.4	15.4	18.0
BEV 300 Mile Range	0.2	0.2	0.2	1.7	1.7	4.0	11.9	11.8	32.4	32.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	30	26	22	21	18	16	7	7	7	7
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	35	33	21	16	11	11	11
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	2	2	0	12	17	22	19	18

Table 514 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	91	87	80	76	38	29	27	26	20	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	58	53	48	46	33	25	23	23	20	6
Mild Hybrid Powertrains	29.0	29.5	27.9	25.4	1.8	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	1.3	36.9	40.7	40.9	41.0	40.7	39.5
Plug-In Hybrid Powertrains	5.8	5.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.3	7.4	15.2	22.9	24.8	30.5	32.1	32.6	39.7	55.0
BEV 100 Mile Range	0.8	3.2	3.4	3.3	5.2	5.2	5.1	5.1	5.1	5.1
BEV 200 Mile Range	0.2	1.9	8.5	9.8	9.8	9.7	10.3	10.8	12.1	12.1
BEV 300 Mile Range	2.3	2.3	3.4	9.8	9.8	15.6	16.6	16.6	22.5	32.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
DCT Transmissions	6	6	6	6	5	5	5	5	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	73	65	60	31	23	3	2	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	8	10	10	2	1	20	20	20	6

Table 515 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	3	3	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	73	70	62	62	58	30	13	1	1	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	72	68	61	62	57	32	15	3	3	3
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	8.6	8.6	11.0	11.0	11.0	28.0	32.2	29.5	29.5	29.5
Plug-In Hybrid Powertrains	1.2	1.1	1.2	0.1	0.1	6.7	8.6	11.9	11.9	11.9
Battery Electric Vehicles (BEVs)	3.1	7.7	14.5	15.5	20.0	32.8	43.5	55.1	55.1	55.1
BEV 100 Mile Range	0.5	3.0	2.9	3.0	3.3	3.3	3.3	6.0	6.0	6.0
BEV 200 Mile Range	1.4	3.7	9.8	10.5	10.5	11.7	11.6	12.2	12.2	12.2
BEV 300 Mile Range	1.1	1.1	1.7	2.0	6.3	17.9	28.6	33.1	33.1	33.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.8	3.8
DCT Transmissions	2	2	2	2	2	2	2	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	1	0	0	0	0	0	0	0	0	0
7-Speed Automatic	1	1	0	0	0	0	0	0	0	0
8-Speed Automatic	29	29	23	16	14	4	4	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	54	51	48	56	54	27	10	3	3	3

Table 516 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (GM) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	1	7	8	8	8	7	7	6
Cylinder Deactivation	4	4	3	2	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	47	36	35	32	32	32	23	21	6
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	5	5	5	1	1	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	82	82	68	47	44	35	34	27	26	10
Mild Hybrid Powertrains	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	2.1	18.5	20.2	20.3	20.3	20.3	20.0	11.5
Plug-In Hybrid Powertrains	0.0	0.0	6.6	10.5	10.6	10.6	10.7	10.7	9.9	26.9
Battery Electric Vehicles (BEVs)	1.6	1.5	14.0	14.2	17.2	29.4	29.4	38.8	42.3	49.5
BEV 100 Mile Range	0.0	0.0	4.4	4.2	4.2	4.1	4.1	4.0	4.0	4.1
BEV 200 Mile Range	1.6	1.5	9.6	10.0	11.2	11.2	11.2	11.9	12.6	12.9
BEV 300 Mile Range	0.0	0.0	0.0	0.0	1.9	14.1	14.2	22.8	25.6	29.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
DCT Transmissions	2	2	2	1	0	0	0	0	0	0
CVT Transmissions	9	9	5	5	4	4	4	3	2	2
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	18	18	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	20	20	24	19	19	13	5	2	0	0
9-Speed Automatic	22	22	18	5	1	1	0	0	0	0
10-Speed Automatic	28	28	29	26	28	21	31	25	26	10

Table 517 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	8	8	8	7	7	17	10	10	10
Cylinder Deactivation	27	13	13	3	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	53	53	60	59	39	23	19	8	8
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	79	77	77	74	69	49	33	29	18	18
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	9.3	9.4	9.4	9.4	9.2	4.5	18.0	21.4	28.5	28.5
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	4.5	4.5
Battery Electric Vehicles (BEVs)	0.0	5.5	5.4	9.4	14.6	38.7	41.9	45.8	49.1	49.1
BEV 100 Mile Range	0.0	3.3	3.3	3.2	4.0	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	0.0	2.0	2.0	6.0	10.2	10.2	10.2	12.2	12.2	12.2
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.5	24.5	24.6	25.8	29.1	29.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.9	3.9	3.9
DCT Transmissions	2	2	2	1	1	1	1	1	1	1
CVT Transmissions	55	52	51	51	49	31	19	12	12	12
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	17	3	3	3	0	0	0	0	0	0
10-Speed Automatic	17	29	29	26	26	25	20	17	5	5

Table 518 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	59	59	59	55	55	56	55	42	41	39
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	19	18	17	17	13	11	9	4	4	1
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	68	68	66	63	60	55	52	31	29	24
Mild Hybrid Powertrains	0.0	0.0	0.4	0.4	0.4	0.4	0.4	3.8	4.8	4.8
Strong Hybrid Powertrains Total	10.9	9.6	9.7	10.0	8.5	2.2	2.2	0.0	0.0	0.4
Plug-In Hybrid Powertrains	1.9	1.7	0.9	0.0	0.0	0.0	0.0	6.5	6.5	6.9
Battery Electric Vehicles (BEVs)	3.3	7.4	9.3	14.0	19.6	31.0	34.2	47.3	48.1	52.6
BEV 100 Mile Range	0.2	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BEV 200 Mile Range	2.1	2.2	4.1	8.9	11.7	11.7	12.6	12.6	13.4	16.1
BEV 300 Mile Range	1.0	1.0	1.0	1.0	3.9	15.3	17.5	30.7	30.7	30.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
DCT Transmissions	11	11	10	10	8	8	6	1	1	1
CVT Transmissions	22	28	28	24	24	24	24	20	19	19
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	50	42	41	42	40	34	33	22	17	12
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	3	8	8

Table 519 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	45	57	59	62	61	61	49	38	25	18
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	23	21	21	18	18	17	16	15	7
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	32	32	32	30	28	28	28	26	13	12
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	5.0	5.0	5.0	5.0	3.4	3.4	0.7	0.7	1.7	8.9
Plug-In Hybrid Powertrains	3.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	5.1	11.3
Battery Electric Vehicles (BEVs)	4.4	6.2	9.0	12.0	17.4	17.4	32.5	45.3	53.2	54.4
BEV 100 Mile Range	0.0	1.9	2.9	2.9	2.9	2.9	2.9	4.9	4.9	5.0
BEV 200 Mile Range	3.7	3.6	5.3	8.4	13.4	13.4	14.8	14.8	14.8	16.0
BEV 300 Mile Range	0.7	0.7	0.7	0.7	1.2	1.2	14.9	25.5	33.5	33.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	9	9	8	9	6	6	6	6	6	0
CVT Transmissions	32	31	30	28	30	30	46	38	25	18
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	13	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	47	46	47	43	41	13	10	10	7
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	2	2	0	0	0

Table 520 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	47	39	35	35	30	30	30	30	26	18
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	52	31	27	27	10	10	10	10	10	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	38	34	34	30	30	30	30	26	18
Mild Hybrid Powertrains	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	12.3	12.4	12.4	27.8	27.8	27.8	27.8	27.8	27.8
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.9	17.8	25.4	25.4	32.4	32.4	32.4	32.4	36.8	53.8
BEV 100 Mile Range	0.9	2.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
BEV 200 Mile Range	0.0	14.8	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
BEV 300 Mile Range	0.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	12.5	29.4
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	85	42	34	34	27	10	10	10	0	0
9-Speed Automatic	13	2	2	2	0	0	0	0	0	0
10-Speed Automatic	0	26	26	26	13	30	30	30	35	18

Table 521 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	50.0	50.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 522 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 300 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 400 Mile Range	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 523 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	71	69	69	68	65	63	63	40	40	40
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	29	6	4	5	4	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	15.1	15.1	15.2	14.6	14.6	14.6	14.7	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.3	9.4	11.8	11.9	15.7	22.1	22.1	45.1	59.8	59.8
BEV 100 Mile Range	0.3	8.1	10.3	10.4	10.9	10.9	10.9	10.9	10.9	10.9
BEV 200 Mile Range	0.0	1.1	1.3	1.3	4.1	10.5	10.5	10.6	20.7	20.6
BEV 300 Mile Range	0.0	0.2	0.2	0.2	0.7	0.7	0.7	23.7	28.2	28.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	3	3	2	2	2	2	2	2	2	2
CVT Transmissions	0	0	0	0	0	6	5	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	97	12	1	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	61	69	71	68	56	55	38	38	38
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	1	1	1	1

Table 524 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	90	79	75	73	58	42	25	23	4	3
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	7	7	6	6	6	4	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	63	52	51	49	44	39	25	23	4	3
Mild Hybrid Powertrains	26.5	26.3	23.8	23.1	13.2	2.8	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	4.6	5.2	6.7	14.1	19.1	17.7	34.0	34.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	3.1	14.1	13.9	15.5	29.8	39.7	55.5	59.0	61.5	63.4
BEV 100 Mile Range	0.0	9.8	9.7	9.4	9.3	9.2	9.1	9.1	9.1	9.2
BEV 200 Mile Range	1.3	2.5	2.5	4.5	13.8	13.8	13.8	13.8	13.8	13.8
BEV 300 Mile Range	1.8	1.8	1.7	1.7	6.7	16.7	32.6	32.6	32.6	32.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	6.1	7.9
DCT Transmissions	16	16	16	14	9	5	4	4	3	3
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	81	27	14	3	0	0	0	0	0	0
10-Speed Automatic	0	43	51	63	54	42	21	19	2	0

Table 525 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	51	51	39	39
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	21	21	10	10	10	10	10	10	4
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	1.4	1.4	1.4	1.3	1.3	1.3	0.0	0.0	0.0	1.6
Battery Electric Vehicles (BEVs)	0.0	0.8	20.3	31.3	31.2	31.2	39.9	39.9	51.1	55.0
BEV 100 Mile Range	0.0	0.3	6.3	6.1	6.1	6.0	6.0	6.0	6.0	6.0
BEV 200 Mile Range	0.0	0.4	14.0	13.7	13.6	13.5	13.4	13.3	13.4	13.4
BEV 300 Mile Range	0.0	0.0	0.0	11.4	11.6	11.6	20.5	20.6	31.8	31.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
DCT Transmissions	1	1	0	0	0	0	0	0	0	0
CVT Transmissions	98	97	78	67	67	67	60	60	49	43
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 526 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	10	21	33	33	37	40	30	27
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	1	1	1	1	1	1	1	1	5	5
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	13	13	13	14	14	14	7	7	7	7
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.7	0.8	0.8	0.8	7.5	7.4	13.8	16.4
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	1.2	7.9	9.5	13.4	16.1	17.7	41.5	41.6	51.3	52.5
BEV 100 Mile Range	1.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
BEV 200 Mile Range	0.3	2.4	3.6	7.1	9.8	9.8	13.3	13.3	13.3	13.3
BEV 300 Mile Range	0.0	0.0	0.4	0.8	0.8	2.4	22.6	22.7	32.5	33.6
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	71	66	64	62	59	57	33	33	23	19
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	4	1	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	23	24	24	23	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	24	25	18	18	12	12

Table 527 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	11	13	12	12	11	11	11
Cylinder Deactivation	20	20	6	5	5	5	5	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	10	10	9	10	9	11	11	10	10	9
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	2	2	1	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	46	44	44	33	33	23	22	13	13	13
Mild Hybrid Powertrains	16.4	16.3	6.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	18.7	32.5	32.6	32.6	32.6	34.5	16.8	16.7
Plug-In Hybrid Powertrains	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.9	17.5	17.5
Battery Electric Vehicles (BEVs)	0.0	4.6	9.1	17.5	18.0	32.5	33.2	43.5	44.6	45.4
BEV 100 Mile Range	0.0	2.7	2.7	2.6	2.6	2.8	3.4	3.4	3.4	3.4
BEV 200 Mile Range	0.0	1.7	6.1	9.9	10.2	10.2	10.2	10.8	11.0	11.8
BEV 300 Mile Range	0.0	0.3	0.3	5.0	5.1	19.5	19.6	29.3	29.3	29.3
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
DCT Transmissions	1	1	1	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	2	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	65	61	38	31	30	16	14	7	0	0
9-Speed Automatic	28	27	27	8	1	1	0	0	0	0
10-Speed Automatic	0	0	0	11	18	18	20	14	21	20

Table 528 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	13	39	59	66	62	46	30	30	30
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	23	23	21	20	16	8	8
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	76	75	75	73	71	67	54	38	30	30
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3
Plug-In Hybrid Powertrains	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	5.7	5.7	7.2	10.5	15.5	33.2	53.2	56.8	56.7
BEV 100 Mile Range	0.0	2.5	2.5	2.7	2.8	3.0	3.2	3.2	3.2	3.2
BEV 200 Mile Range	0.0	2.5	2.5	3.8	5.4	7.9	17.3	17.3	17.3	17.3
BEV 300 Mile Range	0.0	0.7	0.7	0.7	2.2	4.5	12.6	32.7	32.7	32.7
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
DCT Transmissions	4	4	4	3	3	3	2	0	0	0
CVT Transmissions	95	90	90	89	86	81	65	46	39	39
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 529 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BEV 100 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEV 200 Mile Range	18.5	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4	18.4
BEV 300 Mile Range	56.9	57.0	57.0	57.2	57.2	57.2	57.3	57.3	57.3	57.3
BEV 400 Mile Range	24.6	24.5	24.5	24.4	24.4	24.4	24.4	24.3	24.3	24.4
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0	0	0	0	0

Table 530 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	25	24	32	31	37	36	33	32	25	21
Cylinder Deactivation	0	0	1	1	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	16	17	24	29	29	28	23	17
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	25	26	25	25	22	20	20	10
Mild Hybrid Powertrains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid Powertrains Total	24.8	24.2	24.3	23.7	18.6	16.2	16.3	11.2	8.7	1.1
Plug-In Hybrid Powertrains	2.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	0.0	3.6	3.9	7.3	14.5	16.9	20.5	27.5	42.1	59.9
BEV 100 Mile Range	0.0	2.9	2.9	2.8	3.5	3.5	3.5	3.4	3.5	3.5
BEV 200 Mile Range	0.0	0.4	0.7	3.3	9.1	10.9	10.9	10.9	11.4	11.7
BEV 300 Mile Range	0.0	0.3	0.3	1.2	1.9	2.5	6.2	13.2	27.3	31.5
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
DCT Transmissions	1	1	1	1	1	1	1	1	1	1
CVT Transmissions	15	15	14	14	13	22	27	27	19	19
5-Speed Automatic	6	6	0	0	0	0	0	0	0	0
6-Speed Automatic	11	11	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	34	33	49	48	47	38	14	4	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	6	6	6	6	6	6	21	29	29	19

Table 531 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	0	0	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	64	65	65	65	57	57	57	57	35	35
Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Electric Variable Geometry Turbo	5	5	3	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0	0	0	0	0
Mild Hybrid Powertrains	27.2	27.0	26.8	26.5	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid Powertrains Total	0.0	0.0	1.8	4.6	4.7	4.7	4.7	4.7	5.6	3.9
Plug-In Hybrid Powertrains	17.6	14.8	14.9	0.0	0.0	0.0	0.0	0.0	5.0	5.0
Battery Electric Vehicles (BEVs)	13.4	15.9	15.7	30.3	38.7	38.6	38.4	38.3	54.5	56.2
BEV 100 Mile Range	3.5	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
BEV 200 Mile Range	9.9	9.6	9.4	9.1	17.4	17.3	17.1	17.0	20.7	20.8
BEV 300 Mile Range	0.0	0.0	0.0	15.0	15.1	15.1	15.2	15.2	27.6	29.1
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
DCT Transmissions	0	0	0	0	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	69	69	68	65	57	35	35	21	5	6
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	22	22	36	29	29

Table 532 - Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC6LT8

Powertrain Technology Penetration Rate (%) by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Non-Hybrid High Compression Engines	0	0	11	11	11	11	11	11	4	4
Cylinder Deactivation	1	0	0	0	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	61	57	48	46	40	38	29	29	26	21
Variable Geometry Turbo	19	19	3	1	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	81	78	56	53	49	48	39	39	29	24
Mild Hybrid Powertrains	8.3	8.2	4.4	4.5	0.5	0.3	0.3	0.3	0.3	0.3
Strong Hybrid Powertrains Total	0.0	0.0	22.3	22.7	26.0	26.1	26.3	26.4	8.6	8.1
Plug-In Hybrid Powertrains	1.4	1.4	1.1	0.0	0.0	0.0	0.0	0.0	5.7	5.7
Battery Electric Vehicles (BEVs)	7.1	10.5	15.0	18.6	22.9	25.1	34.1	34.0	56.6	61.5
BEV 100 Mile Range	2.8	5.2	5.3	5.6	5.6	5.6	6.4	6.3	6.3	6.4
BEV 200 Mile Range	4.1	5.1	9.6	11.3	15.6	15.5	15.4	15.4	15.4	19.5
BEV 300 Mile Range	0.2	0.2	0.2	1.7	1.7	3.9	12.3	12.3	28.4	29.2
BEV 400 Mile Range	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	6.4
DCT Transmissions	30	26	22	21	18	16	14	14	14	14
CVT Transmissions	0	0	2	1	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0	0	0	0	0
6-Speed Automatic	2	2	0	0	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0	0	0	0	0
8-Speed Automatic	60	59	36	35	33	21	5	0	0	0
9-Speed Automatic	0	0	0	0	0	0	0	0	0	0
10-Speed Automatic	0	1	2	2	0	12	21	26	15	11

Mass Reduction Penetration Rate, by Model Year

Table 533 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	3	2
Mass Reduction Level 1 (%)	24	25	25	26	27	28	29	31	33	34
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	51	52	52	53	53
Mass Reduction Level 4 (%)	8	8	8	8	8	8	8	8	8	8
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,040	4,037	4,035	4,033
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 534 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	4	3	2	1	1
Mass Reduction Level 1 (%)	28	28	25	25	27	29	30	31	33	33
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	4
Mass Reduction Level 3 (%)	34	36	43	46	46	46	46	46	47	47
Mass Reduction Level 4 (%)	12	12	14	14	14	14	14	14	14	14
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,040	4,037	4,035	4,033
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 535 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	6	4	2
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	31	33	35
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	56	56	56
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	5	5	5
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,040	4,037	4,035	4,033
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 536 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	1	1	0	0	0
Mass Reduction Level 1 (%)	19	19	13	12	13	15	15	15	15	15
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	4	4
Mass Reduction Level 3 (%)	39	44	50	57	57	57	57	57	59	59
Mass Reduction Level 4 (%)	15	15	17	17	18	18	18	18	18	18
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,040	4,037	4,035	4,033
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 537 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Baseline)

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, No Action Alternative (Baseline)										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	4	2	2
Mass Reduction Level 1 (%)	36	36	36	38	41	44	45	47	49	50
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	35	35	35	35	35
Mass Reduction Level 4 (%)	10	10	10	10	10	10	10	10	10	10
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,039	4,040	4,037	4,035	4,033
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 538 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	3	2
Mass Reduction Level 1 (%)	24	25	25	26	27	28	29	31	32	34
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	52	52	52	52	52
Mass Reduction Level 4 (%)	8	8	8	8	8	8	8	9	9	9
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,035	4,033	4,031
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	2	2	2

Table 539 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	4	3	2	1	1
Mass Reduction Level 1 (%)	28	28	25	25	27	28	29	30	31	31
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	4
Mass Reduction Level 3 (%)	34	36	43	46	46	46	47	44	45	45
Mass Reduction Level 4 (%)	12	12	14	14	14	14	14	17	17	17
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,035	4,033	4,031
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	2	2	2

Table 540 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	6	4	2
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	31	33	35
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	56	56	56
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	5	5	5
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,035	4,033	4,031
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	2	2	2

Table 541 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	1	1	0	0	0
Mass Reduction Level 1 (%)	19	19	13	12	13	15	14	15	15	15
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	4	4
Mass Reduction Level 3 (%)	39	44	50	57	57	57	58	58	60	60
Mass Reduction Level 4 (%)	15	15	17	17	18	18	18	18	18	18
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,035	4,033	4,031
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	2	2	2

Table 542 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	4	2	2
Mass Reduction Level 1 (%)	36	36	36	38	41	42	44	45	47	48
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	36	36	31	31	31
Mass Reduction Level 4 (%)	10	10	10	10	10	11	11	16	16	16
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,035	4,033	4,031
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	2	2	2

Table 543 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	3	1
Mass Reduction Level 1 (%)	24	25	25	26	27	28	29	32	33	34
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	51	52	52	52	52
Mass Reduction Level 4 (%)	8	8	8	8	8	8	8	8	9	9
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,034	4,032	4,030
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	3	3	3

Table 544 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	4	3	2	1	1
Mass Reduction Level 1 (%)	28	28	25	25	27	29	30	31	32	32
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	4
Mass Reduction Level 3 (%)	34	36	43	46	46	46	46	45	47	47
Mass Reduction Level 4 (%)	12	12	14	14	14	14	14	15	15	15
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,034	4,032	4,030
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	3	3	3

Table 545 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	3	1
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	32	33	36
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	56	55	55
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	5	6	6
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,034	4,032	4,030
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	3	3	3

Table 546 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	1	1	0	0	0
Mass Reduction Level 1 (%)	19	19	13	12	13	15	15	15	15	15
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	4	4
Mass Reduction Level 3 (%)	39	44	50	57	57	57	57	57	59	59
Mass Reduction Level 4 (%)	15	15	17	17	18	18	18	18	18	18
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,034	4,032	4,030
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	3	3	3

Table 547 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC1LT3										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	4	2	2
Mass Reduction Level 1 (%)	36	36	36	38	41	43	45	47	49	49
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	35	35	34	35	35
Mass Reduction Level 4 (%)	10	10	10	10	10	11	11	11	11	11
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,038	4,039	4,034	4,032	4,030
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	1	3	3	3

Table 548 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	3	1
Mass Reduction Level 1 (%)	24	25	25	26	27	28	29	32	33	34
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	3
Mass Reduction Level 3 (%)	38	39	45	50	50	52	52	52	52	52
Mass Reduction Level 4 (%)	8	8	8	8	8	8	8	9	9	9
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,039	4,033	4,031	4,029
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	1	4	4	4

Table 549 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	4	3	2	1	1
Mass Reduction Level 1 (%)	28	28	25	25	27	28	29	30	31	31
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	4
Mass Reduction Level 3 (%)	34	36	43	46	46	46	47	44	45	45
Mass Reduction Level 4 (%)	12	12	14	14	14	14	14	17	17	17
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,039	4,033	4,031	4,029
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	1	4	4	4

Table 550 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	3	1
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	32	33	36
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	56	56	56
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	5	5	5
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,039	4,033	4,031	4,029
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	1	4	4	4

Table 551 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	1	1	0	0	0
Mass Reduction Level 1 (%)	19	19	13	12	13	15	14	15	15	15
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	4	4
Mass Reduction Level 3 (%)	39	44	50	57	57	57	58	58	60	60
Mass Reduction Level 4 (%)	15	15	17	17	18	18	18	18	18	18
Mass Reduction Level 5 (%)	3	3	3	3	3	3	3	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,039	4,033	4,031	4,029
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	1	4	4	4

Table 552 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC2LT4										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	4	2	2
Mass Reduction Level 1 (%)	36	36	36	38	41	42	44	45	47	48
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	36	36	31	31	31
Mass Reduction Level 4 (%)	10	10	10	10	10	11	11	16	16	16
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,039	4,033	4,031	4,029
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	1	4	4	4

Table 553 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	3	1
Mass Reduction Level 1 (%)	24	25	25	26	27	28	28	30	31	32
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	4
Mass Reduction Level 3 (%)	38	39	45	50	50	51	53	52	53	53
Mass Reduction Level 4 (%)	8	8	8	8	8	8	8	10	10	10
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,031	4,028	4,024
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	6	7	9

Table 554 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	4	3	2	1	1
Mass Reduction Level 1 (%)	28	28	25	25	27	28	26	28	27	25
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	5	6
Mass Reduction Level 3 (%)	34	36	43	46	46	46	48	45	46	47
Mass Reduction Level 4 (%)	12	12	14	14	14	15	15	18	19	19
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,031	4,028	4,024
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	6	7	9

Table 555 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	3	1
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	31	33	35
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	2
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	56	56	56
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	6	6	6
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,031	4,028	4,024
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	6	7	9

Table 556 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	1	1	0	0	0
Mass Reduction Level 1 (%)	19	19	13	12	13	13	12	13	10	8
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	7	9
Mass Reduction Level 3 (%)	39	44	50	57	57	58	58	58	60	60
Mass Reduction Level 4 (%)	15	15	17	17	18	18	19	19	19	19
Mass Reduction Level 5 (%)	3	3	3	3	3	4	4	4	4	4
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,031	4,028	4,024
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	6	7	9

Table 557 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC3LT5										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	4	2	2
Mass Reduction Level 1 (%)	36	36	36	38	41	42	40	42	44	43
Mass Reduction Level 2 (%)	8	8	3	3	3	3	3	3	3	3
Mass Reduction Level 3 (%)	29	29	35	35	35	35	39	33	33	34
Mass Reduction Level 4 (%)	10	10	10	10	10	12	12	18	18	18
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,031	4,028	4,024
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	6	7	9

Table 558 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Total Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	16	15	11	9	8	8	7	4	3	1
Mass Reduction Level 1 (%)	24	25	25	26	27	28	28	28	28	26
Mass Reduction Level 2 (%)	13	13	10	6	6	4	3	3	3	2
Mass Reduction Level 3 (%)	38	39	45	50	50	52	52	51	49	44
Mass Reduction Level 4 (%)	8	8	8	8	8	8	9	13	17	25
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,024	4,013	3,991
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	13	22	42

Table 559 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Passenger Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	10	10	10	9	6	4	3	2	1	1
Mass Reduction Level 1 (%)	28	28	25	25	27	28	26	27	26	24
Mass Reduction Level 2 (%)	14	11	8	6	5	5	5	5	4	3
Mass Reduction Level 3 (%)	34	36	43	46	46	47	46	41	41	37
Mass Reduction Level 4 (%)	12	12	14	14	14	14	17	22	25	33
Mass Reduction Level 5 (%)	1	1	1	1	1	2	2	3	3	3
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,024	4,013	3,991
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	13	22	42

Table 560 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Light Truck Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	20	18	12	10	9	9	9	5	3	1
Mass Reduction Level 1 (%)	21	23	26	27	27	27	28	29	29	28
Mass Reduction Level 2 (%)	13	13	12	6	6	4	3	2	2	1
Mass Reduction Level 3 (%)	41	41	46	52	52	54	55	55	53	48
Mass Reduction Level 4 (%)	5	5	5	5	5	5	5	9	13	21
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,024	4,013	3,991
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	13	22	42

Table 561 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Domestic Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	4	3	2	1	1	0	0	0
Mass Reduction Level 1 (%)	19	19	13	12	13	13	12	12	9	7
Mass Reduction Level 2 (%)	20	15	13	8	7	6	6	6	4	3
Mass Reduction Level 3 (%)	39	44	50	57	57	58	58	55	57	54
Mass Reduction Level 4 (%)	15	15	17	17	18	18	18	23	26	31
Mass Reduction Level 5 (%)	3	3	3	3	3	4	4	4	4	4
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,024	4,013	3,991
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	13	22	42

Table 562 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Total) Imported Car Fleet, Alternative PC6LT8										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	17	16	14	10	8	6	4	2	2
Mass Reduction Level 1 (%)	36	36	36	38	41	42	40	41	43	40
Mass Reduction Level 2 (%)	8	8	3	3	3	3	4	4	4	3
Mass Reduction Level 3 (%)	29	29	35	35	35	36	35	29	25	20
Mass Reduction Level 4 (%)	10	10	10	10	10	11	15	21	25	34
Mass Reduction Level 5 (%)	0	0	0	0	0	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,032	4,040	4,033	4,037	4,039	4,037	4,037	4,024	4,013	3,991
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	2	3	13	22	42

Table 563 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (BMW) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	43	43	42	33	24	14	13	10	9	9
Mass Reduction Level 1 (%)	35	35	35	44	53	63	64	66	68	68
Mass Reduction Level 2 (%)	22	23	23	23	23	23	23	23	23	23
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,301	4,313	4,319	4,323	4,316	4,305	4,308	4,306	4,305	4,305
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	1	0	0	-1	0

Table 564 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Ford) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	13	9	9	9	9	9	9	0	0	0
Mass Reduction Level 1 (%)	6	10	6	6	6	6	6	15	15	15
Mass Reduction Level 2 (%)	7	7	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	64	65	75	75	75	75	75	75	75	75
Mass Reduction Level 4 (%)	10	10	10	10	10	10	10	10	10	10
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,399	4,395	4,386	4,390	4,392	4,392	4,393	4,379	4,379	4,379
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 565 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (GM) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	4	4	3	3	1	0	0	0	0	0
Mass Reduction Level 1 (%)	36	36	11	6	8	9	9	9	9	9
Mass Reduction Level 2 (%)	45	46	46	18	18	5	5	5	5	5
Mass Reduction Level 3 (%)	15	15	41	73	74	86	86	85	85	85
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	1	1	1
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,310	4,322	4,293	4,274	4,277	4,264	4,268	4,269	4,269	4,269
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	1

Table 566 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Honda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	2	2	2	1	1	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	1	1	1	1	1
Mass Reduction Level 2 (%)	12	4	4	4	4	4	4	4	4	4
Mass Reduction Level 3 (%)	86	95	95	95	95	95	95	95	95	95
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,559	3,565	3,571	3,582	3,586	3,587	3,590	3,592	3,592	3,593
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	-1	0	0

Table 567 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Hyundai) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	1	1	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	6	6	6	6	6	2	0	0	0	0
Mass Reduction Level 2 (%)	12	12	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	65	66	78	79	79	83	85	73	73	73
Mass Reduction Level 4 (%)	16	16	16	15	15	15	15	27	27	27
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,524	3,532	3,527	3,537	3,540	3,538	3,539	3,525	3,525	3,526
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	4	5	20	20	20

Table 568 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (KIA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 2 (%)	3	3	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	83	84	86	87	87	87	87	85	85	85
Mass Reduction Level 4 (%)	14	14	14	13	13	13	13	15	15	15
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,485	3,495	3,498	3,510	3,514	3,516	3,520	3,517	3,517	3,518
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	3	4	3

Table 569 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (JLR) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	1	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	62	62	62	62	62	62	62	62	62	62
Mass Reduction Level 2 (%)	18	18	18	18	18	18	18	18	18	18
Mass Reduction Level 3 (%)	18	19	19	19	19	19	19	19	19	19
Mass Reduction Level 4 (%)	1	1	1	1	1	1	1	1	1	1
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,736	4,734	4,735	4,736	4,737	4,737	4,738	4,738	4,738	4,738
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 570 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Karma) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	100	100	100	100	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	100	100	100	100	100	100
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,250	5,250	5,250	5,250	5,064	5,064	5,064	5,064	5,064	5,064
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 571 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Lucid) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	100	100	100	100	100	100	100	100	100	100
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,220	5,220	5,220	5,220	5,220	5,220	5,220	5,220	5,220	5,220
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 572 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mazda) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	47	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	15	62	63	63	63	63	64	64	64	64
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	34	34	34	33	33	33	33	33	33	33
Mass Reduction Level 4 (%)	4	3	3	3	3	3	3	3	3	3
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,651	3,591	3,593	3,598	3,599	3,600	3,602	3,602	3,602	3,602
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 573 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mercedes-Benz) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	54	54	54	54	43	37	16	10	8	7
Mass Reduction Level 1 (%)	0	0	0	0	11	16	37	44	46	47
Mass Reduction Level 2 (%)	18	17	17	17	17	17	17	17	17	17
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	28	28	28	28	28	28	29	29	29	29
Mass Reduction Level 5 (%)	1	1	1	1	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,266	4,272	4,274	4,281	4,269	4,260	4,225	4,216	4,212	4,212
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 574 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Mitsubishi) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	81	81	81	82	82	82	34	34	22	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	48	49	61	82
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	19	19	19	18	18	18	18	18	18	18
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,295	3,302	3,306	3,314	3,317	3,319	3,257	3,258	3,244	3,218
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	-1	0	0

Table 575 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Nissan) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	17	15	15	14	13	13	13	13	2	2
Mass Reduction Level 1 (%)	40	42	42	43	44	44	44	44	55	55
Mass Reduction Level 2 (%)	44	43	38	25	22	20	9	6	0	0
Mass Reduction Level 3 (%)	0	0	0	12	12	12	23	26	32	32
Mass Reduction Level 4 (%)	0	0	6	6	9	9	9	9	9	9
Mass Reduction Level 5 (%)	0	0	0	0	0	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	3,740	3,748	3,746	3,752	3,750	3,747	3,741	3,740	3,717	3,718
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	6	6	6	7	7

Table 576 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Stellantis) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	22	20	20	14	13	13	13	5	5	5
Mass Reduction Level 1 (%)	43	45	45	51	52	52	52	59	59	59
Mass Reduction Level 2 (%)	1	1	1	1	1	1	1	1	1	1
Mass Reduction Level 3 (%)	21	21	21	21	21	21	21	21	21	21
Mass Reduction Level 4 (%)	13	13	13	14	14	14	14	14	14	14
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,539	4,540	4,542	4,534	4,535	4,536	4,538	4,527	4,527	4,527
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 577 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Subaru) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	99	99	99	99	99	99	99	99	99	99
Mass Reduction Level 2 (%)	1	1	1	1	1	1	1	1	1	1
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,634	3,637	3,638	3,641	3,642	3,643	3,644	3,644	3,644	3,644
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 578 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Tesla) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	85	85	85	85	85	85	85	85	85	85
Mass Reduction Level 5 (%)	15	15	15	15	15	15	15	15	15	15
Avg Curb Weight - Fleet (pounds)	4,300	4,300	4,300	4,300	4,300	4,301	4,301	4,301	4,301	4,301
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 579 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Toyota) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	25	25	8	8	8	8	8	8	8	1
Mass Reduction Level 1 (%)	20	20	37	37	37	37	37	37	37	44
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	55	55	55	55	55	55	55	55	55	55
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,924	3,936	3,913	3,926	3,930	3,933	3,936	3,938	3,938	3,926
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	-1	0	0

Table 580 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (Volvo) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	28	28	28	28	9	9	9	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	19	19	19	27	27	27
Mass Reduction Level 2 (%)	72	72	72	72	73	73	73	73	73	73
Mass Reduction Level 3 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,378	4,379	4,379	4,379	4,353	4,353	4,353	4,339	4,339	4,339
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0	0	0	0	0

Table 581 - Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002

Mass Reduction Penetration Rate and Curb Weights by Model Year for Manufacturer (VWA) Total Fleet, Alternative PC2LT002										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mass Reduction Level 0 (%)	59	60	42	28	24	22	20	14	9	2
Mass Reduction Level 1 (%)	20	20	37	51	54	55	56	62	66	72
Mass Reduction Level 2 (%)	0	0	0	0	0	0	0	0	0	0
Mass Reduction Level 3 (%)	20	20	21	21	21	21	21	21	21	21
Mass Reduction Level 4 (%)	0	0	0	0	0	2	2	2	4	4
Mass Reduction Level 5 (%)	0	0	0	0	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,024	4,033	4,013	4,000	3,996	3,990	3,991	3,982	3,970	3,957
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	5	5	5	9	11

Powertrain Technology Penetration Rate, by Alternative

Table 582 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Non-Hybrid High Compression Engines	18	18	18	18	18	14
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	20	19	17	16	8
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	26	25	24	21	21	12
Mild Hybrid	0.2	0.5	0.3	0.5	0.7	0.5
Strong Hybrid	13.9	13.8	12.6	13.5	11.6	13.7
Plug-In Hybrid	0.6	0.6	1.0	1.3	3.1	8.6
Battery Electric Vehicles (BEVs)	45.30	46.77	48.79	50.25	51.16	55.30
BEV 100 Mile Range	4.59	4.49	4.50	4.39	4.39	4.40
BEV 200 Mile Range	13.72	13.05	13.23	13.34	13.33	13.63
BEV 300 Mile Range	26.20	28.44	30.27	31.70	32.57	32.14
BEV 400 Mile Range	0.80	0.80	0.80	0.81	0.87	5.13
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	12	12	12	12	12	10
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	17	15	13	12	6	2
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	10	10	11	10	15	10

Table 583 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	23	23	24	23	25	20
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	12	13	13	11	10	7
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	19	19	19	18	16	12
Mild Hybrid	0.2	0.2	0.4	0.1	1.0	1.0
Strong Hybrid	4.0	4.0	3.8	4.3	5.5	11.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	2.2
Battery Electric Vehicles (BEVs)	59.52	59.20	57.37	59.14	58.30	59.88
BEV 100 Mile Range	8.89	8.66	8.65	8.42	8.40	8.44
BEV 200 Mile Range	16.15	16.40	15.82	16.11	16.13	17.44
BEV 300 Mile Range	32.10	31.77	30.51	32.22	31.34	29.77
BEV 400 Mile Range	2.37	2.37	2.39	2.39	2.42	4.23
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	21	24	23	22	23	19
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	12	10	11	10	7	1
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	1	1	3	2	6	5

Table 584 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	16	16	15	14	14	11
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	25	23	21	19	19	9
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	30	28	26	23	23	12
Mild Hybrid	0.2	0.6	0.2	0.7	0.6	0.3
Strong Hybrid	19.0	18.7	17.1	18.2	14.7	15.0
Plug-In Hybrid	0.9	0.9	1.5	2.0	4.7	11.7
Battery Electric Vehicles (BEVs)	38.12	40.49	44.45	45.73	47.54	52.95
BEV 100 Mile Range	2.41	2.39	2.39	2.35	2.35	2.33
BEV 200 Mile Range	12.50	11.35	11.92	11.93	11.91	11.68
BEV 300 Mile Range	23.22	26.75	30.14	31.44	33.19	33.35
BEV 400 Mile Range	0.00	0.00	0.00	0.01	0.09	5.59
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	7	6	7	6	7	6
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	19	17	13	13	6	2
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	14	15	15	14	19	12

Table 585 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	17	17	19	18	19	15
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	12	14	10	10	7	5
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	19	20	17	16	14	11
Mild Hybrid	0.0	0.0	0.4	0.0	0.0	0.0
Strong Hybrid	2.8	3.6	2.9	2.9	6.1	13.5
Plug-In Hybrid	0.1	0.1	0.1	0.1	0.1	2.0
Battery Electric Vehicles (BEVs)	67.90	65.52	68.06	69.77	67.09	64.24
BEV 100 Mile Range	6.74	6.73	6.73	6.62	6.62	7.05
BEV 200 Mile Range	12.72	13.21	12.70	12.73	13.19	14.00
BEV 300 Mile Range	43.64	40.78	43.82	45.61	42.48	35.52
BEV 400 Mile Range	4.80	4.80	4.80	4.80	4.80	7.67
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	19	25	21	20	20	15
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	8	4	4	3	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	1	1	3	3	5	4

Table 586 - Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	28	28	29	29	30	24
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	12	12	16	13	12	9
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	19	17	21	19	19	13
Mild Hybrid	0.4	0.3	0.4	0.3	1.9	1.9
Strong Hybrid	5.1	4.3	4.7	5.7	5.0	8.6
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	2.4
Battery Electric Vehicles (BEVs)	51.34	53.03	46.93	48.78	49.72	55.63
BEV 100 Mile Range	10.99	10.53	10.53	10.18	10.15	9.79
BEV 200 Mile Range	19.49	19.51	18.85	19.40	19.00	20.80
BEV 300 Mile Range	20.85	22.98	17.52	19.16	20.48	24.16
BEV 400 Mile Range	0.00	0.00	0.03	0.04	0.09	0.88
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	23	22	25	24	25	23
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	16	16	18	16	13	2
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	1	2	2	2	6	6

Table 587 - Powertrain Technology Penetration Rate (%) for Manufacturer (BMW), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (BMW), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	7	11	6	6	6
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	7	7	11	6	6	6
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	41.0	41.2	41.0	43.0	40.7	39.5
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	51.71	51.49	48.41	50.81	53.12	54.95
BEV 100 Mile Range	5.11	5.11	5.12	5.12	5.12	5.15
BEV 200 Mile Range	12.16	12.18	12.20	12.20	11.77	12.14
BEV 300 Mile Range	34.43	34.20	31.09	33.35	33.79	32.01
BEV 400 Mile Range	0.01	0.00	0.00	0.14	2.44	5.66
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	7	6	6	6	6	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	1	4	0	0	6

Table 588 - Powertrain Technology Penetration Rate (%) for Manufacturer (Ford), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Ford), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	3	3	3	3	3	3
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	27	26	26	25	24	1
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	25	25	24	24	23	3
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	27.7	27.7	27.7	27.7	23.7	29.5
Plug-In Hybrid	0.1	0.1	0.1	0.1	0.1	11.9
Battery Electric Vehicles (BEVs)	42.91	43.52	43.89	44.73	49.33	55.13
BEV 100 Mile Range	5.98	5.98	5.98	5.98	5.98	5.97
BEV 200 Mile Range	12.23	12.23	12.23	12.23	12.23	12.24
BEV 300 Mile Range	24.70	25.31	25.68	26.52	31.12	33.13
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	3.79
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	11	10	11	11	4	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	18	18	17	17	23	3

Table 589 - Powertrain Technology Penetration Rate (%) for Manufacturer (GM), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (GM), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	7	7	7	7	7	6
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	17	12	17	18	21	6
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	22	17	22	23	26	10
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	31.0	28.9	21.8	18.2	8.3	11.5
Plug-In Hybrid	4.8	4.8	6.8	9.6	18.1	26.9
Battery Electric Vehicles (BEVs)	39.93	47.73	47.14	47.41	45.94	49.46
BEV 100 Mile Range	4.04	4.04	4.06	4.06	4.05	4.08
BEV 200 Mile Range	13.66	13.82	13.77	13.82	13.01	12.91
BEV 300 Mile Range	22.23	29.87	29.32	29.54	28.88	29.60
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	2.87
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	2	2	2	2
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	16	11	10	11	9	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	8	8	12	12	17	10

Table 590 - Powertrain Technology Penetration Rate (%) for Manufacturer (Honda), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Honda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	13	13	14	14	17	10
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	43	41	24	16	15	8
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	53	51	34	23	25	18
Mild Hybrid	0.0	0.0	0.0	3.4	0.0	0.0
Strong Hybrid	0.0	2.0	4.4	11.7	8.6	28.5
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.9	4.5
Battery Electric Vehicles (BEVs)	43.55	43.45	57.61	57.84	58.70	49.10
BEV 100 Mile Range	3.90	3.97	3.98	3.98	3.98	3.99
BEV 200 Mile Range	11.82	11.88	13.79	13.78	14.34	12.17
BEV 300 Mile Range	27.83	27.60	39.85	40.07	40.38	29.05
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	3.90
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	31	29	21	21	19	12
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	25	24	16	9	12	5

Table 591 - Powertrain Technology Penetration Rate (%) for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	47	47	47	47	47	39
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	5	1	3	2	4	1
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	41	38	39	38	35	24
Mild Hybrid	0.0	0.0	0.3	0.0	4.4	4.8
Strong Hybrid	0.0	0.8	0.0	0.8	1.7	0.4
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	6.9
Battery Electric Vehicles (BEVs)	41.23	43.91	44.31	49.40	47.72	52.64
BEV 100 Mile Range	4.00	4.00	4.00	4.00	4.00	4.02
BEV 200 Mile Range	13.51	13.51	13.61	13.61	13.57	16.15
BEV 300 Mile Range	23.72	26.41	26.70	31.78	30.15	30.63
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	1.84
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	23	23	23	23	22	19
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	27	25	26	27	15	12
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	12	8

Table 592 - Powertrain Technology Penetration Rate (%) for Manufacturer (KIA), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (KIA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	39	36	31	26	30	18
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	7	14	16	14	13	7
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	19	10	16	16	13	12
Mild Hybrid	0.0	7.0	0.0	0.0	7.2	0.0
Strong Hybrid	3.4	0.0	0.9	4.2	3.5	8.9
Plug-In Hybrid	0.0	0.0	2.5	2.5	4.2	11.3
Battery Electric Vehicles (BEVs)	51.00	49.75	50.45	52.67	49.22	54.42
BEV 100 Mile Range	3.20	3.20	3.20	3.20	3.20	4.96
BEV 200 Mile Range	16.71	15.53	15.53	15.53	15.95	15.97
BEV 300 Mile Range	31.08	31.02	31.72	33.94	30.06	33.49
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	8	14	12	9	26	18
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	32	31	29	27	13	7
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 593 - Powertrain Technology Penetration Rate (%) for Manufacturer (JLR), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (JLR), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	21	18	18	18	18	19
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	21	18	18	18	18	18
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	42.4	44.4	34.1	29.2	27.8	27.8
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	36.79	37.20	47.47	52.31	53.78	53.78
BEV 100 Mile Range	4.94	4.93	4.93	4.93	4.93	4.93
BEV 200 Mile Range	19.43	19.44	19.44	19.44	19.44	19.44
BEV 300 Mile Range	12.43	12.84	23.10	27.94	29.42	29.41
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	10	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	11	18	18	18	18	18

Table 594 - Powertrain Technology Penetration Rate (%) for Manufacturer (Karma), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Karma), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.00	100.00	100.00	100.00	100.00	100.00
BEV 100 Mile Range	50.00	50.00	50.00	50.00	50.00	50.00
BEV 200 Mile Range	50.00	50.00	50.00	50.00	50.00	50.00
BEV 300 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 595 - Powertrain Technology Penetration Rate (%) for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.00	100.00	100.00	100.00	100.00	100.00
BEV 100 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 200 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 300 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 400 Mile Range	100.00	100.00	100.00	100.00	100.00	100.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 596 - Powertrain Technology Penetration Rate (%) for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	52	56	56	56	48	40
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	48.48	44.19	44.21	44.21	52.19	59.80
BEV 100 Mile Range	11.83	10.90	10.91	10.91	10.90	10.91
BEV 200 Mile Range	14.84	15.09	15.08	15.08	15.08	20.63
BEV 300 Mile Range	21.82	18.20	18.22	18.22	26.20	28.26
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	50	53	53	53	45	38
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	1	1	1	1	1

Table 597 - Powertrain Technology Penetration Rate (%) for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	27	24	20	3
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	24	24	27	24	20	3
Mild Hybrid	0.2	0.2	0.2	0.0	0.0	0.0
Strong Hybrid	22.9	22.9	19.3	21.7	25.7	34.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	52.75	52.75	53.87	53.87	54.71	63.36
BEV 100 Mile Range	9.09	9.09	9.11	9.11	9.11	9.15
BEV 200 Mile Range	13.77	13.77	13.77	13.77	13.77	13.78
BEV 300 Mile Range	29.89	29.89	30.98	30.98	30.99	32.51
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.84	7.92
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	20	20	21	18	17	0

Table 598 - Powertrain Technology Penetration Rate (%) for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	58	58	58	58	47	39
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	6	0	6	0	6	4
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	4.1
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	1.6
Battery Electric Vehicles (BEVs)	36.32	41.96	36.34	41.98	47.59	55.03
BEV 100 Mile Range	5.96	5.97	5.98	5.98	5.98	6.00
BEV 200 Mile Range	13.36	13.37	13.39	13.40	13.39	13.44
BEV 300 Mile Range	17.00	22.63	16.97	22.61	28.23	31.72
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	3.87
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	64	58	64	58	52	43
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 599 - Powertrain Technology Penetration Rate (%) for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	34	32	33	34	33	27
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	11	11	11	11	11	5
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	14	12	11	14	13	7
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	1.4	0.8	0.8	0.8	0.0	16.4
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	45.11	49.43	46.48	47.71	49.58	52.49
BEV 100 Mile Range	5.50	5.50	5.50	5.50	5.50	5.50
BEV 200 Mile Range	20.74	12.06	12.06	13.34	13.34	13.34
BEV 300 Mile Range	18.87	31.87	28.92	28.87	30.74	33.64
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	29	27	31	27	27	19
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	25	23	22	25	24	12

Table 600 - Powertrain Technology Penetration Rate (%) for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Non-Hybrid High Compression Engines	12	11	12	11	11	11
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	22	21	17	13	11	9
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	24	24	22	18	15	13
Mild Hybrid	0.0	0.0	0.5	0.0	0.0	0.0
Strong Hybrid	36.5	37.0	34.0	33.5	31.0	16.7
Plug-In Hybrid	0.0	0.0	0.0	0.0	1.8	17.5
Battery Electric Vehicles (BEVs)	29.35	30.96	37.48	42.48	44.81	45.41
BEV 100 Mile Range	3.42	3.42	3.43	3.43	3.43	3.43
BEV 200 Mile Range	11.74	11.56	11.50	11.57	11.60	11.80
BEV 300 Mile Range	14.19	15.97	22.55	27.49	29.79	29.31
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.88
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	2	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	23	16	14	11	6	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	11	16	14	13	15	20

Table 601 - Powertrain Technology Penetration Rate (%) for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Non-Hybrid High Compression Engines	33	33	33	33	38	30
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	17	17	17	17	16	8
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	40	40	40	40	46	30
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	4.3
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	49.29	49.30	49.30	49.30	45.78	56.73
BEV 100 Mile Range	3.26	3.26	3.26	3.27	3.18	3.20
BEV 200 Mile Range	13.46	13.47	13.47	13.48	13.43	17.30
BEV 300 Mile Range	32.57	32.57	32.56	32.56	29.17	32.71
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	3.51
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	50	50	50	50	54	39
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 602 - Powertrain Technology Penetration Rate (%) for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	0	0	0	0	0	0
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Battery Electric Vehicles (BEVs)	100.00	100.00	100.00	100.00	100.00	100.00
BEV 100 Mile Range	0.00	0.00	0.00	0.00	0.00	0.00
BEV 200 Mile Range	18.36	18.36	18.36	18.36	18.36	18.37
BEV 300 Mile Range	57.30	57.30	57.29	57.29	57.29	57.27
BEV 400 Mile Range	24.35	24.35	24.35	24.35	24.35	24.36
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	0	0	0	0	0	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	0

Table 603 - Powertrain Technology Penetration Rate (%) for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	27	28	28	27	24	21
Cylinder Deactivation	1	1	1	1	1	1
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	24	24	24	22	18	17
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	23	23	23	19	14	10
Mild Hybrid	0.0	0.0	0.0	0.0	0.0	0.0
Strong Hybrid	1.0	1.2	1.1	3.6	6.8	1.1
Plug-In Hybrid	0.0	0.0	0.0	0.0	1.7	0.0
Battery Electric Vehicles (BEVs)	46.06	45.51	45.80	46.37	47.58	59.88
BEV 100 Mile Range	4.77	4.55	4.55	3.93	3.93	3.48
BEV 200 Mile Range	12.38	12.12	12.12	12.18	11.76	11.71
BEV 300 Mile Range	28.92	28.84	29.13	30.26	31.88	31.51
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	13.18
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	13	13	19	17	17	19
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	34	34	24	24	5	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	6	6	10	8	22	19

Table 604 - Powertrain Technology Penetration Rate (%) for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	0	0	0	0	0	0
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	40	40	40	41	40	35
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	0	0	0	0	0	0
Mild Hybrid	19.4	19.4	19.4	19.4	19.4	19.4
Strong Hybrid	3.0	3.8	4.4	3.0	4.4	3.9
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	5.0
Battery Electric Vehicles (BEVs)	57.17	56.32	55.78	56.10	55.78	56.23
BEV 100 Mile Range	6.16	6.16	6.16	6.17	6.16	6.18
BEV 200 Mile Range	21.57	20.62	20.68	20.68	20.67	20.76
BEV 300 Mile Range	29.44	29.54	28.94	29.26	28.95	29.07
BEV 400 Mile Range	0.00	0.00	0.00	0.00	0.00	0.22
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	40	40	40	41	40	6
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	0	0	0	0	0	29

Table 605 - Powertrain Technology Penetration Rate (%) for Manufacturer (VWA), MY 2031 Total Fleet by Alternative

Powertrain Technology Penetration Rate (%) for Manufacturer (VWA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Hybrid High Compression Engines	5	11	5	5	11	4
Cylinder Deactivation	0	0	0	0	0	0
Dynamic Cylinder Deactivation	0	0	0	0	0	0
Non-Hybrid Turbocharged Engines	31	29	33	31	25	21
Variable Geometry Turbo	0	0	0	0	0	0
Electric Variable Geometry Turbo	0	0	0	0	0	0
Diesel Engines	0	0	0	0	0	0
Fuel Cell Vehicles (FCVs)	0	0	0	0	0	0
12V Stop-Start (non-hybrid)	36	40	38	36	35	24
Mild Hybrid	0.3	0.0	0.0	0.0	0.3	0.3
Strong Hybrid	9.5	7.8	8.1	9.6	7.6	8.1
Plug-In Hybrid	0.0	0.0	0.0	0.0	0.0	5.7
Battery Electric Vehicles (BEVs)	54.22	52.35	53.91	54.44	56.70	61.51
BEV 100 Mile Range	7.62	6.35	6.35	6.35	6.35	6.36
BEV 200 Mile Range	15.76	15.53	15.55	15.55	17.98	19.53
BEV 300 Mile Range	30.83	30.45	31.90	32.37	32.35	29.25
BEV 400 Mile Range	0.02	0.02	0.11	0.16	0.02	6.38
DCT Transmissions	0	0	0	0	0	0
CVT Transmissions	0	0	0	0	0	0
5-Speed Automatic	0	0	0	0	0	0
6-Speed Automatic	0	0	0	0	0	0
7-Speed Automatic	0	0	0	0	0	0
8-Speed Automatic	19	24	11	9	11	0
9-Speed Automatic	0	0	0	0	0	0
10-Speed Automatic	2	3	13	13	18	11

Mass Reduction Penetration Rate, by Alternative

Table 606 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	2	2	1	1	1	1
Mass Reduction Level 1 (%)	34	34	34	34	32	26
Mass Reduction Level 2 (%)	3	3	3	3	4	2
Mass Reduction Level 3 (%)	53	52	52	52	53	44
Mass Reduction Level 4 (%)	8	9	9	9	10	25
Mass Reduction Level 5 (%)	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,033	4,031	4,030	4,029	4,024	3,991
Diff. from Baseline - Fleet (pounds)	0	2	3	4	9	42
Avg Curb Weight - Passenger Car (pounds)	3,436	3,430	3,434	3,430	3,421	3,396
Diff. from Baseline - Passenger Car (pounds)	0	6	2	6	15	40
Avg Curb Weight - Light Truck (pounds)	4,335	4,335	4,331	4,333	4,330	4,295
Diff. from Baseline - Light Trucks (pounds)	0	0	4	2	5	40

Table 607 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Passenger Car Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	1	1	1	1	1	1
Mass Reduction Level 1 (%)	33	31	32	31	25	24
Mass Reduction Level 2 (%)	4	4	4	4	6	3
Mass Reduction Level 3 (%)	47	45	47	45	47	37
Mass Reduction Level 4 (%)	14	17	15	17	19	33
Mass Reduction Level 5 (%)	1	2	2	2	2	3
Avg Curb Weight - Fleet (pounds)	4,033	4,031	4,030	4,029	4,024	3,991
Diff. from Baseline - Fleet (pounds)	0	2	3	4	9	42
Avg Curb Weight - Passenger Car (pounds)	3,436	3,430	3,434	3,430	3,421	3,396
Diff. from Baseline - Passenger Car (pounds)	0	6	2	6	15	40
Avg Curb Weight - Light Truck (pounds)	4,335	4,335	4,331	4,333	4,330	4,295
Diff. from Baseline - Light Trucks (pounds)	0	0	4	2	5	40

Table 608 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Light Truck Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	2	2	1	1	1	1
Mass Reduction Level 1 (%)	35	35	36	36	35	28
Mass Reduction Level 2 (%)	2	2	2	2	2	1
Mass Reduction Level 3 (%)	56	56	55	56	56	48
Mass Reduction Level 4 (%)	5	5	6	5	6	21
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,033	4,031	4,030	4,029	4,024	3,991
Diff. from Baseline - Fleet (pounds)	0	2	3	4	9	42
Avg Curb Weight - Passenger Car (pounds)	3,436	3,430	3,434	3,430	3,421	3,396
Diff. from Baseline - Passenger Car (pounds)	0	6	2	6	15	40
Avg Curb Weight - Light Truck (pounds)	4,335	4,335	4,331	4,333	4,330	4,295
Diff. from Baseline - Light Trucks (pounds)	0	0	4	2	5	40

Table 609 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Domestic Car Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	15	15	15	15	8	7
Mass Reduction Level 2 (%)	4	4	4	4	9	3
Mass Reduction Level 3 (%)	59	60	59	60	60	54
Mass Reduction Level 4 (%)	18	18	18	18	19	31
Mass Reduction Level 5 (%)	3	3	3	3	4	4
Avg Curb Weight - Fleet (pounds)	4,033	4,031	4,030	4,029	4,024	3,991
Diff. from Baseline - Fleet (pounds)	0	2	3	4	9	42
Avg Curb Weight - Passenger Car (pounds)	3,436	3,430	3,434	3,430	3,421	3,396
Diff. from Baseline - Passenger Car (pounds)	0	6	2	6	15	40
Avg Curb Weight - Light Truck (pounds)	4,335	4,335	4,331	4,333	4,330	4,295
Diff. from Baseline - Light Trucks (pounds)	0	0	4	2	5	40

Table 610 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Total), MY 2031 Imported Car Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	2	2	2	2	2	2
Mass Reduction Level 1 (%)	50	48	49	48	43	40
Mass Reduction Level 2 (%)	3	3	3	3	3	3
Mass Reduction Level 3 (%)	35	31	35	31	34	20
Mass Reduction Level 4 (%)	10	16	11	16	18	34
Mass Reduction Level 5 (%)	0	0	0	0	0	1
Avg Curb Weight - Fleet (pounds)	4,033	4,031	4,030	4,029	4,024	3,991
Diff. from Baseline - Fleet (pounds)	0	2	3	4	9	42
Avg Curb Weight - Passenger Car (pounds)	3,436	3,430	3,434	3,430	3,421	3,396
Diff. from Baseline - Passenger Car (pounds)	0	6	2	6	15	40
Avg Curb Weight - Light Truck (pounds)	4,335	4,335	4,331	4,333	4,330	4,295
Diff. from Baseline - Light Trucks (pounds)	0	0	4	2	5	40

Table 611 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (BMW), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (BMW), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	9	9	9	9	9	9
Mass Reduction Level 1 (%)	68	68	68	68	68	67
Mass Reduction Level 2 (%)	23	23	23	23	23	1
Mass Reduction Level 3 (%)	0	0	0	0	0	23
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,305	4,305	4,304	4,304	4,305	4,284
Diff. from Baseline - Fleet (pounds)	0	0	1	1	0	21
Avg Curb Weight - Passenger Car (pounds)	3,772	3,772	3,772	3,772	3,772	3,762
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	10
Avg Curb Weight - Light Truck (pounds)	4,829	4,829	4,829	4,829	4,829	4,802
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	27

Table 612 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Ford), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Ford), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	15	15	15	15	15	3
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	75	75	75	75	75	74
Mass Reduction Level 4 (%)	10	10	10	10	10	24
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,379	4,379	4,379	4,379	4,379	4,335
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	44
Avg Curb Weight - Passenger Car (pounds)	3,752	3,752	3,752	3,752	3,752	3,752
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,447	4,447	4,447	4,447	4,447	4,399
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	48

Table 613 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (GM), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (GM), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	9	9	9	9	7	4
Mass Reduction Level 2 (%)	5	5	5	5	5	5
Mass Reduction Level 3 (%)	86	85	85	85	81	69
Mass Reduction Level 4 (%)	0	1	1	1	5	20
Mass Reduction Level 5 (%)	0	0	0	0	1	2
Avg Curb Weight - Fleet (pounds)	4,270	4,269	4,269	4,268	4,258	4,230
Diff. from Baseline - Fleet (pounds)	0	1	1	2	12	40
Avg Curb Weight - Passenger Car (pounds)	3,248	3,244	3,244	3,244	3,216	3,161
Diff. from Baseline - Passenger Car (pounds)	0	4	4	4	32	87
Avg Curb Weight - Light Truck (pounds)	4,550	4,550	4,550	4,550	4,544	4,527
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	6	23

Table 614 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Honda), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Honda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	1	1	1	1	0	0
Mass Reduction Level 2 (%)	4	4	4	4	4	0
Mass Reduction Level 3 (%)	95	95	95	95	96	84
Mass Reduction Level 4 (%)	0	0	0	0	0	16
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,593	3,593	3,592	3,592	3,590	3,561
Diff. from Baseline - Fleet (pounds)	0	0	1	1	3	32
Avg Curb Weight - Passenger Car (pounds)	3,152	3,152	3,152	3,152	3,149	3,144
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	3	8
Avg Curb Weight - Light Truck (pounds)	4,021	4,021	4,021	4,021	4,021	3,971
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	50

Table 615 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Hyundai), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	6	0	6	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	80	73	80	73	68	70
Mass Reduction Level 4 (%)	15	27	15	27	32	30
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,546	3,526	3,545	3,525	3,520	3,519
Diff. from Baseline - Fleet (pounds)	0	20	1	21	26	27
Avg Curb Weight - Passenger Car (pounds)	3,246	3,211	3,246	3,211	3,201	3,209
Diff. from Baseline - Passenger Car (pounds)	0	35	0	35	45	37
Avg Curb Weight - Light Truck (pounds)	3,937	3,937	3,937	3,937	3,937	3,928
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	9

Table 616 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (KIA), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (KIA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	87	85	75	85	85	18
Mass Reduction Level 4 (%)	13	15	25	15	15	80
Mass Reduction Level 5 (%)	0	0	0	0	0	2
Avg Curb Weight - Fleet (pounds)	3,521	3,518	3,500	3,517	3,517	3,421
Diff. from Baseline - Fleet (pounds)	0	3	21	4	4	100
Avg Curb Weight - Passenger Car (pounds)	3,140	3,133	3,140	3,133	3,133	3,052
Diff. from Baseline - Passenger Car (pounds)	0	7	0	7	7	88
Avg Curb Weight - Light Truck (pounds)	3,958	3,958	3,914	3,958	3,958	3,849
Diff. from Baseline - Light Trucks (pounds)	0	0	44	0	0	109

Table 617 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (JLR), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (JLR), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	62	62	62	62	51	51
Mass Reduction Level 2 (%)	18	18	18	18	18	18
Mass Reduction Level 3 (%)	19	19	19	19	19	19
Mass Reduction Level 4 (%)	1	1	0	0	0	0
Mass Reduction Level 5 (%)	0	0	1	1	12	12
Avg Curb Weight - Fleet (pounds)	4,738	4,738	4,736	4,736	4,667	4,666
Diff. from Baseline - Fleet (pounds)	0	0	2	2	71	72
Avg Curb Weight - Passenger Car (pounds)	3,655	3,655	3,655	3,655	3,655	3,655
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,763	4,763	4,761	4,761	4,690	4,690
Diff. from Baseline - Light Trucks (pounds)	0	0	2	2	73	73

Table 618 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Karma), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Karma), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	100	100	100	100	100	100
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,064	5,064	5,064	5,064	5,064	5,064
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	5,064	5,064	5,064	5,064	5,064	5,064
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	0	0	0	0	0	0
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 619 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Lucid), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	100	100	100	100	100	100
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	5,220	5,220	5,220	5,220	5,220	5,220
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	5,220	5,220	5,220	5,220	5,220	5,220
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	0	0	0	0	0	0
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 620 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mazda), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	64	64	64	64	16	16
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	33	33	33	33	81	81
Mass Reduction Level 4 (%)	3	3	3	3	3	3
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,602	3,602	3,602	3,602	3,536	3,536
Diff. from Baseline - Fleet (pounds)	0	0	0	0	66	66
Avg Curb Weight - Passenger Car (pounds)	3,010	3,010	3,010	3,010	3,010	3,010
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	3,692	3,692	3,692	3,692	3,617	3,617
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	75	75

Table 621 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mercedes-Benz), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	7	7	7	7	7	7
Mass Reduction Level 1 (%)	47	47	47	47	44	34
Mass Reduction Level 2 (%)	17	17	17	17	17	17
Mass Reduction Level 3 (%)	0	0	0	0	2	0
Mass Reduction Level 4 (%)	29	29	29	29	29	41
Mass Reduction Level 5 (%)	1	1	1	1	1	1
Avg Curb Weight - Fleet (pounds)	4,212	4,212	4,211	4,211	4,206	4,173
Diff. from Baseline - Fleet (pounds)	0	0	1	1	6	39
Avg Curb Weight - Passenger Car (pounds)	3,945	3,945	3,945	3,945	3,934	3,863
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	11	82
Avg Curb Weight - Light Truck (pounds)	4,432	4,432	4,432	4,432	4,432	4,432
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 622 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Mitsubishi), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	82	82	82	82	82	82
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	18	18	18	18	18	0
Mass Reduction Level 4 (%)	0	0	0	0	0	18
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,218	3,218	3,217	3,217	3,217	3,201
Diff. from Baseline - Fleet (pounds)	0	0	1	1	1	17
Avg Curb Weight - Passenger Car (pounds)	2,962	2,962	2,962	2,961	2,962	2,933
Diff. from Baseline - Passenger Car (pounds)	0	0	0	1	0	29
Avg Curb Weight - Light Truck (pounds)	3,490	3,490	3,490	3,490	3,490	3,490
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 623 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Nissan), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	2	2	2	2	2	2
Mass Reduction Level 1 (%)	55	55	55	55	55	55
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	34	32	32	32	32	32
Mass Reduction Level 4 (%)	9	9	9	9	9	9
Mass Reduction Level 5 (%)	0	2	2	2	2	2
Avg Curb Weight - Fleet (pounds)	3,725	3,718	3,717	3,717	3,717	3,715
Diff. from Baseline - Fleet (pounds)	0	7	8	8	8	10
Avg Curb Weight - Passenger Car (pounds)	3,238	3,235	3,235	3,235	3,235	3,235
Diff. from Baseline - Passenger Car (pounds)	0	3	3	3	3	3
Avg Curb Weight - Light Truck (pounds)	4,296	4,286	4,286	4,286	4,286	4,286
Diff. from Baseline - Light Trucks (pounds)	0	10	10	10	10	10

Table 624 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Stellantis), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	5	5	0	0	0	0
Mass Reduction Level 1 (%)	59	59	65	65	57	49
Mass Reduction Level 2 (%)	1	1	1	1	8	1
Mass Reduction Level 3 (%)	21	21	21	21	21	29
Mass Reduction Level 4 (%)	14	14	14	14	14	21
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,527	4,527	4,515	4,515	4,509	4,480
Diff. from Baseline - Fleet (pounds)	0	0	12	12	18	47
Avg Curb Weight - Passenger Car (pounds)	3,861	3,861	3,861	3,861	3,812	3,651
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	49	210
Avg Curb Weight - Light Truck (pounds)	4,616	4,616	4,603	4,603	4,603	4,592
Diff. from Baseline - Light Trucks (pounds)	0	0	13	13	13	24

Table 625 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Subaru), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	99	99	99	99	99	99
Mass Reduction Level 2 (%)	1	1	1	1	1	1
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,644	3,644	3,644	3,644	3,644	3,644
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	3,279	3,279	3,279	3,279	3,279	3,279
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	3,703	3,703	3,703	3,703	3,703	3,703
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 626 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Tesla), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT00 2	PC1LT 3	PC2LT 4	PC3LT 5	PC6LT 8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	0	0	0	0	0	0
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	85	85	85	85	85	85
Mass Reduction Level 5 (%)	15	15	15	15	15	15
Avg Curb Weight - Fleet (pounds)	4,301	4,301	4,301	4,301	4,301	4,301
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	4,294	4,294	4,294	4,294	4,294	4,294
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,416	4,416	4,416	4,416	4,416	4,416
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 627 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Toyota), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	1	1	1	1	1	1
Mass Reduction Level 1 (%)	44	44	44	44	44	37
Mass Reduction Level 2 (%)	0	0	0	0	0	0
Mass Reduction Level 3 (%)	55	55	55	55	55	37
Mass Reduction Level 4 (%)	0	0	0	0	0	24
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,926	3,926	3,925	3,925	3,925	3,873
Diff. from Baseline - Fleet (pounds)	0	0	1	1	1	53
Avg Curb Weight - Passenger Car (pounds)	3,354	3,354	3,354	3,354	3,354	3,334
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	20
Avg Curb Weight - Light Truck (pounds)	4,265	4,265	4,265	4,265	4,265	4,197
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	68

Table 628 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (Volvo), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	0	0	0	0	0	0
Mass Reduction Level 1 (%)	27	27	27	27	27	27
Mass Reduction Level 2 (%)	73	73	73	73	73	73
Mass Reduction Level 3 (%)	0	0	0	0	0	0
Mass Reduction Level 4 (%)	0	0	0	0	0	0
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	4,339	4,339	4,339	4,339	4,339	4,339
Diff. from Baseline - Fleet (pounds)	0	0	0	0	0	0
Avg Curb Weight - Passenger Car (pounds)	4,279	4,279	4,279	4,279	4,279	4,279
Diff. from Baseline - Passenger Car (pounds)	0	0	0	0	0	0
Avg Curb Weight - Light Truck (pounds)	4,362	4,362	4,362	4,362	4,362	4,362
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	0

Table 629 - Mass Reduction Penetration Rate and Curb Weights for Manufacturer (VWA), MY 2031 Total Fleet by Alternative

Mass Reduction Penetration Rate and Curb Weights for Manufacturer (VWA), MY 2031 Total Fleet by Alternative						
Alternative	No Action (Baseline)	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Mass Reduction Level 0 (%)	2	2	2	2	2	2
Mass Reduction Level 1 (%)	76	72	72	72	54	30
Mass Reduction Level 2 (%)	0	0	0	0	0	2
Mass Reduction Level 3 (%)	21	21	23	21	40	11
Mass Reduction Level 4 (%)	0	4	3	4	4	55
Mass Reduction Level 5 (%)	0	0	0	0	0	0
Avg Curb Weight - Fleet (pounds)	3,968	3,957	3,959	3,957	3,935	3,834
Diff. from Baseline - Fleet (pounds)	0	11	9	11	33	134
Avg Curb Weight - Passenger Car (pounds)	3,537	3,508	3,514	3,508	3,450	3,400
Diff. from Baseline - Passenger Car (pounds)	0	29	23	29	87	137
Avg Curb Weight - Light Truck (pounds)	4,223	4,223	4,223	4,223	4,223	4,094
Diff. from Baseline - Light Trucks (pounds)	0	0	0	0	0	129

Required and Achieved CAFE Levels, Comparison

Table 630 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	46.4	1.7	37.3	38.4	1.1	38.4	41.4	3.0	46.5	48.3	1.8
2026	49.6	52.8	3.2	41.4	41.5	0.1	42.6	43.0	0.4	51.5	52.0	0.5
2027	50.0	54.2	4.2	41.4	43.9	2.5	42.7	45.0	2.3	51.9	61.6	9.7
2028	50.4	54.1	3.7	41.5	47.1	5.6	42.7	44.2	1.5	52.3	62.8	10.5
2029	51.3	52.9	1.6	42.4	52.8	10.4	43.6	46.2	2.6	53.3	63.0	9.7
2030	52.4	54.6	2.2	43.2	50.6	7.4	44.5	45.9	1.4	54.4	61.4	7.0
2031	53.5	61.9	8.4	44.0	50.3	6.3	45.4	50.4	5.0	55.6	60.9	5.3

Table 631 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.0	2.6	48.1	106.8	58.7
2026	52.3	53.9	1.6	52.1	52.9	0.8	43.7	48.5	4.8	53.5	542.6	489.1
2027	52.8	54.8	2.0	52.5	52.3	-0.2	43.8	47.1	3.3	55.2	328.4	273.2
2028	53.2	54.4	1.2	53.0	54.3	1.3	43.8	45.6	1.8	56.3	207.1	150.8
2029	54.3	62.1	7.8	54.0	59.7	5.7	44.7	44.3	-0.4	57.5	151.2	93.7
2030	55.4	60.8	5.4	55.1	64.7	9.6	45.6	45.1	-0.5	58.6	119.0	60.4
2031	56.5	66.2	9.7	56.2	65.6	9.4	46.5	46.5	0.0	59.8	119.0	59.2

Table 632 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	55.2	394.4	339.2	49.6	56.3	6.7	49.0	52.2	3.2	56.0	61.2	5.2
2028	56.3	248.6	192.3	49.7	55.4	5.7	49.3	63.8	14.5	56.4	65.7	9.3
2029	57.5	181.5	124.0	50.7	58.1	7.4	50.3	61.7	11.4	57.6	64.2	6.6
2030	58.6	142.9	84.3	51.7	64.2	12.5	51.3	59.7	8.4	58.8	62.9	4.1
2031	59.8	142.9	83.1	52.7	63.7	11.0	52.4	60.2	7.8	59.9	69.6	9.7

Table 633 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	45.0	2.3	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.7	2.4	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.7	1.4	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	51.8	52.9	1.1	42.3	42.9	0.6	50.2	53.2	3.0	55.2	380.6	325.4
2028	52.2	62.4	10.2	42.4	42.7	0.3	50.3	56.1	5.8	56.2	239.9	183.7
2029	53.2	62.1	8.9	43.2	46.5	3.3	51.3	73.0	21.7	57.3	175.2	117.9
2030	54.3	64.6	10.3	44.1	45.8	1.7	52.3	69.7	17.4	58.4	137.9	79.5
2031	55.4	69.4	14.0	45.0	46.4	1.4	53.4	69.2	15.8	59.7	137.9	78.2

Table 634 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.6	4.0	39.1	43.1	4.0
2025	43.9	47.5	3.6	42.8	53.4	10.6	45.0	49.0	4.0	42.4	46.7	4.3
2026	48.7	52.3	3.6	47.6	60.3	12.7	50.0	52.5	2.5	47.0	49.9	2.9
2027	49.0	51.7	2.7	47.8	57.1	9.3	50.2	52.6	2.4	47.3	51.4	4.1
2028	49.2	51.1	1.9	48.0	54.9	6.9	50.5	52.5	2.0	47.5	52.4	4.9
2029	50.2	53.9	3.7	48.9	53.1	4.2	51.6	51.3	-0.3	48.4	55.6	7.2
2030	51.2	58.1	6.9	49.9	63.3	13.4	52.6	59.0	6.4	49.4	56.1	6.7
2031	52.2	60.2	8.0	51.0	63.5	12.5	53.7	60.8	7.1	50.4	58.1	7.7

Table 635 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	58.4	4.3	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	64.0	3.9	59.6	59.6	0.0
2027	58.9	68.9	10.0	59.0	78.5	19.5	61.3	63.6	2.3	60.8	60.9	0.1
2028	60.1	69.1	9.0	60.2	73.6	13.4	62.6	62.2	-0.4	62.1	66.2	4.1
2029	61.3	66.9	5.6	61.5	69.4	7.9	63.9	82.5	18.6	63.3	70.4	7.1
2030	62.6	74.6	12.0	62.7	65.9	3.2	65.1	82.8	17.7	64.6	68.3	3.7
2031	63.9	74.1	10.2	64.0	65.4	1.4	66.5	115.6	49.1	66.0	67.6	1.6

Table 636 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	61.5	2.5	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	60.2	64.3	4.1	60.8	60.4	-0.4	58.7	70.9	12.2	55.2	328.4	273.2
2028	61.4	62.9	1.5	62.1	61.6	-0.5	59.9	66.2	6.3	56.3	207.1	150.8
2029	62.7	67.9	5.2	63.3	77.7	14.4	61.1	62.1	1.0	57.5	151.2	93.7
2030	64.0	65.9	1.9	64.6	93.0	28.4	62.4	61.7	-0.7	58.6	119.0	60.4
2031	65.3	73.3	8.0	65.9	93.0	27.1	63.7	61.3	-2.4	59.8	119.0	59.2

Table 637 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	55.2	394.4	339.2	62.7	62.4	-0.3	56.8	70.8	14.0	63.9	66.5	2.6
2028	56.3	248.6	192.3	64.0	62.0	-2.0	57.9	66.9	9.0	65.2	72.0	6.8
2029	57.5	181.5	124.0	65.3	130.6	65.3	59.1	65.9	6.8	66.6	70.2	3.6
2030	58.6	142.9	84.3	66.7	115.7	49.0	60.3	65.3	5.0	67.9	68.7	0.8
2031	59.8	142.9	83.1	68.0	115.7	47.7	61.6	67.1	5.5	69.3	78.2	8.9

Table 638 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.3	5.3	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.5	1.9	61.3	68.1	6.8	54.8	698.9	644.1
2027	60.8	64.9	4.1	56.8	55.9	-0.9	62.5	69.1	6.6	55.9	381.4	325.5
2028	62.1	66.7	4.6	57.9	55.4	-2.5	63.8	88.0	24.2	57.0	240.4	183.4
2029	63.3	65.3	2.0	59.1	59.8	0.7	65.1	136.4	71.3	58.2	175.6	117.4
2030	64.6	71.1	6.5	60.3	59.8	-0.5	66.4	119.6	53.2	59.4	138.3	78.9
2031	65.9	83.2	17.3	61.5	77.0	15.5	67.8	119.7	51.9	60.7	138.3	77.6

Table 639 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	58.9	5.3	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	63.0	10.1
2026	59.6	64.5	4.9	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.8	10.0
2027	60.8	63.9	3.1	58.3	112.1	53.8	61.2	69.0	7.8	60.0	69.5	9.5
2028	62.1	63.0	0.9	59.5	98.6	39.1	62.5	71.7	9.2	61.2	69.8	8.6
2029	63.4	64.1	0.7	60.8	89.4	28.6	63.8	68.1	4.3	62.5	73.7	11.2
2030	64.6	79.6	15.0	62.0	80.9	18.9	65.1	66.2	1.1	63.7	76.7	13.0
2031	65.9	81.1	15.2	63.3	83.7	20.4	66.4	73.3	6.9	65.1	82.6	17.5

Table 640 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	40.0	1.0	36.1	36.5	0.4	35.4	38.2	2.8	40.8	41.9	1.1
2026	43.4	46.5	3.1	40.1	39.7	-0.4	39.3	39.3	0.0	45.3	46.1	0.8
2027	43.4	44.6	1.2	40.1	41.8	1.7	39.3	41.6	2.3	45.3	62.4	17.1
2028	43.4	44.5	1.1	40.1	45.3	5.2	39.3	40.9	1.6	45.3	59.8	14.5
2029	44.2	43.9	-0.3	41.0	51.5	10.5	40.1	41.2	1.1	46.2	57.1	10.9
2030	45.1	43.2	-1.9	41.8	49.4	7.6	40.9	40.9	0.0	47.2	55.9	8.7
2031	46.1	53.3	7.2	42.6	49.1	6.5	41.8	43.7	1.9	48.2	55.5	7.3

Table 641 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.6	2.4	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.9	0.6	43.5	48.1	4.6	0.0	0.0	0.0
2027	45.3	45.7	0.4	45.3	45.2	-0.1	43.5	46.7	3.2	0.0	0.0	0.0
2028	45.3	46.2	0.9	45.3	47.8	2.5	43.5	45.3	1.8	0.0	0.0	0.0
2029	46.2	55.8	9.6	46.2	47.1	0.9	44.4	44.0	-0.4	0.0	0.0	0.0
2030	47.1	55.3	8.2	47.2	48.0	0.8	45.3	44.8	-0.5	0.0	0.0	0.0
2031	48.1	58.7	10.6	48.1	49.1	1.0	46.2	46.2	0.0	0.0	0.0	0.0

Table 642 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	48.0	55.5	7.5	43.9	42.6	-1.3	49.3	56.4	7.1
2028	0.0	0.0	0.0	48.0	54.5	6.5	43.9	61.5	17.6	49.3	60.1	10.8
2029	0.0	0.0	0.0	49.0	53.6	4.6	44.8	58.6	13.8	50.3	58.8	8.5
2030	0.0	0.0	0.0	50.0	60.1	10.1	45.7	55.7	10.0	51.4	57.7	6.3
2031	0.0	0.0	0.0	51.0	59.6	8.6	46.6	55.4	8.8	52.4	62.4	10.0

Table 643 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	37.0	0.7	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	40.2	0.7	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.9	-1.0	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	43.9	43.2	-0.7	40.9	41.6	0.7	48.6	51.3	2.7	44.5	365.7	321.2
2028	43.9	58.0	14.1	40.9	41.4	0.5	48.6	53.0	4.4	44.5	230.5	186.0
2029	44.8	58.7	13.9	41.7	45.2	3.5	49.6	67.9	18.3	45.4	168.3	122.9
2030	45.7	58.4	12.7	42.6	44.4	1.8	50.6	65.3	14.7	46.3	132.5	86.2
2031	46.6	58.0	11.4	43.4	44.1	0.7	51.6	64.8	13.2	47.3	132.5	85.2

Table 644 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.6	6.1	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.8	6.0	38.3	41.0	2.7
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	47.8	2.5	42.6	43.6	1.0
2027	43.8	46.3	2.5	44.5	47.6	3.1	45.3	45.9	0.6	42.6	45.3	2.7
2028	43.8	45.9	2.1	44.5	46.6	2.1	45.3	45.3	0.0	42.6	46.5	3.9
2029	44.7	49.2	4.5	45.4	45.7	0.3	46.3	44.8	-1.5	43.5	49.5	6.0
2030	45.6	50.0	4.4	46.3	58.3	12.0	47.2	55.4	8.2	44.3	49.4	5.1
2031	46.5	52.2	5.7	47.3	57.9	10.6	48.2	55.2	7.0	45.2	50.5	5.3

Table 645 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	59.2	6.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	63.6	4.5	59.6	59.6	0.0
2027	0.0	0.0	0.0	59.0	78.5	19.5	60.3	63.5	3.2	60.8	60.9	0.1
2028	0.0	0.0	0.0	60.2	73.6	13.4	61.5	61.9	0.4	62.1	66.2	4.1
2029	0.0	0.0	0.0	61.5	69.4	7.9	62.8	87.9	25.1	63.3	70.4	7.1
2030	0.0	0.0	0.0	62.7	65.9	3.2	64.0	81.6	17.6	64.6	68.3	3.7
2031	0.0	0.0	0.0	64.0	65.4	1.4	65.4	102.9	37.5	66.0	67.6	1.6

Table 646 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	66.3	674.6	608.3	62.3	61.9	-0.4	0.0	0.0	0.0	55.2	328.4	273.2
2028	67.6	433.4	365.8	63.6	61.2	-2.4	0.0	0.0	0.0	56.3	207.1	150.8
2029	69.0	316.4	247.4	64.9	227.5	162.6	0.0	0.0	0.0	57.5	151.2	93.7
2030	70.4	249.2	178.8	66.2	179.2	113.0	0.0	0.0	0.0	58.6	119.0	60.4
2031	71.8	249.2	177.4	67.6	179.2	111.6	0.0	0.0	0.0	59.8	119.0	59.2

Table 647 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	55.2	394.4	339.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	56.3	248.6	192.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	57.5	181.5	124.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	58.6	142.9	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	59.8	142.9	83.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 648 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.3	5.7	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	56.5	1.4	0.0	0.0	0.0	54.4	671.8	617.4
2027	60.5	62.9	2.4	56.3	55.0	-1.3	0.0	0.0	0.0	55.5	373.0	317.5
2028	61.8	62.1	0.3	57.4	54.7	-2.7	0.0	0.0	0.0	56.6	235.1	178.5
2029	63.0	61.4	-1.6	58.6	59.8	1.2	0.0	0.0	0.0	57.8	171.7	113.9
2030	64.3	69.8	5.5	59.8	59.8	0.0	0.0	0.0	0.0	58.9	135.2	76.3
2031	65.6	87.1	21.5	61.0	80.0	19.0	0.0	0.0	0.0	60.2	135.2	75.0

Table 649 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	61.1	9.4	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	67.3	15.0
2026	57.4	63.2	5.8	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	72.2	14.2
2027	58.6	61.9	3.3	57.5	434.6	377.1	56.3	104.1	47.8	59.2	72.2	13.0
2028	59.8	61.0	1.2	58.7	274.0	215.3	57.4	94.1	36.7	60.4	71.9	11.5
2029	61.0	61.9	0.9	59.9	200.0	140.1	58.6	85.8	27.2	61.7	77.6	15.9
2030	62.2	182.8	120.6	61.1	157.5	96.4	59.8	78.8	19.0	62.9	82.1	19.2
2031	63.5	183.1	119.6	62.3	157.5	95.2	61.0	78.8	17.8	64.2	89.6	25.4

Table 650 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	58.9	68.9	10.0	0.0	0.0	0.0	64.1	63.9	-0.2	61.1	242.0	180.9
2028	60.1	69.1	9.0	0.0	0.0	0.0	65.4	62.9	-2.5	62.3	152.6	90.3
2029	61.3	66.9	5.6	0.0	0.0	0.0	66.8	71.3	4.5	63.6	111.4	47.8
2030	62.6	74.6	12.0	0.0	0.0	0.0	68.1	86.1	18.0	64.9	87.7	22.8
2031	63.9	74.1	10.2	0.0	0.0	0.0	69.5	169.0	99.5	66.2	87.7	21.5

Table 651 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	59.6	0.8	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	60.0	62.4	2.4	60.3	59.9	-0.4	58.7	70.9	12.2	0.0	0.0	0.0
2028	61.2	61.2	0.0	61.6	61.7	0.1	59.9	66.2	6.3	0.0	0.0	0.0
2029	62.5	66.2	3.7	62.8	64.3	1.5	61.1	62.1	1.0	0.0	0.0	0.0
2030	63.8	64.3	0.5	64.1	80.7	16.6	62.4	61.7	-0.7	0.0	0.0	0.0
2031	65.1	71.6	6.5	65.4	80.7	15.3	63.7	61.3	-2.4	0.0	0.0	0.0

Table 652 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	62.7	62.4	-0.3	56.8	70.8	14.0	63.9	66.5	2.6
2028	0.0	0.0	0.0	64.0	62.0	-2.0	57.9	66.9	9.0	65.2	72.0	6.8
2029	0.0	0.0	0.0	65.3	130.6	65.3	59.1	65.9	6.8	66.6	70.2	3.6
2030	0.0	0.0	0.0	66.7	115.7	49.0	60.3	65.3	5.0	67.9	68.7	0.8
2031	0.0	0.0	0.0	68.0	115.7	47.7	61.6	67.1	5.5	69.3	78.2	8.9

Table 653 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	66.5	6.7	61.3	68.1	6.8	56.6	839.5	782.9
2027	61.5	70.8	9.3	61.0	64.2	3.2	62.5	69.1	6.6	57.7	420.9	363.2
2028	62.8	82.5	19.7	62.3	61.7	-0.6	63.8	88.0	24.2	58.9	265.4	206.5
2029	64.0	78.4	14.4	63.5	59.6	-3.9	65.1	136.4	71.3	60.1	193.7	133.6
2030	65.4	74.6	9.2	64.8	59.6	-5.2	66.4	119.6	53.2	61.3	152.6	91.3
2031	66.7	74.6	7.9	66.1	59.6	-6.5	67.8	119.7	51.9	62.6	152.6	90.0

Table 654 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT002												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.7	6.2
2027	61.6	64.6	3.0	58.7	84.8	26.1	61.6	67.3	5.7	60.7	67.1	6.4
2028	62.9	63.7	0.8	59.9	77.2	17.3	62.9	70.4	7.5	62.0	67.8	5.8
2029	64.2	64.9	0.7	61.2	72.1	10.9	64.2	67.0	2.8	63.3	70.2	6.9
2030	65.5	67.0	1.5	62.4	66.8	4.4	65.5	65.4	-0.1	64.6	72.1	7.5
2031	66.8	68.4	1.6	63.7	69.6	5.9	66.8	72.9	6.1	65.9	76.8	10.9

Table 655 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	46.4	1.7	37.3	38.4	1.1	38.4	41.4	3.0	46.5	48.3	1.8
2026	49.6	52.8	3.2	41.4	41.5	0.1	42.6	43.0	0.4	51.5	52.0	0.5
2027	50.6	54.2	3.6	42.7	43.6	0.9	43.7	49.4	5.7	52.6	61.3	8.7
2028	51.7	54.3	2.6	43.9	47.4	3.5	44.9	48.0	3.1	53.7	72.4	18.7
2029	52.8	53.2	0.4	45.2	53.2	8.0	46.1	50.1	4.0	54.9	75.8	20.9
2030	54.0	54.9	0.9	46.4	50.9	4.5	47.4	49.3	1.9	56.1	72.4	16.3
2031	55.1	60.0	4.9	47.8	50.6	2.8	48.7	51.8	3.1	57.3	72.0	14.7

Table 656 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.0	2.6	48.1	106.8	58.7
2026	52.3	53.9	1.6	52.1	52.9	0.8	43.7	48.5	4.8	53.5	542.6	489.1
2027	53.3	55.0	1.7	53.1	52.3	-0.8	45.1	47.1	2.0	54.6	328.4	273.8
2028	54.3	55.0	0.7	54.2	56.3	2.1	46.4	45.6	-0.8	55.2	207.1	151.9
2029	55.4	61.6	6.2	55.3	61.9	6.6	47.9	44.3	-3.6	55.7	151.2	95.5
2030	56.5	60.4	3.9	56.5	66.9	10.4	49.4	45.1	-4.3	56.3	119.0	62.7
2031	57.6	65.7	8.1	57.7	68.1	10.4	50.9	50.9	0.0	56.9	119.0	62.1

Table 657 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	54.6	394.4	339.8	50.9	56.3	5.4	49.7	57.0	7.3	56.6	61.3	4.7
2028	55.2	248.6	193.4	52.3	55.4	3.1	50.8	68.6	17.8	57.8	65.5	7.7
2029	55.7	181.5	125.8	53.8	58.2	4.4	51.9	64.6	12.7	59.0	63.9	4.9
2030	56.3	142.9	86.6	55.3	64.2	8.9	53.0	60.9	7.9	60.2	62.7	2.5
2031	56.9	142.9	86.0	56.9	63.7	6.8	54.2	60.8	6.6	61.5	65.4	3.9

Table 658 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	45.0	2.3	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.7	2.4	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.7	1.4	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	52.3	52.9	0.6	43.4	45.3	1.9	51.5	53.1	1.6	54.7	380.6	325.9
2028	53.4	62.0	8.6	44.7	44.8	0.1	53.0	56.1	3.1	55.4	239.9	184.5
2029	54.5	61.7	7.2	46.0	50.0	4.0	54.5	73.1	18.6	56.0	175.2	119.2
2030	55.7	62.9	7.2	47.3	48.9	1.6	56.0	69.9	13.9	56.6	137.9	81.3
2031	56.8	67.4	10.6	48.7	49.7	1.0	57.6	69.3	11.7	57.3	137.9	80.6

Table 659 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.6	4.0	39.1	43.1	4.0
2025	43.9	47.5	3.6	42.8	53.4	10.6	45.0	49.0	4.0	42.4	46.7	4.3
2026	48.7	52.3	3.6	47.6	60.3	12.7	50.0	52.5	2.5	47.0	49.9	2.9
2027	49.8	51.7	1.9	48.8	57.1	8.3	51.1	52.6	1.5	48.2	52.5	4.3
2028	51.0	51.6	0.6	50.0	54.9	4.9	52.4	52.7	0.3	49.4	54.3	4.9
2029	52.3	54.6	2.3	51.2	53.1	1.9	53.6	51.7	-1.9	50.6	58.0	7.4
2030	53.6	59.1	5.5	52.6	63.4	10.8	54.9	63.7	8.8	51.8	58.4	6.6
2031	54.8	61.1	6.3	53.9	63.2	9.3	56.2	63.7	7.5	53.1	60.0	6.9

Table 660 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	58.4	4.3	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	64.0	3.9	59.6	59.6	0.0
2027	58.3	68.9	10.6	58.4	70.4	12.0	60.7	63.6	2.9	60.2	60.3	0.1
2028	58.9	69.1	10.2	59.0	66.9	7.9	61.3	62.2	0.9	60.8	86.9	26.1
2029	59.5	66.9	7.4	59.6	63.8	4.2	61.9	82.5	20.6	61.4	90.2	28.8
2030	60.1	74.6	14.5	60.2	61.2	1.0	62.6	82.8	20.2	62.1	84.8	22.7
2031	60.7	74.1	13.4	60.8	60.8	0.0	63.2	82.8	19.6	62.7	84.1	21.4

Table 661 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	61.5	2.5	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	59.6	62.9	3.3	60.2	60.3	0.1	58.1	70.9	12.8	54.6	328.4	273.8
2028	60.2	61.7	1.5	60.8	60.5	-0.3	58.7	66.2	7.5	55.2	207.1	151.9
2029	60.8	64.4	3.6	61.4	76.2	14.8	59.3	62.0	2.7	55.7	151.2	95.5
2030	61.4	62.8	1.4	62.1	87.4	25.3	59.9	61.7	1.8	56.3	119.0	62.7
2031	62.0	69.5	7.5	62.7	87.4	24.7	60.5	61.3	0.8	56.9	119.0	62.1

Table 662 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	54.6	394.4	339.8	62.1	62.4	0.3	56.2	70.8	14.6	63.3	66.5	3.2
2028	55.2	248.6	193.4	62.7	62.0	-0.7	56.8	66.9	10.1	63.9	71.4	7.5
2029	55.7	181.5	125.8	63.4	130.6	67.2	57.3	63.7	6.4	64.6	69.6	5.0
2030	56.3	142.9	86.6	64.0	115.7	51.7	57.9	60.6	2.7	65.2	68.2	3.0
2031	56.9	142.9	86.0	64.7	115.7	51.0	58.5	60.8	2.3	65.9	68.4	2.5

Table 663 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.3	5.3	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.5	1.9	61.3	68.1	6.8	54.8	698.9	644.1
2027	60.2	64.9	4.7	56.2	55.9	-0.3	61.9	69.1	7.2	55.3	381.4	326.1
2028	60.8	63.8	3.0	56.8	55.4	-1.4	62.5	88.0	25.5	55.9	240.4	184.5
2029	61.4	62.8	1.4	57.3	57.1	-0.2	63.1	136.4	73.3	56.4	175.6	119.2
2030	62.1	65.5	3.4	57.9	57.6	-0.3	63.8	119.6	55.8	57.0	138.3	81.3
2031	62.7	75.7	13.0	58.5	73.5	15.0	64.4	119.6	55.2	57.6	138.3	80.7

Table 664 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	58.9	5.3	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	63.0	10.1
2026	59.6	64.5	4.9	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.8	10.0
2027	60.2	63.9	3.7	57.8	112.1	54.3	60.6	67.2	6.6	59.4	68.9	9.5
2028	60.8	63.0	2.2	58.3	98.6	40.3	61.2	69.8	8.6	60.0	71.4	11.4
2029	61.4	64.1	2.7	58.9	89.4	30.5	61.9	66.6	4.7	60.6	74.6	14.0
2030	62.1	80.9	18.8	59.5	80.9	21.4	62.5	65.0	2.5	61.2	77.2	16.0
2031	62.7	80.9	18.2	60.1	81.2	21.1	63.1	65.5	2.4	61.8	80.4	18.6

Table 665 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	40.0	1.0	36.1	36.5	0.4	35.4	38.2	2.8	40.8	41.9	1.1
2026	43.4	46.5	3.1	40.1	39.7	-0.4	39.3	39.3	0.0	45.3	46.1	0.8
2027	44.7	44.6	-0.1	41.4	41.8	0.4	40.5	46.5	6.0	46.7	62.3	15.6
2028	46.1	44.8	-1.3	42.7	45.9	3.2	41.8	45.2	3.4	48.2	62.2	14.0
2029	47.5	44.2	-3.3	44.0	52.2	8.2	43.1	45.2	2.1	49.7	65.5	15.8
2030	49.0	43.5	-5.5	45.3	50.0	4.7	44.4	44.4	0.0	51.2	63.4	12.2
2031	50.5	50.5	0.0	46.7	49.7	3.0	45.8	47.0	1.2	52.8	63.1	10.3

Table 666 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.6	2.4	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.9	0.6	43.5	48.1	4.6	0.0	0.0	0.0
2027	46.7	47.0	0.3	46.7	45.2	-1.5	44.9	46.7	1.8	0.0	0.0	0.0
2028	48.1	48.1	0.0	48.2	52.0	3.8	46.2	45.3	-0.9	0.0	0.0	0.0
2029	49.6	58.3	8.7	49.6	50.9	1.3	47.7	44.0	-3.7	0.0	0.0	0.0
2030	51.1	57.5	6.4	51.2	52.7	1.5	49.2	44.8	-4.4	0.0	0.0	0.0
2031	52.7	61.2	8.5	52.8	54.3	1.5	50.7	50.7	0.0	0.0	0.0	0.0

Table 667 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	49.5	55.5	6.0	45.2	48.9	3.7	50.8	56.4	5.6
2028	0.0	0.0	0.0	51.0	54.5	3.5	46.6	70.1	23.5	52.4	60.1	7.7
2029	0.0	0.0	0.0	52.6	53.6	1.0	48.1	65.4	17.3	54.0	58.8	4.8
2030	0.0	0.0	0.0	54.2	60.1	5.9	49.5	61.1	11.6	55.7	57.7	2.0
2031	0.0	0.0	0.0	55.9	59.6	3.7	51.1	60.8	9.7	57.4	62.4	5.0

Table 668 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	37.0	0.7	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	40.2	0.7	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.9	-1.0	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	45.2	43.2	-2.0	42.1	44.1	2.0	50.1	51.2	1.1	45.9	365.7	319.8
2028	46.6	59.9	13.3	43.4	43.7	0.3	51.7	53.0	1.3	47.3	230.5	183.2
2029	48.1	60.5	12.4	44.8	49.2	4.4	53.3	68.0	14.7	48.8	168.3	119.5
2030	49.6	60.0	10.4	46.2	47.9	1.7	54.9	65.5	10.6	50.3	132.5	82.2
2031	51.1	59.7	8.6	47.6	47.6	0.0	56.6	64.9	8.3	51.8	132.5	80.7

Table 669 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.6	6.1	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.8	6.0	38.3	41.0	2.7
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	47.8	2.5	42.6	43.6	1.0
2027	45.1	46.3	1.2	45.9	47.6	1.7	46.7	46.4	-0.3	43.9	46.7	2.8
2028	46.5	46.5	0.0	47.3	46.6	-0.7	48.2	46.0	-2.2	45.3	48.4	3.1
2029	48.0	50.1	2.1	48.7	45.7	-3.0	49.7	45.6	-4.1	46.7	52.1	5.4
2030	49.5	50.9	1.4	50.2	58.4	8.2	51.2	62.9	11.7	48.1	52.0	3.9
2031	51.0	53.3	2.3	51.8	58.1	6.3	52.8	62.7	9.9	49.6	53.1	3.5

Table 670 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	59.2	6.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	63.6	4.5	59.6	59.6	0.0
2027	0.0	0.0	0.0	58.4	70.4	12.0	59.7	63.5	3.8	60.2	60.3	0.1
2028	0.0	0.0	0.0	59.0	66.9	7.9	60.3	61.9	1.6	60.8	86.9	26.1
2029	0.0	0.0	0.0	59.6	63.8	4.2	60.9	88.0	27.1	61.4	90.2	28.8
2030	0.0	0.0	0.0	60.2	61.2	1.0	61.5	81.6	20.1	62.1	84.8	22.7
2031	0.0	0.0	0.0	60.8	60.8	0.0	62.1	81.9	19.8	62.7	84.1	21.4

Table 671 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	65.6	674.6	609.0	61.7	61.9	0.2	0.0	0.0	0.0	54.6	328.4	273.8
2028	66.3	425.3	359.0	62.3	61.2	-1.1	0.0	0.0	0.0	55.2	207.1	151.9
2029	66.9	310.5	243.6	63.0	227.5	164.5	0.0	0.0	0.0	55.7	151.2	95.5
2030	67.6	244.5	176.9	63.6	179.2	115.6	0.0	0.0	0.0	56.3	119.0	62.7
2031	68.3	244.5	176.2	64.2	179.2	115.0	0.0	0.0	0.0	56.9	119.0	62.1

Table 672 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	54.6	394.4	339.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	55.2	248.6	193.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	55.7	181.5	125.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	56.3	142.9	86.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	56.9	142.9	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 673 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.3	5.7	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	56.5	1.4	0.0	0.0	0.0	54.4	671.8	617.4
2027	59.9	62.9	3.0	55.7	55.0	-0.7	0.0	0.0	0.0	54.9	373.0	318.1
2028	60.5	62.1	1.6	56.3	54.7	-1.6	0.0	0.0	0.0	55.5	235.1	179.6
2029	61.2	61.4	0.2	56.8	56.8	0.0	0.0	0.0	0.0	56.0	171.7	115.7
2030	61.8	65.8	4.0	57.4	57.4	0.0	0.0	0.0	0.0	56.6	135.2	78.6
2031	62.4	80.9	18.5	58.0	75.8	17.8	0.0	0.0	0.0	57.2	135.2	78.0

Table 674 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	61.1	9.4	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	67.3	15.0
2026	57.4	63.2	5.8	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	72.2	14.2
2027	58.0	61.9	3.9	56.9	434.6	377.7	55.7	104.1	48.4	58.6	71.4	12.8
2028	58.6	61.0	2.4	57.5	274.0	216.5	56.3	94.1	37.8	59.2	77.2	18.0
2029	59.2	61.9	2.7	58.1	200.0	141.9	56.9	88.5	31.6	59.8	82.4	22.6
2030	59.8	182.8	123.0	58.7	157.5	98.8	57.4	81.1	23.7	60.4	86.1	25.7
2031	60.4	183.1	122.7	59.3	157.5	98.2	58.0	81.1	23.1	61.0	91.8	30.8

Table 675 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	58.3	68.9	10.6	0.0	0.0	0.0	63.5	63.9	0.4	60.4	242.0	181.6
2028	58.9	69.1	10.2	0.0	0.0	0.0	64.1	62.9	-1.2	61.1	152.6	91.5
2029	59.5	66.9	7.4	0.0	0.0	0.0	64.7	71.2	6.5	61.7	111.4	49.7
2030	60.1	74.6	14.5	0.0	0.0	0.0	65.4	85.9	20.5	62.3	87.7	25.4
2031	60.7	74.1	13.4	0.0	0.0	0.0	66.1	85.3	19.2	62.9	87.7	24.8

Table 676 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	59.6	0.8	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	59.4	61.1	1.7	59.7	59.8	0.1	58.1	70.9	12.8	0.0	0.0	0.0
2028	60.0	60.0	0.0	60.3	60.3	0.0	58.7	66.2	7.5	0.0	0.0	0.0
2029	60.6	62.8	2.2	60.9	62.9	2.0	59.3	62.0	2.7	0.0	0.0	0.0
2030	61.2	61.3	0.1	61.6	75.2	13.6	59.9	61.7	1.8	0.0	0.0	0.0
2031	61.8	67.9	6.1	62.2	75.2	13.0	60.5	61.3	0.8	0.0	0.0	0.0

Table 677 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	62.1	62.4	0.3	56.2	70.8	14.6	63.3	66.5	3.2
2028	0.0	0.0	0.0	62.7	62.0	-0.7	56.8	66.9	10.1	63.9	71.4	7.5
2029	0.0	0.0	0.0	63.4	130.6	67.2	57.3	63.7	6.4	64.6	69.6	5.0
2030	0.0	0.0	0.0	64.0	115.7	51.7	57.9	60.6	2.7	65.2	68.2	3.0
2031	0.0	0.0	0.0	64.7	115.7	51.0	58.5	60.8	2.3	65.9	68.4	2.5

Table 678 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	66.5	6.7	61.3	68.1	6.8	56.6	839.5	782.9
2027	60.9	70.8	9.9	60.4	64.2	3.8	61.9	69.1	7.2	57.1	420.9	363.8
2028	61.5	68.7	7.2	61.0	61.7	0.7	62.5	88.0	25.5	57.7	265.4	207.7
2029	62.1	66.6	4.5	61.6	59.6	-2.0	63.1	136.4	73.3	58.3	193.7	135.4
2030	62.8	64.7	1.9	62.2	59.6	-2.6	63.8	119.6	55.8	58.9	152.6	93.7
2031	63.4	64.7	1.3	62.9	59.6	-3.3	64.4	119.6	55.2	59.5	152.6	93.1

Table 679 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC1LT3												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.7	6.2
2027	61.0	64.6	3.6	58.2	84.8	26.6	61.0	65.4	4.4	60.1	66.6	6.5
2028	61.6	63.7	2.1	58.7	77.2	18.5	61.6	68.4	6.8	60.7	66.5	5.8
2029	62.2	64.9	2.7	59.3	72.1	12.8	62.3	65.4	3.1	61.3	68.3	7.0
2030	62.9	68.2	5.3	59.9	66.8	6.9	62.9	64.0	1.1	62.0	70.2	8.2
2031	63.5	68.2	4.7	60.5	67.1	6.6	63.5	64.6	1.1	62.6	71.8	9.2

Table 680 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	46.4	1.7	37.3	38.4	1.1	38.4	41.4	3.0	46.5	48.3	1.8
2026	49.6	52.8	3.2	41.4	41.5	0.1	42.6	43.0	0.4	51.5	52.0	0.5
2027	51.2	54.2	3.0	43.1	44.0	0.9	44.1	49.8	5.7	53.2	61.6	8.4
2028	52.7	54.3	1.6	44.8	47.8	3.0	45.9	48.3	2.4	54.9	73.8	18.9
2029	54.4	53.2	-1.2	46.6	53.6	7.0	47.5	50.4	2.9	56.6	77.2	20.6
2030	56.2	54.9	-1.3	48.5	51.3	2.8	49.4	49.5	0.1	58.4	75.0	16.6
2031	58.0	61.9	3.9	50.3	51.0	0.7	51.2	53.0	1.8	60.3	74.5	14.2

Table 681 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.0	2.6	48.1	106.8	58.7
2026	52.3	53.9	1.6	52.1	52.9	0.8	43.7	48.5	4.8	53.5	542.6	489.1
2027	53.9	57.7	3.8	53.7	52.3	-1.4	45.5	47.1	1.6	55.2	328.4	273.2
2028	55.4	58.1	2.7	55.4	56.7	1.3	47.4	45.6	-1.8	56.3	207.1	150.8
2029	57.2	66.4	9.2	57.0	62.4	5.4	49.4	44.3	-5.1	57.5	151.2	93.7
2030	58.9	64.5	5.6	58.8	67.9	9.1	51.4	45.1	-6.3	58.6	119.0	60.4
2031	60.7	68.1	7.4	60.7	70.1	9.4	53.6	53.6	0.0	59.8	119.0	59.2

Table 682 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	55.2	394.4	339.2	51.4	56.7	5.3	50.2	57.1	6.9	57.2	61.3	4.1
2028	56.3	248.6	192.3	53.4	55.7	2.3	51.8	68.6	16.8	59.0	66.1	7.1
2029	57.5	181.5	124.0	55.5	58.9	3.4	53.5	65.0	11.5	60.8	64.5	3.7
2030	58.6	142.9	84.3	57.7	65.1	7.4	55.2	61.2	6.0	62.8	63.2	0.4
2031	59.8	142.9	83.1	60.0	64.6	4.6	57.1	61.2	4.1	64.7	70.0	5.3

Table 683 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	45.0	2.3	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.7	2.4	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.7	1.4	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	52.9	52.9	0.0	43.9	47.6	3.7	52.0	53.2	1.2	55.3	380.6	325.3
2028	54.5	62.4	7.9	45.7	46.9	1.2	54.0	56.3	2.3	56.5	239.9	183.4
2029	56.2	60.9	4.7	47.4	53.1	5.7	56.1	73.4	17.3	57.7	175.2	117.5
2030	58.0	63.5	5.5	49.3	51.4	2.1	58.3	70.1	11.8	58.9	137.9	79.0
2031	59.7	68.1	8.4	51.2	52.4	1.2	60.6	69.6	9.0	60.3	137.9	77.6

Table 684 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.6	4.0	39.1	43.1	4.0
2025	43.9	47.5	3.6	42.8	53.4	10.6	45.0	49.0	4.0	42.4	46.7	4.3
2026	48.7	52.3	3.6	47.6	60.3	12.7	50.0	52.5	2.5	47.0	49.9	2.9
2027	50.4	51.7	1.3	49.2	57.1	7.9	51.7	53.0	1.3	48.7	53.2	4.5
2028	52.1	52.4	0.3	51.1	54.9	3.8	53.5	53.1	-0.4	50.4	55.2	4.8
2029	53.9	54.8	0.9	52.9	53.1	0.2	55.3	52.0	-3.3	52.2	58.9	6.7
2030	55.8	59.5	3.7	54.8	62.4	7.6	57.2	64.1	6.9	54.0	59.5	5.5
2031	57.7	61.8	4.1	56.8	63.0	6.2	59.2	64.6	5.4	55.9	61.3	5.4

Table 685 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	58.4	4.3	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	64.0	3.9	59.6	59.6	0.0
2027	58.9	68.9	10.0	59.0	78.5	19.5	61.3	63.6	2.3	60.8	60.9	0.1
2028	60.1	69.1	9.0	60.2	73.6	13.4	62.6	62.2	-0.4	62.1	88.0	25.9
2029	61.3	66.9	5.6	61.5	69.4	7.9	63.9	82.5	18.6	63.3	91.3	28.0
2030	62.6	74.6	12.0	62.7	65.9	3.2	65.1	82.8	17.7	64.6	85.7	21.1
2031	63.9	74.1	10.2	64.0	65.4	1.4	66.5	82.7	16.2	66.0	85.0	19.0

Table 686 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	61.5	2.5	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	60.2	64.3	4.1	60.8	60.4	-0.4	58.7	70.9	12.2	55.2	328.4	273.2
2028	61.4	62.9	1.5	62.1	61.6	-0.5	59.9	66.2	6.3	56.3	207.1	150.8
2029	62.7	67.9	5.2	63.3	77.7	14.4	61.1	62.0	0.9	57.5	151.2	93.7
2030	64.0	65.9	1.9	64.6	88.6	24.0	62.4	61.7	-0.7	58.6	119.0	60.4
2031	65.3	73.3	8.0	65.9	88.6	22.7	63.6	61.3	-2.3	59.8	119.0	59.2

Table 687 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	55.2	394.4	339.2	62.7	62.4	-0.3	56.8	70.9	14.1	63.9	66.5	2.6
2028	56.3	248.6	192.3	64.0	62.0	-2.0	57.9	67.0	9.1	65.2	72.0	6.8
2029	57.5	181.5	124.0	65.3	130.6	65.3	59.1	64.6	5.5	66.6	70.2	3.6
2030	58.6	142.9	84.3	66.7	115.7	49.0	60.3	61.4	1.1	67.9	68.7	0.8
2031	59.8	142.9	83.1	68.0	115.7	47.7	61.6	61.6	0.0	69.3	78.2	8.9

Table 688 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.3	5.3	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.5	1.9	61.3	68.1	6.8	54.8	698.9	644.1
2027	60.8	64.9	4.1	56.8	55.9	-0.9	62.5	69.1	6.6	55.9	381.4	325.5
2028	62.1	66.7	4.6	57.9	55.4	-2.5	63.8	88.0	24.2	57.0	240.4	183.4
2029	63.3	65.3	2.0	59.1	59.8	0.7	65.1	136.4	71.3	58.2	175.6	117.4
2030	64.6	71.1	6.5	60.3	59.8	-0.5	66.4	119.6	53.2	59.4	138.3	78.9
2031	65.9	83.2	17.3	61.5	77.0	15.5	67.8	119.6	51.8	60.7	138.3	77.6

Table 689 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	58.9	5.3	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	63.0	10.1
2026	59.6	64.5	4.9	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.8	10.0
2027	60.8	64.0	3.2	58.3	112.1	53.8	61.2	69.0	7.8	60.0	69.5	9.5
2028	62.1	63.2	1.1	59.5	98.6	39.1	62.5	71.7	9.2	61.2	72.5	11.3
2029	63.4	64.3	0.9	60.8	89.4	28.6	63.8	68.2	4.4	62.5	76.3	13.8
2030	64.6	82.0	17.4	62.0	80.9	18.9	65.1	66.3	1.2	63.7	79.4	15.7
2031	65.9	81.5	15.6	63.3	84.0	20.7	66.4	68.0	1.6	65.1	82.9	17.8

Table 690 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	40.0	1.0	36.1	36.5	0.4	35.4	38.2	2.8	40.8	41.9	1.1
2026	43.4	46.5	3.1	40.1	39.7	-0.4	39.3	39.3	0.0	45.3	46.1	0.8
2027	45.2	44.6	-0.6	41.8	41.9	0.1	40.9	46.9	6.0	47.2	62.3	15.1
2028	47.0	44.8	-2.2	43.6	46.0	2.4	42.7	45.5	2.8	49.2	63.7	14.5
2029	49.0	44.2	-4.8	45.4	52.3	6.9	44.4	45.5	1.1	51.2	67.1	15.9
2030	51.0	43.5	-7.5	47.3	50.1	2.8	46.3	44.6	-1.7	53.4	66.9	13.5
2031	53.2	53.2	0.0	49.2	49.8	0.6	48.2	48.2	0.0	55.6	66.5	10.9

Table 691 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.6	2.4	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.9	0.6	43.5	48.1	4.6	0.0	0.0	0.0
2027	47.2	50.7	3.5	47.2	45.2	-2.0	45.3	46.7	1.4	0.0	0.0	0.0
2028	49.1	52.7	3.6	49.2	52.0	2.8	47.2	45.3	-1.9	0.0	0.0	0.0
2029	51.2	64.4	13.2	51.2	50.9	-0.3	49.2	44.0	-5.2	0.0	0.0	0.0
2030	53.3	62.7	9.4	53.3	53.5	0.2	51.2	44.8	-6.4	0.0	0.0	0.0
2031	55.5	62.3	6.8	55.6	56.5	0.9	53.4	53.4	0.0	0.0	0.0	0.0

Table 692 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	50.0	55.9	5.9	45.7	48.9	3.2	51.4	56.4	5.0
2028	0.0	0.0	0.0	52.1	54.8	2.7	47.6	70.1	22.5	53.5	60.7	7.2
2029	0.0	0.0	0.0	54.3	54.3	0.0	49.6	65.4	15.8	55.7	59.3	3.6
2030	0.0	0.0	0.0	56.5	61.0	4.5	51.6	61.1	9.5	58.1	58.2	0.1
2031	0.0	0.0	0.0	58.9	60.5	1.6	53.8	60.8	7.0	60.5	63.0	2.5

Table 693 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	37.0	0.7	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	40.2	0.7	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.9	-1.0	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	45.7	43.2	-2.5	42.6	46.6	4.0	50.6	51.2	0.6	46.4	365.7	319.3
2028	47.6	58.0	10.4	44.4	45.9	1.5	52.7	53.2	0.5	48.3	230.5	182.2
2029	49.6	56.4	6.8	46.2	52.3	6.1	54.9	68.3	13.4	50.3	168.3	118.0
2030	51.7	56.4	4.7	48.1	50.5	2.4	57.2	65.7	8.5	52.4	132.5	80.1
2031	53.8	56.0	2.2	50.1	50.2	0.1	59.6	65.2	5.6	54.6	132.5	77.9

Table 694 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.6	6.1	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.8	6.0	38.3	41.0	2.7
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	47.8	2.5	42.6	43.6	1.0
2027	45.6	46.3	0.7	46.3	47.6	1.3	47.2	46.4	-0.8	44.3	47.3	3.0
2028	47.5	47.5	0.0	48.3	46.6	-1.7	49.2	46.0	-3.2	46.2	49.2	3.0
2029	49.5	50.3	0.8	50.3	45.7	-4.6	51.2	45.6	-5.6	48.1	52.8	4.7
2030	51.6	51.1	-0.5	52.4	57.2	4.8	53.4	62.9	9.5	50.1	52.7	2.6
2031	53.7	54.0	0.3	54.6	57.3	2.7	55.6	62.7	7.1	52.2	54.2	2.0

Table 695 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	59.2	6.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	63.6	4.5	59.6	59.6	0.0
2027	0.0	0.0	0.0	59.0	78.5	19.5	60.3	63.5	3.2	60.8	60.9	0.1
2028	0.0	0.0	0.0	60.2	73.6	13.4	61.5	61.9	0.4	62.1	88.0	25.9
2029	0.0	0.0	0.0	61.5	69.4	7.9	62.8	87.9	25.1	63.3	91.3	28.0
2030	0.0	0.0	0.0	62.7	65.9	3.2	64.0	81.6	17.6	64.6	85.7	21.1
2031	0.0	0.0	0.0	64.0	65.4	1.4	65.4	81.7	16.3	66.0	85.0	19.0

Table 696 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	66.3	674.6	608.3	62.3	61.9	-0.4	0.0	0.0	0.0	55.2	328.4	273.2
2028	67.6	433.4	365.8	63.6	61.2	-2.4	0.0	0.0	0.0	56.3	207.1	150.8
2029	69.0	316.4	247.4	64.9	227.5	162.6	0.0	0.0	0.0	57.5	151.2	93.7
2030	70.4	249.2	178.8	66.2	179.2	113.0	0.0	0.0	0.0	58.6	119.0	60.4
2031	71.8	249.2	177.4	67.6	179.2	111.6	0.0	0.0	0.0	59.8	119.0	59.2

Table 697 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	55.2	394.4	339.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	56.3	248.6	192.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	57.5	181.5	124.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	58.6	142.9	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	59.8	142.9	83.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 698 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.3	5.7	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	56.5	1.4	0.0	0.0	0.0	54.4	671.8	617.4
2027	60.5	62.9	2.4	56.3	55.0	-1.3	0.0	0.0	0.0	55.5	373.0	317.5
2028	61.8	62.1	0.3	57.4	54.7	-2.7	0.0	0.0	0.0	56.6	235.1	178.5
2029	63.0	61.4	-1.6	58.6	59.8	1.2	0.0	0.0	0.0	57.8	171.7	113.9
2030	64.3	69.8	5.5	59.8	59.8	0.0	0.0	0.0	0.0	58.9	135.2	76.3
2031	65.6	87.1	21.5	61.0	80.0	19.0	0.0	0.0	0.0	60.2	135.2	75.0

Table 699 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	61.1	9.4	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	67.3	15.0
2026	57.4	63.2	5.8	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	72.2	14.2
2027	58.6	61.9	3.3	57.5	434.6	377.1	56.3	104.1	47.8	59.2	72.2	13.0
2028	59.8	61.0	1.2	58.7	274.0	215.3	57.4	94.0	36.6	60.4	78.0	17.6
2029	61.0	60.9	-0.1	59.9	200.0	140.1	58.6	88.5	29.9	61.7	83.6	21.9
2030	62.2	182.6	120.4	61.1	157.5	96.4	59.8	81.1	21.3	62.9	88.4	25.5
2031	63.5	182.9	119.4	62.3	157.5	95.2	61.0	81.1	20.1	64.2	94.4	30.2

Table 700 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	58.9	68.9	10.0	0.0	0.0	0.0	64.1	63.9	-0.2	61.1	242.0	180.9
2028	60.1	69.1	9.0	0.0	0.0	0.0	65.4	62.9	-2.5	62.3	152.6	90.3
2029	61.3	66.9	5.6	0.0	0.0	0.0	66.8	71.3	4.5	63.6	111.4	47.8
2030	62.6	74.6	12.0	0.0	0.0	0.0	68.1	86.1	18.0	64.9	87.7	22.8
2031	63.9	74.1	10.2	0.0	0.0	0.0	69.5	85.4	15.9	66.2	87.7	21.5

Table 701 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	59.6	0.8	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	60.0	62.4	2.4	60.3	59.9	-0.4	58.7	70.9	12.2	0.0	0.0	0.0
2028	61.2	61.2	0.0	61.6	61.7	0.1	59.9	66.2	6.3	0.0	0.0	0.0
2029	62.5	66.2	3.7	62.8	64.3	1.5	61.1	62.0	0.9	0.0	0.0	0.0
2030	63.8	64.3	0.5	64.1	76.4	12.3	62.4	61.7	-0.7	0.0	0.0	0.0
2031	65.1	71.6	6.5	65.4	76.4	11.0	63.6	61.3	-2.3	0.0	0.0	0.0

Table 702 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	62.7	62.4	-0.3	56.8	70.9	14.1	63.9	66.5	2.6
2028	0.0	0.0	0.0	64.0	62.0	-2.0	57.9	67.0	9.1	65.2	72.0	6.8
2029	0.0	0.0	0.0	65.3	130.6	65.3	59.1	64.6	5.5	66.6	70.2	3.6
2030	0.0	0.0	0.0	66.7	115.7	49.0	60.3	61.4	1.1	67.9	68.7	0.8
2031	0.0	0.0	0.0	68.0	115.7	47.7	61.6	61.6	0.0	69.3	78.2	8.9

Table 703 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	66.5	6.7	61.3	68.1	6.8	56.6	839.5	782.9
2027	61.5	70.8	9.3	61.0	64.2	3.2	62.5	69.1	6.6	57.7	420.9	363.2
2028	62.8	82.5	19.7	62.3	61.7	-0.6	63.8	88.0	24.2	58.9	265.4	206.5
2029	64.0	78.4	14.4	63.5	59.6	-3.9	65.1	136.4	71.3	60.1	193.7	133.6
2030	65.4	74.6	9.2	64.8	59.6	-5.2	66.4	119.6	53.2	61.3	152.6	91.3
2031	66.7	74.6	7.9	66.1	59.6	-6.5	67.8	119.6	51.8	62.6	152.6	90.0

Table 704 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC2LT4												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.7	6.2
2027	61.6	64.7	3.1	58.7	84.8	26.1	61.6	67.3	5.7	60.7	67.1	6.4
2028	62.9	64.0	1.1	59.9	77.2	17.3	62.9	70.4	7.5	62.0	67.9	5.9
2029	64.2	65.5	1.3	61.2	72.1	10.9	64.2	67.0	2.8	63.3	70.3	7.0
2030	65.5	69.3	3.8	62.4	66.8	4.4	65.5	65.4	-0.1	64.6	72.2	7.6
2031	66.8	68.8	2.0	63.7	69.9	6.2	66.8	67.2	0.4	65.9	74.1	8.2

Table 705 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	46.4	1.7	37.3	38.4	1.1	38.4	41.4	3.0	46.5	48.3	1.8
2026	49.6	52.8	3.2	41.4	41.5	0.1	42.6	43.0	0.4	51.5	52.0	0.5
2027	51.7	54.2	2.5	43.6	46.3	2.7	44.7	50.9	6.2	53.7	62.3	8.6
2028	53.9	54.3	0.4	45.8	50.1	4.3	46.8	49.3	2.5	56.0	79.3	23.3
2029	56.2	53.2	-3.0	48.0	56.3	8.3	49.0	51.3	2.3	58.4	76.2	17.8
2030	58.5	54.9	-3.6	50.5	53.5	3.0	51.5	50.5	-1.0	60.8	76.0	15.2
2031	61.0	63.0	2.0	53.1	53.5	0.4	54.0	55.5	1.5	63.5	75.6	12.1

Table 706 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.0	2.6	48.1	106.8	58.7
2026	52.3	53.9	1.6	52.1	52.9	0.8	43.7	48.5	4.8	53.5	542.6	489.1
2027	54.4	60.2	5.8	54.3	52.3	-2.0	46.0	47.1	1.1	55.8	328.4	272.6
2028	56.6	59.2	2.6	56.5	58.0	1.5	48.4	45.6	-2.8	57.5	207.1	149.6
2029	58.9	67.8	8.9	58.8	63.8	5.0	51.0	44.3	-6.7	59.3	151.2	91.9
2030	61.3	66.3	5.0	61.3	66.7	5.4	53.6	45.1	-8.5	61.1	119.0	57.9
2031	63.9	68.5	4.6	63.9	70.1	6.2	56.4	54.6	-1.8	63.0	119.0	56.0

Table 707 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	55.8	394.4	338.6	52.0	56.7	4.7	50.8	57.3	6.5	57.8	61.3	3.5
2028	57.5	248.6	191.1	54.5	55.7	1.2	52.9	69.0	16.1	60.2	66.1	5.9
2029	59.3	181.5	122.2	57.3	64.9	7.6	55.2	65.3	10.1	62.7	64.5	1.8
2030	61.1	142.9	81.8	60.2	72.0	11.8	57.6	62.1	4.5	65.4	70.5	5.1
2031	63.0	142.9	79.9	63.2	71.4	8.2	60.1	62.6	2.5	68.2	73.9	5.7

Table 708 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	45.0	2.3	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.7	2.4	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.7	1.4	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	53.5	52.9	-0.6	44.3	49.3	5.0	52.6	53.1	0.5	55.9	380.6	324.7
2028	55.6	63.4	7.8	46.6	48.4	1.8	55.2	58.2	3.0	57.7	239.9	182.2
2029	58.0	61.8	3.8	49.0	54.6	5.6	57.9	71.4	13.5	59.5	175.2	115.7
2030	60.4	65.0	4.6	51.4	54.0	2.6	60.9	68.5	7.6	61.4	137.9	76.5
2031	62.9	69.8	6.9	54.0	54.1	0.1	63.9	67.9	4.0	63.4	137.9	74.5

Table 709 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.6	4.0	39.1	43.1	4.0
2025	43.9	47.5	3.6	42.8	53.4	10.6	45.0	49.0	4.0	42.4	46.7	4.3
2026	48.7	52.3	3.6	47.6	60.3	12.7	50.0	52.5	2.5	47.0	49.9	2.9
2027	50.9	51.7	0.8	49.8	57.1	7.3	52.2	53.0	0.8	49.2	54.1	4.9
2028	53.2	52.8	-0.4	52.1	54.9	2.8	54.5	57.3	2.8	51.4	56.8	5.4
2029	55.6	55.4	-0.2	54.6	53.1	-1.5	57.1	55.7	-1.4	53.8	60.1	6.3
2030	58.2	60.5	2.3	57.1	63.3	6.2	59.6	63.7	4.1	56.3	60.8	4.5
2031	60.8	64.7	3.9	59.8	63.2	3.4	62.4	66.1	3.7	58.9	63.2	4.3

Table 710 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	58.4	4.3	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	64.0	3.9	59.6	59.6	0.0
2027	59.5	68.9	9.4	59.6	78.5	18.9	61.9	63.6	1.7	61.5	62.3	0.8
2028	61.4	69.1	7.7	61.5	73.7	12.2	63.9	62.3	-1.6	63.4	91.0	27.6
2029	63.3	66.9	3.6	63.4	69.4	6.0	65.8	82.7	16.9	65.3	87.7	22.4
2030	65.2	74.7	9.5	65.4	65.9	0.5	67.9	83.0	15.1	67.3	83.0	15.7
2031	67.2	74.2	7.0	67.4	67.4	0.0	70.0	82.9	12.9	69.4	82.3	12.9

Table 711 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	61.5	2.5	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	60.8	65.7	4.9	61.5	60.4	-1.1	59.3	70.9	11.6	55.8	328.4	272.6
2028	62.7	64.2	1.5	63.3	63.1	-0.2	61.1	66.3	5.2	57.5	207.1	149.6
2029	64.6	69.2	4.6	65.3	79.8	14.5	63.0	62.0	-1.0	59.3	151.2	91.9
2030	66.6	68.0	1.4	67.3	79.4	12.1	65.0	61.7	-3.3	61.1	119.0	57.9
2031	68.7	72.6	3.9	69.4	81.9	12.5	67.0	61.3	-5.7	63.0	119.0	56.0

Table 712 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	55.8	394.4	338.6	63.4	62.4	-1.0	57.4	71.7	14.3	64.6	66.5	1.9
2028	57.5	248.6	191.1	65.3	62.0	-3.3	59.1	67.7	8.6	66.6	72.0	5.4
2029	59.3	181.5	122.2	67.4	130.6	63.2	61.0	65.2	4.2	68.6	70.2	1.6
2030	61.1	142.9	81.8	69.5	115.7	46.2	62.8	63.4	0.6	70.8	76.4	5.6
2031	63.0	142.9	79.9	71.6	115.7	44.1	64.8	64.8	0.0	73.0	76.6	3.6

Table 713 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.3	5.3	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.5	1.9	61.3	68.1	6.8	54.8	698.9	644.1
2027	61.4	64.9	3.5	57.3	55.9	-1.4	63.2	69.1	5.9	56.5	381.4	324.9
2028	63.4	66.7	3.3	59.1	55.4	-3.7	65.1	87.8	22.7	58.2	240.4	182.2
2029	65.3	65.3	0.0	60.9	60.2	-0.7	67.1	134.8	67.7	60.1	175.6	115.5
2030	67.3	71.2	3.9	62.8	61.9	-0.9	69.2	118.4	49.2	61.9	138.3	76.4
2031	69.4	83.4	14.0	64.8	66.2	1.4	71.3	118.3	47.0	63.8	138.3	74.5

Table 714 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	58.9	5.3	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	63.0	10.1
2026	59.6	64.5	4.9	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.8	10.0
2027	61.5	64.0	2.5	58.9	112.1	53.2	61.9	69.0	7.1	60.6	70.0	9.4
2028	63.4	63.9	0.5	60.8	98.6	37.8	63.8	97.1	33.3	62.5	74.2	11.7
2029	65.3	64.9	-0.4	62.7	89.4	26.7	65.8	88.6	22.8	64.4	77.3	12.9
2030	67.3	84.0	16.7	64.6	80.9	16.3	67.7	83.5	15.8	66.4	80.4	14.0
2031	69.4	85.2	15.8	66.6	81.2	14.6	69.9	84.2	14.3	68.5	83.2	14.7

Table 715 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	40.0	1.0	36.1	36.5	0.4	35.4	38.2	2.8	40.8	41.9	1.1
2026	43.4	46.5	3.1	40.1	39.7	-0.4	39.3	39.3	0.0	45.3	46.1	0.8
2027	45.6	44.6	-1.0	42.3	44.3	2.0	41.4	48.2	6.8	47.7	62.3	14.6
2028	48.0	44.8	-3.2	44.5	48.4	3.9	43.6	46.6	3.0	50.2	70.4	20.2
2029	50.6	44.2	-6.4	46.8	55.2	8.4	45.8	46.5	0.7	52.9	67.6	14.7
2030	53.2	43.5	-9.7	49.3	52.4	3.1	48.3	45.6	-2.7	55.6	70.3	14.7
2031	56.0	54.9	-1.1	51.9	52.3	0.4	50.8	50.9	0.1	58.6	70.0	11.4

Table 716 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.6	2.4	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.9	0.6	43.5	48.1	4.6	0.0	0.0	0.0
2027	47.7	54.1	6.4	47.7	45.2	-2.5	45.8	46.7	0.9	0.0	0.0	0.0
2028	50.2	53.8	3.6	50.2	53.0	2.8	48.2	45.3	-2.9	0.0	0.0	0.0
2029	52.8	66.0	13.2	52.8	51.9	-0.9	50.8	44.0	-6.8	0.0	0.0	0.0
2030	55.6	64.2	8.6	55.6	56.4	0.8	53.4	44.8	-8.6	0.0	0.0	0.0
2031	58.5	63.9	5.4	58.6	60.2	1.6	56.2	54.5	-1.7	0.0	0.0	0.0

Table 717 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	50.6	55.9	5.3	46.2	48.9	2.7	51.9	56.4	4.5
2028	0.0	0.0	0.0	53.2	54.8	1.6	48.6	70.1	21.5	54.6	60.7	6.1
2029	0.0	0.0	0.0	56.0	60.3	4.3	51.2	65.4	14.2	57.5	59.3	1.8
2030	0.0	0.0	0.0	59.0	68.1	9.1	53.9	61.1	7.2	60.5	65.2	4.7
2031	0.0	0.0	0.0	62.1	67.5	5.4	56.7	60.8	4.1	63.7	71.3	7.6

Table 718 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	37.0	0.7	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	40.2	0.7	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.9	-1.0	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	46.2	43.2	-3.0	43.0	48.5	5.5	51.2	51.2	0.0	46.8	365.7	318.9
2028	48.6	59.9	11.3	45.3	47.6	2.3	53.9	55.2	1.3	49.3	230.5	181.2
2029	51.2	58.1	6.9	47.7	53.9	6.2	56.7	66.4	9.7	51.9	168.3	116.4
2030	53.9	59.0	5.1	50.2	53.1	2.9	59.7	64.2	4.5	54.6	132.5	77.9
2031	56.7	58.6	1.9	52.8	52.8	0.0	62.8	63.6	0.8	57.5	132.5	75.0

Table 719 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.6	6.1	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.8	6.0	38.3	41.0	2.7
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	47.8	2.5	42.6	43.6	1.0
2027	46.1	46.3	0.2	46.8	47.6	0.8	47.7	46.4	-1.3	44.8	48.4	3.6
2028	48.5	47.8	-0.7	49.3	46.6	-2.7	50.2	46.0	-4.2	47.2	50.7	3.5
2029	51.1	51.0	-0.1	51.9	45.7	-6.2	52.9	45.6	-7.3	49.7	54.0	4.3
2030	53.8	51.9	-1.9	54.6	58.3	3.7	55.7	55.9	0.2	52.3	54.1	1.8
2031	56.6	56.6	0.0	57.5	58.1	0.6	58.6	58.6	0.0	55.0	56.4	1.4

Table 720 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	59.2	6.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	63.6	4.5	59.6	59.6	0.0
2027	0.0	0.0	0.0	59.6	78.5	18.9	60.9	63.5	2.6	61.5	62.3	0.8
2028	0.0	0.0	0.0	61.5	73.7	12.2	62.8	62.0	-0.8	63.4	91.0	27.6
2029	0.0	0.0	0.0	63.4	69.4	6.0	64.7	88.2	23.5	65.3	87.7	22.4
2030	0.0	0.0	0.0	65.4	65.9	0.5	66.7	81.8	15.1	67.3	83.0	15.7
2031	0.0	0.0	0.0	67.4	67.4	0.0	68.8	81.9	13.1	69.4	82.3	12.9

Table 721 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	66.9	674.6	607.7	63.0	61.9	-1.1	0.0	0.0	0.0	55.8	328.4	272.6
2028	69.0	441.6	372.6	64.9	61.2	-3.7	0.0	0.0	0.0	57.5	207.1	149.6
2029	71.2	322.5	251.3	66.9	227.5	160.6	0.0	0.0	0.0	59.3	151.2	91.9
2030	73.3	253.9	180.6	69.0	179.2	110.2	0.0	0.0	0.0	61.1	119.0	57.9
2031	75.6	253.9	178.3	71.1	179.2	108.1	0.0	0.0	0.0	63.0	119.0	56.0

Table 722 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	55.8	394.4	338.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	57.5	248.6	191.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	59.3	181.5	122.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	61.1	142.9	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	63.0	142.9	79.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 723 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.3	5.7	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	56.5	1.4	0.0	0.0	0.0	54.4	671.8	617.4
2027	61.2	62.9	1.7	56.8	55.0	-1.8	0.0	0.0	0.0	56.1	373.0	316.9
2028	63.1	62.1	-1.0	58.6	54.7	-3.9	0.0	0.0	0.0	57.8	235.1	177.3
2029	65.0	61.4	-3.6	60.4	60.3	-0.1	0.0	0.0	0.0	59.6	171.7	112.1
2030	67.0	70.0	3.0	62.3	62.2	-0.1	0.0	0.0	0.0	61.4	135.2	73.8
2031	69.1	87.4	18.3	64.2	67.1	2.9	0.0	0.0	0.0	63.3	135.2	71.9

Table 724 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC3LT5												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	61.1	9.4	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	67.3	15.0
2026	57.4	63.2	5.8	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	72.2	14.2
2027	59.2	61.9	2.7	58.1	434.6	376.5	56.9	104.1	47.2	59.9	72.7	12.8
2028	61.0	61.0	0.0	59.9	274.0	214.1	58.6	94.1	35.5	61.7	78.7	17.0
2029	62.9	60.9	-2.0	61.7	200.0	138.3	60.4	88.5	28.1	63.6	82.8	19.2
2030	64.8	182.6	117.8	63.6	157.5	93.9	62.3	81.1	18.8	65.5	88.0	22.5
2031	66.8	182.9	116.1	65.6	157.5	91.9	64.2	81.1	16.9	67.6	92.3	24.7

Table 725 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.6	35.3	-2.3	31.4	30.9	-0.5	32.5	30.8	-1.7	39.1	40.0	0.9
2023	38.0	38.1	0.1	31.9	32.7	0.8	33.0	31.0	-2.0	39.5	44.4	4.9
2024	41.3	41.8	0.5	34.3	37.4	3.1	35.4	37.3	1.9	42.9	44.5	1.6
2025	44.7	46.4	1.7	37.3	38.4	1.1	38.4	41.4	3.0	46.5	48.3	1.8
2026	49.6	52.8	3.2	41.4	41.5	0.1	42.6	43.0	0.4	51.5	52.0	0.5
2027	53.3	54.8	1.5	44.9	51.6	6.7	46.0	51.6	5.6	55.5	65.4	9.9
2028	57.3	55.2	-2.1	48.7	58.0	9.3	49.8	50.3	0.5	59.7	69.1	9.4
2029	61.8	53.9	-7.9	52.8	67.4	14.6	54.0	52.4	-1.6	64.2	72.1	7.9
2030	66.5	55.6	-10.9	57.4	62.6	5.2	58.5	51.5	-7.0	69.2	74.7	5.5
2031	71.7	64.7	-7.0	62.3	62.3	0.0	63.3	63.7	0.4	74.4	74.2	-0.2

Table 726 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	39.6	41.4	1.8	39.5	40.9	1.4	32.9	29.0	-3.9	40.6	106.8	66.2
2023	40.1	43.5	3.4	39.9	43.6	3.7	33.4	37.9	4.5	41.1	106.8	65.7
2024	43.5	46.2	2.7	43.4	47.3	3.9	36.2	41.8	5.6	44.3	106.8	62.5
2025	47.1	50.4	3.3	47.0	49.3	2.3	39.4	42.0	2.6	48.1	106.8	58.7
2026	52.3	53.9	1.6	52.1	52.9	0.8	43.7	48.5	4.8	53.5	542.6	489.1
2027	56.2	60.5	4.3	56.0	52.3	-3.7	47.5	47.1	-0.4	57.5	328.4	270.9
2028	60.3	61.5	1.2	60.1	60.3	0.2	51.6	45.6	-6.0	61.2	207.1	145.9
2029	64.8	73.7	8.9	64.7	66.5	1.8	56.1	44.3	-11.8	65.1	151.2	86.1
2030	69.6	71.1	1.5	69.6	74.8	5.2	60.9	45.1	-15.8	69.3	119.0	49.7
2031	74.9	75.6	0.7	74.9	82.5	7.6	66.2	54.6	-11.6	73.7	119.0	45.3

Table 727 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	37.3	36.5	-0.8	36.8	32.8	-4.0	42.0	40.3	-1.7
2023	41.1	742.5	701.4	37.8	47.1	9.3	37.3	39.5	2.2	42.6	40.6	-2.0
2024	44.3	742.5	698.2	41.1	49.5	8.4	40.4	40.4	0.0	46.2	48.6	2.4
2025	48.1	742.5	694.4	44.6	50.3	5.7	43.8	42.0	-1.8	50.0	62.3	12.3
2026	53.5	742.5	689.0	49.5	53.0	3.5	48.6	49.4	0.8	55.5	62.3	6.8
2027	57.5	394.3	336.8	53.7	56.8	3.1	52.4	57.0	4.6	59.7	61.2	1.5
2028	61.2	248.6	187.4	58.1	55.8	-2.3	56.3	70.7	14.4	64.2	71.8	7.6
2029	65.1	181.5	116.4	63.1	70.5	7.4	60.7	69.4	8.7	69.0	69.5	0.5
2030	69.3	142.9	73.6	68.3	78.4	10.1	65.4	69.5	4.1	74.2	76.1	1.9
2031	73.7	142.9	69.2	74.2	77.9	3.7	70.5	71.2	0.7	79.9	81.5	1.6

Table 728 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	38.9	38.6	-0.3	31.9	28.9	-3.0	37.8	39.0	1.2	40.7	699.0	658.3
2023	39.4	42.4	3.0	32.3	30.9	-1.4	38.2	43.7	5.5	41.3	707.6	666.3
2024	42.7	45.0	2.3	35.0	34.9	-0.1	41.5	46.3	4.8	44.8	710.6	665.8
2025	46.3	48.7	2.4	38.1	41.7	3.6	45.1	48.9	3.8	48.7	714.2	665.5
2026	51.3	52.7	1.4	42.3	42.4	0.1	50.1	51.5	1.4	54.1	714.6	660.5
2027	55.2	52.9	-2.3	45.8	50.4	4.6	54.3	53.2	-1.1	57.6	380.6	323.0
2028	59.2	68.4	9.2	49.7	49.4	-0.3	58.8	62.3	3.5	61.4	239.9	178.5
2029	63.7	66.2	2.5	53.9	56.1	2.2	63.8	77.2	13.4	65.4	175.2	109.8
2030	68.6	73.7	5.1	58.5	58.4	-0.1	69.1	80.1	11.0	69.6	137.9	68.3
2031	73.8	75.0	1.2	63.4	58.8	-4.6	75.0	80.2	5.2	74.2	137.9	63.7

Table 729 - Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Total Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	37.1	39.1	2.0	36.0	43.8	7.8	37.9	36.3	-1.6	35.8	36.5	0.7
2023	37.5	41.0	3.5	36.4	47.1	10.7	38.3	38.5	0.2	36.2	38.9	2.7
2024	40.6	45.3	4.7	39.5	47.5	8.0	41.6	45.6	4.0	39.1	43.1	4.0
2025	43.9	47.5	3.6	42.8	53.4	10.6	45.0	49.0	4.0	42.4	46.7	4.3
2026	48.7	52.3	3.6	47.6	60.3	12.7	50.0	52.5	2.5	47.0	49.9	2.9
2027	52.6	51.9	-0.7	51.4	57.9	6.5	53.9	53.0	-0.9	50.8	55.4	4.6
2028	56.6	53.7	-2.9	55.6	55.6	0.0	58.2	57.3	-0.9	54.8	58.5	3.7
2029	61.1	55.9	-5.2	60.0	54.3	-5.7	62.7	55.8	-6.9	59.2	62.6	3.4
2030	66.0	61.9	-4.1	64.9	67.2	2.3	67.8	69.0	1.2	64.0	64.9	0.9
2031	71.3	73.5	2.2	70.2	67.9	-2.3	73.1	73.7	0.6	69.1	70.2	1.1

Table 730 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	43.4	45.5	2.1	45.1	41.9	-3.2	44.7	45.6	0.9
2023	44.0	42.2	-1.8	44.1	45.8	1.7	45.8	42.3	-3.5	45.4	52.2	6.8
2024	47.8	51.8	4.0	47.9	66.6	18.7	49.7	54.2	4.5	49.4	52.6	3.2
2025	52.0	54.7	2.7	52.1	69.2	17.1	54.1	58.4	4.3	53.7	56.7	3.0
2026	57.7	60.9	3.2	57.9	69.2	11.3	60.1	64.0	3.9	59.6	59.6	0.0
2027	61.4	70.8	9.4	61.6	104.0	42.4	63.9	63.6	-0.3	63.4	68.7	5.3
2028	65.3	72.1	6.8	65.5	93.8	28.3	68.0	62.3	-5.7	67.5	78.5	11.0
2029	69.5	69.6	0.1	69.7	85.4	15.7	72.3	82.8	10.5	71.8	85.9	14.1
2030	73.9	77.7	3.8	74.1	78.9	4.8	77.0	83.2	6.2	76.4	82.0	5.6
2031	78.7	79.0	0.3	78.8	78.3	-0.5	81.9	85.1	3.2	81.2	81.2	0.0

Table 731 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.2	45.3	1.1	44.7	47.0	2.3	43.2	30.6	-12.6	40.6	106.8	66.2
2023	44.9	48.8	3.9	45.4	49.7	4.3	43.8	68.6	24.8	41.1	106.8	65.7
2024	48.8	53.7	4.9	49.4	57.0	7.6	47.6	69.1	21.5	44.3	106.8	62.5
2025	53.1	54.6	1.5	53.6	59.4	5.8	51.8	69.2	17.4	48.1	106.8	58.7
2026	59.0	61.5	2.5	59.6	60.6	1.0	57.5	74.2	16.7	53.5	542.6	489.1
2027	62.8	70.7	7.9	63.4	60.4	-3.0	61.2	70.9	9.7	57.5	328.4	270.9
2028	66.8	68.6	1.8	67.4	68.5	1.1	65.1	66.2	1.1	61.2	207.1	145.9
2029	71.0	79.9	8.9	71.8	88.1	16.3	69.3	62.0	-7.3	65.1	151.2	86.1
2030	75.5	76.8	1.3	76.3	88.0	11.7	73.7	61.6	-12.1	69.3	119.0	49.7
2031	80.3	81.9	1.6	81.2	94.9	13.7	78.4	61.2	-17.2	73.7	119.0	45.3

Table 732 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	41.1	742.5	701.4	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	44.3	742.5	698.2	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	48.1	742.5	694.4	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	53.5	742.5	689.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	57.5	394.3	336.8	65.4	62.4	-3.0	59.2	72.2	13.0	66.7	66.5	-0.2
2028	61.2	248.6	187.4	69.6	62.0	-7.6	63.0	68.2	5.2	70.9	78.7	7.8
2029	65.1	181.5	116.4	74.0	130.6	56.6	67.0	71.5	4.5	75.4	76.1	0.7
2030	69.3	142.9	73.6	78.7	115.7	37.0	71.3	71.3	0.0	80.2	83.0	2.8
2031	73.7	142.9	69.2	83.8	115.7	31.9	75.8	76.0	0.2	85.4	86.6	1.2

Table 733 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	44.3	-0.4	41.8	29.2	-12.6	46.0	38.3	-7.7	41.1	698.9	657.8
2023	45.4	49.4	4.0	42.4	31.9	-10.5	46.7	52.1	5.4	41.7	698.9	657.2
2024	49.3	53.8	4.5	46.1	45.5	-0.6	50.7	52.2	1.5	45.3	698.9	653.6
2025	53.6	58.7	5.1	50.0	55.3	5.3	55.1	65.4	10.3	49.3	698.9	649.6
2026	59.6	64.9	5.3	55.6	57.5	1.9	61.3	68.1	6.8	54.8	698.9	644.1
2027	63.4	64.9	1.5	59.2	55.9	-3.3	65.2	69.1	3.9	58.3	381.4	323.1
2028	67.5	67.7	0.2	63.0	55.4	-7.6	69.3	87.8	18.5	62.0	240.4	178.4
2029	71.7	66.3	-5.4	67.0	60.6	-6.4	73.8	134.8	61.0	66.0	175.6	109.6
2030	76.3	78.9	2.6	71.2	65.1	-6.1	78.5	120.1	41.6	70.1	138.3	68.2
2031	81.2	82.1	0.9	75.8	74.4	-1.4	83.5	120.0	36.5	74.6	138.3	63.7

Table 734 - Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Passenger Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.7	46.7	2.0	42.9	64.5	21.6	45.0	40.1	-4.9	44.1	47.1	3.0
2023	45.4	51.6	6.2	43.6	67.5	23.9	45.7	41.6	-4.1	44.8	51.6	6.8
2024	49.4	54.3	4.9	47.4	69.3	21.9	49.7	49.1	-0.6	48.7	58.4	9.7
2025	53.6	58.9	5.3	51.5	75.5	24.0	54.0	53.1	-0.9	52.9	63.0	10.1
2026	59.6	64.5	4.9	57.2	126.6	69.4	60.0	62.6	2.6	58.8	68.8	10.0
2027	63.4	64.7	1.3	60.8	112.1	51.3	63.9	69.0	5.1	62.5	72.4	9.9
2028	67.4	67.2	-0.2	64.8	98.6	33.8	67.9	98.1	30.2	66.5	75.6	9.1
2029	71.8	67.8	-4.0	68.8	89.4	20.6	72.2	89.7	17.5	70.8	80.8	10.0
2030	76.3	93.1	16.8	73.2	81.4	8.2	76.9	82.7	5.8	75.3	85.8	10.5
2031	81.2	96.6	15.4	77.9	84.6	6.7	81.8	83.5	1.7	80.1	88.7	8.6

Table 735 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.5	32.7	0.2	30.3	29.6	-0.7	29.8	28.3	-1.5	34.0	35.0	1.0
2023	33.0	34.4	1.4	30.8	31.6	0.8	30.3	28.6	-1.7	34.5	38.0	3.5
2024	35.9	34.4	-1.5	33.2	35.5	2.3	32.5	34.0	1.5	37.5	38.1	0.6
2025	39.0	40.0	1.0	36.1	36.5	0.4	35.4	38.2	2.8	40.8	41.9	1.1
2026	43.4	46.5	3.1	40.1	39.7	-0.4	39.3	39.3	0.0	45.3	46.1	0.8
2027	47.1	44.6	-2.5	43.6	48.9	5.3	42.7	49.0	6.3	49.3	62.4	13.1
2028	51.2	44.8	-6.4	47.4	55.7	8.3	46.4	47.8	1.4	53.6	61.8	8.2
2029	55.7	44.2	-11.5	51.5	65.9	14.4	50.5	47.6	-2.9	58.2	62.4	4.2
2030	60.5	43.5	-17.0	56.0	61.2	5.2	54.9	46.6	-8.3	63.3	68.8	5.5
2031	65.8	54.8	-11.0	60.9	60.9	0.0	59.6	59.6	0.0	68.8	68.4	-0.4

Table 736 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	34.0	36.4	2.4	34.0	34.6	0.6	32.7	29.0	-3.7	0.0	0.0	0.0
2023	34.5	37.4	2.9	34.5	37.5	3.0	33.2	37.5	4.3	0.0	0.0	0.0
2024	37.5	38.3	0.8	37.5	38.8	1.3	36.0	41.4	5.4	0.0	0.0	0.0
2025	40.7	45.5	4.8	40.8	40.8	0.0	39.2	41.6	2.4	0.0	0.0	0.0
2026	45.3	46.1	0.8	45.3	45.9	0.6	43.5	48.1	4.6	0.0	0.0	0.0
2027	49.2	50.6	1.4	49.2	45.2	-4.0	47.3	46.7	-0.6	0.0	0.0	0.0
2028	53.5	54.2	0.7	53.5	53.0	-0.5	51.4	45.3	-6.1	0.0	0.0	0.0
2029	58.1	66.9	8.8	58.2	52.0	-6.2	55.9	44.0	-11.9	0.0	0.0	0.0
2030	63.2	64.8	1.6	63.2	63.8	0.6	60.7	44.8	-15.9	0.0	0.0	0.0
2031	68.7	68.7	0.0	68.7	71.6	2.9	66.0	54.5	-11.5	0.0	0.0	0.0

Table 737 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	36.0	35.7	-0.3	32.9	30.4	-2.5	37.0	37.4	0.4
2023	0.0	0.0	0.0	36.6	48.0	11.4	33.4	35.2	1.8	37.6	37.7	0.1
2024	0.0	0.0	0.0	39.8	48.6	8.8	36.3	35.3	-1.0	40.8	39.0	-1.8
2025	0.0	0.0	0.0	43.2	49.2	6.0	39.5	35.6	-3.9	44.4	57.3	12.9
2026	0.0	0.0	0.0	48.0	51.9	3.9	43.9	39.1	-4.8	49.3	57.3	8.0
2027	0.0	0.0	0.0	52.2	56.0	3.8	47.7	48.4	0.7	53.6	56.4	2.8
2028	0.0	0.0	0.0	56.7	55.0	-1.7	51.8	73.0	21.2	58.3	65.6	7.3
2029	0.0	0.0	0.0	61.7	65.9	4.2	56.3	67.7	11.4	63.3	63.7	0.4
2030	0.0	0.0	0.0	67.0	74.7	7.7	61.2	68.1	6.9	68.8	70.0	1.2
2031	0.0	0.0	0.0	72.9	74.2	1.3	66.6	67.7	1.1	74.8	76.6	1.8

Table 738 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	32.9	32.6	-0.3	30.7	28.9	-1.8	36.5	39.1	2.6	33.4	700.3	666.9
2023	33.4	35.6	2.2	31.2	30.7	-0.5	37.0	42.4	5.4	33.9	936.4	902.5
2024	36.3	37.0	0.7	33.8	33.7	-0.1	40.2	45.4	5.2	36.9	1046.7	1009.8
2025	39.5	40.2	0.7	36.8	40.3	3.5	43.7	46.9	3.2	40.1	1186.5	1146.4
2026	43.9	42.9	-1.0	40.9	40.9	0.0	48.6	49.5	0.9	44.5	1186.5	1142.0
2027	47.7	43.2	-4.5	44.4	49.7	5.3	52.8	51.3	-1.5	48.4	365.7	317.3
2028	51.8	69.2	17.4	48.3	48.7	0.4	57.4	59.5	2.1	52.6	230.5	177.9
2029	56.4	66.0	9.6	52.5	55.5	3.0	62.4	72.3	9.9	57.1	168.3	111.2
2030	61.3	68.5	7.2	57.1	57.6	0.5	67.8	76.0	8.2	62.1	132.5	70.4
2031	66.6	68.1	1.5	62.0	57.2	-4.8	73.8	76.1	2.3	67.5	132.5	65.0

Table 739 - Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Light Truck Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	33.0	35.0	2.0	33.4	38.0	4.6	34.0	33.9	-0.1	32.1	32.1	0.0
2023	33.5	36.0	2.5	33.9	41.4	7.5	34.5	36.6	2.1	32.6	34.0	1.4
2024	36.3	40.8	4.5	36.8	41.7	4.9	37.5	43.6	6.1	35.2	37.5	2.3
2025	39.4	42.4	3.0	40.0	47.6	7.6	40.8	46.8	6.0	38.3	41.0	2.7
2026	43.8	46.8	3.0	44.5	49.6	5.1	45.3	47.8	2.5	42.6	43.6	1.0
2027	47.6	46.3	-1.3	48.4	48.4	0.0	49.3	46.4	-2.9	46.3	49.4	3.1
2028	51.7	48.0	-3.7	52.6	47.4	-5.2	53.6	46.0	-7.6	50.3	52.5	2.2
2029	56.2	50.6	-5.6	57.1	47.0	-10.1	58.2	45.6	-12.6	54.7	56.3	1.6
2030	61.1	51.6	-9.5	62.1	62.8	0.7	63.3	62.9	-0.4	59.4	57.8	-1.6
2031	66.4	64.3	-2.1	67.5	62.9	-4.6	68.8	68.9	0.1	64.6	63.4	-1.2

Table 740 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	43.4	45.5	2.1	44.3	41.2	-3.1	44.7	45.6	0.9
2023	0.0	0.0	0.0	44.1	45.8	1.7	45.0	41.7	-3.3	45.4	52.2	6.8
2024	0.0	0.0	0.0	47.9	66.6	18.7	48.9	54.7	5.8	49.4	52.6	3.2
2025	0.0	0.0	0.0	52.1	69.2	17.1	53.2	59.2	6.0	53.7	56.7	3.0
2026	0.0	0.0	0.0	57.9	69.2	11.3	59.1	63.6	4.5	59.6	59.6	0.0
2027	0.0	0.0	0.0	61.6	104.0	42.4	62.8	63.5	0.7	63.4	68.7	5.3
2028	0.0	0.0	0.0	65.5	93.8	28.3	66.9	62.0	-4.9	67.5	78.5	11.0
2029	0.0	0.0	0.0	69.7	85.4	15.7	71.1	88.4	17.3	71.8	85.9	14.1
2030	0.0	0.0	0.0	74.1	78.9	4.8	75.7	82.1	6.4	76.4	82.0	5.6
2031	0.0	0.0	0.0	78.8	78.3	-0.5	80.5	82.6	2.1	81.2	81.2	0.0

Table 741 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	48.7	53.4	4.7	45.8	47.1	1.3	0.0	0.0	0.0	40.6	106.8	66.2
2023	49.5	2658.3	2608.8	46.5	47.2	0.7	0.0	0.0	0.0	41.1	106.8	65.7
2024	53.8	3125.8	3072.0	50.6	62.1	11.5	0.0	0.0	0.0	44.3	106.8	62.5
2025	58.4	3792.9	3734.5	55.0	61.9	6.9	0.0	0.0	0.0	48.1	106.8	58.7
2026	64.9	4821.9	4757.0	61.1	62.1	1.0	0.0	0.0	0.0	53.5	542.6	489.1
2027	69.1	674.6	605.5	65.0	61.9	-3.1	0.0	0.0	0.0	57.5	328.4	270.9
2028	73.5	433.4	359.9	69.1	61.2	-7.9	0.0	0.0	0.0	61.2	207.1	145.9
2029	78.2	316.4	238.2	73.6	229.5	155.9	0.0	0.0	0.0	65.1	151.2	86.1
2030	83.2	249.2	166.0	78.3	180.7	102.4	0.0	0.0	0.0	69.3	119.0	49.7
2031	88.5	249.2	160.7	83.2	180.7	97.5	0.0	0.0	0.0	73.7	119.0	45.3

Table 742 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	40.6	742.5	701.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	41.1	742.5	701.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	44.3	742.5	698.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	48.1	742.5	694.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	53.5	742.5	689.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	57.5	394.3	336.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	61.2	248.6	187.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2029	65.1	181.5	116.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030	69.3	142.9	73.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2031	73.7	142.9	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 743 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.5	43.4	-1.1	41.4	28.7	-12.7	0.0	0.0	0.0	40.8	671.8	631.0
2023	45.2	44.6	-0.6	42.0	31.5	-10.5	0.0	0.0	0.0	41.4	671.8	630.4
2024	49.1	49.1	0.0	45.7	45.6	-0.1	0.0	0.0	0.0	45.0	671.8	626.8
2025	53.4	54.7	1.3	49.6	55.3	5.7	0.0	0.0	0.0	48.9	671.8	622.9
2026	59.3	62.2	2.9	55.1	56.5	1.4	0.0	0.0	0.0	54.4	671.8	617.4
2027	63.1	62.9	-0.2	58.7	55.0	-3.7	0.0	0.0	0.0	57.8	373.0	315.2
2028	67.2	62.1	-5.1	62.4	54.7	-7.7	0.0	0.0	0.0	61.5	235.1	173.6
2029	71.4	61.4	-10.0	66.4	60.7	-5.7	0.0	0.0	0.0	65.5	171.7	106.2
2030	76.0	78.5	2.5	70.6	65.9	-4.7	0.0	0.0	0.0	69.6	135.2	65.6
2031	80.9	83.0	2.1	75.1	76.9	1.8	0.0	0.0	0.0	74.1	135.2	61.1

Table 744 - Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Domestic Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.1	43.2	0.1	42.3	45.3	3.0	41.4	34.1	-7.3	43.5	48.9	5.4
2023	43.7	43.9	0.2	42.9	49.2	6.3	42.0	34.2	-7.8	44.2	52.4	8.2
2024	47.5	49.4	1.9	46.7	49.7	3.0	45.7	40.2	-5.5	48.1	60.9	12.8
2025	51.7	61.1	9.4	50.7	55.0	4.3	49.6	40.3	-9.3	52.3	67.3	15.0
2026	57.4	63.2	5.8	56.4	1119.7	1063.3	55.2	117.7	62.5	58.0	72.2	14.2
2027	61.1	64.0	2.9	59.9	434.6	374.7	58.7	104.1	45.4	61.7	76.6	14.9
2028	65.0	63.0	-2.0	63.8	274.0	210.2	62.4	94.0	31.6	65.7	77.2	11.5
2029	69.1	62.1	-7.0	67.8	200.0	132.2	66.4	88.5	22.1	69.9	83.9	14.0
2030	73.5	182.5	109.0	72.2	157.5	85.3	70.7	81.1	10.4	74.3	91.6	17.3
2031	78.2	183.4	105.2	76.8	157.5	80.7	75.2	81.1	5.9	79.1	93.6	14.5

Table 745 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	61.4	70.8	9.4	0.0	0.0	0.0	66.8	63.9	-2.9	63.7	242.0	178.3
2028	65.3	72.1	6.8	0.0	0.0	0.0	71.1	62.9	-8.2	67.7	152.6	84.9
2029	69.5	69.6	0.1	0.0	0.0	0.0	75.6	71.4	-4.2	72.0	111.4	39.4
2030	73.9	77.7	3.8	0.0	0.0	0.0	80.5	86.3	5.8	76.6	87.7	11.1
2031	78.7	79.0	0.3	0.0	0.0	0.0	85.6	92.1	6.5	81.5	87.7	6.2

Table 746 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	59.6	0.8	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	62.6	68.7	6.1	62.9	59.9	-3.0	61.2	70.9	9.7	0.0	0.0	0.0
2028	66.6	66.7	0.1	66.9	71.2	4.3	65.1	66.2	1.1	0.0	0.0	0.0
2029	70.8	78.0	7.2	71.2	73.7	2.5	69.3	62.0	-7.3	0.0	0.0	0.0
2030	75.3	75.1	-0.2	75.7	75.7	0.0	73.7	61.6	-12.1	0.0	0.0	0.0
2031	80.1	80.1	0.0	80.6	82.5	1.9	78.4	61.2	-17.2	0.0	0.0	0.0

Table 747 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	65.4	62.4	-3.0	59.2	72.2	13.0	66.7	66.5	-0.2
2028	0.0	0.0	0.0	69.6	62.0	-7.6	63.0	68.2	5.2	70.9	78.7	7.8
2029	0.0	0.0	0.0	74.0	130.6	56.6	67.0	71.5	4.5	75.4	76.1	0.7
2030	0.0	0.0	0.0	78.7	115.7	37.0	71.3	71.3	0.0	80.2	83.0	2.8
2031	0.0	0.0	0.0	83.8	115.7	31.9	75.8	76.0	0.2	85.4	86.6	1.2

Table 748 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	66.5	6.7	61.3	68.1	6.8	56.6	839.5	782.9
2027	64.1	70.8	6.7	63.6	64.2	0.6	65.2	69.1	3.9	60.2	420.9	360.7
2028	68.2	88.8	20.6	67.7	61.7	-6.0	69.3	87.8	18.5	64.0	265.4	201.4
2029	72.6	84.0	11.4	72.0	59.6	-12.4	73.8	134.8	61.0	68.1	193.7	125.6
2030	77.2	79.8	2.6	76.6	59.5	-17.1	78.5	120.1	41.6	72.4	152.6	80.2
2031	82.1	79.8	-2.3	81.5	59.5	-22.0	83.5	120.0	36.5	77.0	152.6	75.6

Table 749 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.7	6.2
2027	64.2	65.0	0.8	61.2	84.8	23.6	64.3	67.3	3.0	63.3	68.7	5.4
2028	68.3	68.7	0.4	65.2	77.2	12.0	68.4	98.4	30.0	67.4	74.1	6.7
2029	72.7	69.9	-2.8	69.3	72.1	2.8	72.7	89.8	17.1	71.7	78.0	6.3
2030	77.3	80.0	2.7	73.7	67.3	-6.4	77.4	82.8	5.4	76.2	80.8	4.6
2031	82.3	83.4	1.1	78.4	70.5	-7.9	82.3	83.7	1.4	81.1	84.3	3.2

Table 750 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	61.4	70.8	9.4	0.0	0.0	0.0	66.8	63.9	-2.9	63.7	242.0	178.3
2028	65.3	72.1	6.8	0.0	0.0	0.0	71.1	62.9	-8.2	67.7	152.6	84.9
2029	69.5	69.6	0.1	0.0	0.0	0.0	75.6	71.4	-4.2	72.0	111.4	39.4
2030	73.9	77.7	3.8	0.0	0.0	0.0	80.5	86.3	5.8	76.6	87.7	11.1
2031	78.7	79.0	0.3	0.0	0.0	0.0	85.6	92.1	6.5	81.5	87.7	6.2

Table 751 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	59.6	0.8	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	62.6	68.7	6.1	62.9	59.9	-3.0	61.2	70.9	9.7	0.0	0.0	0.0
2028	66.6	66.7	0.1	66.9	71.2	4.3	65.1	66.2	1.1	0.0	0.0	0.0
2029	70.8	78.0	7.2	71.2	73.7	2.5	69.3	62.0	-7.3	0.0	0.0	0.0
2030	75.3	75.1	-0.2	75.7	75.7	0.0	73.7	61.6	-12.1	0.0	0.0	0.0
2031	80.1	80.1	0.0	80.6	82.5	1.9	78.4	61.2	-17.2	0.0	0.0	0.0

Table 752 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	65.4	62.4	-3.0	59.2	72.2	13.0	66.7	66.5	-0.2
2028	0.0	0.0	0.0	69.6	62.0	-7.6	63.0	68.2	5.2	70.9	78.7	7.8
2029	0.0	0.0	0.0	74.0	130.6	56.6	67.0	71.5	4.5	75.4	76.1	0.7
2030	0.0	0.0	0.0	78.7	115.7	37.0	71.3	71.3	0.0	80.2	83.0	2.8
2031	0.0	0.0	0.0	83.8	115.7	31.9	75.8	76.0	0.2	85.4	86.6	1.2

Table 753 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	66.5	6.7	61.3	68.1	6.8	56.6	839.5	782.9
2027	64.1	70.8	6.7	63.6	64.2	0.6	65.2	69.1	3.9	60.2	420.9	360.7
2028	68.2	88.8	20.6	67.7	61.7	-6.0	69.3	87.8	18.5	64.0	265.4	201.4
2029	72.6	84.0	11.4	72.0	59.6	-12.4	73.8	134.8	61.0	68.1	193.7	125.6
2030	77.2	79.8	2.6	76.6	59.5	-17.1	78.5	120.1	41.6	72.4	152.6	80.2
2031	82.1	79.8	-2.3	81.5	59.5	-22.0	83.5	120.0	36.5	77.0	152.6	75.6

Table 754 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.7	6.2
2027	64.2	65.0	0.8	61.2	84.8	23.6	64.3	67.3	3.0	63.3	68.7	5.4
2028	68.3	68.7	0.4	65.2	77.2	12.0	68.4	98.4	30.0	67.4	74.1	6.7
2029	72.7	69.9	-2.8	69.3	72.1	2.8	72.7	89.8	17.1	71.7	78.0	6.3
2030	77.3	80.0	2.7	73.7	67.3	-6.4	77.4	82.8	5.4	76.2	80.8	4.6
2031	82.3	83.4	1.1	78.4	70.5	-7.9	82.3	83.7	1.4	81.1	84.3	3.2

Table 755 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	BMW			Ford			GM			Honda		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	43.3	37.8	-5.5	0.0	0.0	0.0	47.1	43.8	-3.3	44.9	30.4	-14.5
2023	44.0	42.2	-1.8	0.0	0.0	0.0	47.9	44.0	-3.9	45.6	31.2	-14.4
2024	47.8	51.8	4.0	0.0	0.0	0.0	52.0	52.9	0.9	49.6	31.3	-18.3
2025	52.0	54.7	2.7	0.0	0.0	0.0	56.5	56.6	0.1	53.8	31.7	-22.1
2026	57.7	60.9	3.2	0.0	0.0	0.0	62.8	65.1	2.3	59.8	427.4	367.6
2027	61.4	70.8	9.4	0.0	0.0	0.0	66.8	63.9	-2.9	63.7	242.0	178.3
2028	65.3	72.1	6.8	0.0	0.0	0.0	71.1	62.9	-8.2	67.7	152.6	84.9
2029	69.5	69.6	0.1	0.0	0.0	0.0	75.6	71.4	-4.2	72.0	111.4	39.4
2030	73.9	77.7	3.8	0.0	0.0	0.0	80.5	86.3	5.8	76.6	87.7	11.1
2031	78.7	79.0	0.3	0.0	0.0	0.0	85.6	92.1	6.5	81.5	87.7	6.2

Table 756 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Hyundai			KIA			JLR			Karma		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	44.1	45.1	1.0	44.4	47.0	2.6	43.2	30.6	-12.6	0.0	0.0	0.0
2023	44.8	47.3	2.5	45.0	50.6	5.6	43.8	68.6	24.8	0.0	0.0	0.0
2024	48.7	52.0	3.3	49.0	55.5	6.5	47.6	69.1	21.5	0.0	0.0	0.0
2025	52.9	52.9	0.0	53.2	58.7	5.5	51.8	69.2	17.4	0.0	0.0	0.0
2026	58.8	59.6	0.8	59.1	60.1	1.0	57.5	74.2	16.7	0.0	0.0	0.0
2027	62.6	68.7	6.1	62.9	59.9	-3.0	61.2	70.9	9.7	0.0	0.0	0.0
2028	66.6	66.7	0.1	66.9	71.2	4.3	65.1	66.2	1.1	0.0	0.0	0.0
2029	70.8	78.0	7.2	71.2	73.7	2.5	69.3	62.0	-7.3	0.0	0.0	0.0
2030	75.3	75.1	-0.2	75.7	75.7	0.0	73.7	61.6	-12.1	0.0	0.0	0.0
2031	80.1	80.1	0.0	80.6	82.5	1.9	78.4	61.2	-17.2	0.0	0.0	0.0

Table 757 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	0.0	0.0	0.0	46.1	41.5	-4.6	41.8	35.5	-6.3	47.0	42.9	-4.1
2023	0.0	0.0	0.0	46.8	42.5	-4.3	42.4	45.3	2.9	47.7	43.3	-4.4
2024	0.0	0.0	0.0	50.9	55.6	4.7	46.1	47.9	1.8	51.9	61.2	9.3
2025	0.0	0.0	0.0	55.3	58.8	3.5	50.1	52.7	2.6	56.4	67.6	11.2
2026	0.0	0.0	0.0	61.5	61.5	0.0	55.6	71.3	15.7	62.7	67.7	5.0
2027	0.0	0.0	0.0	65.4	62.4	-3.0	59.2	72.2	13.0	66.7	66.5	-0.2
2028	0.0	0.0	0.0	69.6	62.0	-7.6	63.0	68.2	5.2	70.9	78.7	7.8
2029	0.0	0.0	0.0	74.0	130.6	56.6	67.0	71.5	4.5	75.4	76.1	0.7
2030	0.0	0.0	0.0	78.7	115.7	37.0	71.3	71.3	0.0	80.2	83.0	2.8
2031	0.0	0.0	0.0	83.8	115.7	31.9	75.8	76.0	0.2	85.4	86.6	1.2

Table 758 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Nissan			Stellantis			Subaru			Tesla		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.2	46.9	1.7	44.9	33.5	-11.4	46.0	38.3	-7.7	42.4	839.5	797.1
2023	45.9	68.7	22.8	45.5	35.8	-9.7	46.7	52.1	5.4	43.1	839.5	796.4
2024	49.9	72.0	22.1	49.5	45.1	-4.4	50.7	52.2	1.5	46.8	839.5	792.7
2025	54.3	72.7	18.4	53.8	55.1	1.3	55.1	65.4	10.3	50.9	839.5	788.6
2026	60.3	73.1	12.8	59.8	66.5	6.7	61.3	68.1	6.8	56.6	839.5	782.9
2027	64.1	70.8	6.7	63.6	64.2	0.6	65.2	69.1	3.9	60.2	420.9	360.7
2028	68.2	88.8	20.6	67.7	61.7	-6.0	69.3	87.8	18.5	64.0	265.4	201.4
2029	72.6	84.0	11.4	72.0	59.6	-12.4	73.8	134.8	61.0	68.1	193.7	125.6
2030	77.2	79.8	2.6	76.6	59.5	-17.1	78.5	120.1	41.6	72.4	152.6	80.2
2031	82.1	79.8	-2.3	81.5	59.5	-22.0	83.5	120.0	36.5	77.0	152.6	75.6

Table 759 - Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8

Required and Achieved CAFE Levels (mpg) for Imported Car Fleet for Alternative PC6LT8												
Model Year	Toyota			Volvo			VWA			Total		
	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference	Required	Achieved	Difference
2022	45.3	48.0	2.7	43.2	78.9	35.7	45.3	40.7	-4.6	44.7	45.5	0.8
2023	46.0	54.8	8.8	43.9	80.4	36.5	46.0	42.3	-3.7	45.4	51.0	5.6
2024	50.0	56.1	6.1	47.7	83.6	35.9	50.0	49.9	-0.1	49.3	56.2	6.9
2025	54.3	58.2	3.9	51.8	90.0	38.2	54.4	54.4	0.0	53.6	59.4	5.8
2026	60.4	64.9	4.5	57.6	91.5	33.9	60.4	60.4	0.0	59.5	65.7	6.2
2027	64.2	65.0	0.8	61.2	84.8	23.6	64.3	67.3	3.0	63.3	68.7	5.4
2028	68.3	68.7	0.4	65.2	77.2	12.0	68.4	98.4	30.0	67.4	74.1	6.7
2029	72.7	69.9	-2.8	69.3	72.1	2.8	72.7	89.8	17.1	71.7	78.0	6.3
2030	77.3	80.0	2.7	73.7	67.3	-6.4	77.4	82.8	5.4	76.2	80.8	4.6
2031	82.3	83.4	1.1	78.4	70.5	-7.9	82.3	83.7	1.4	81.1	84.3	3.2

Regulatory Cost, Comparison

Table 760 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002			
	Total		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	1.9	1.9	0.0
2023	7.6	7.6	0.0
2024	15.1	15.1	0.0
2025	19.8	19.8	0.0
2026	20.1	20.1	0.0
2027	17.5	19.7	2.2
2028	19.8	21.6	1.8
2029	23.3	25.7	2.4
2030	23.8	25.8	2.0
2031	24.0	25.2	1.2

Table 761 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002			
	Total		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.8	0.8	0.0
2023	2.4	2.4	0.0
2024	4.7	4.7	0.0
2025	5.7	5.7	0.0
2026	5.4	5.4	0.0
2027	5.2	5.5	0.3
2028	5.9	5.5	-0.4
2029	6.2	6.6	0.4
2030	7.0	7.4	0.4
2031	7.6	7.5	-0.1

Table 762 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002			
	Total		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	1.1	1.1	0.0
2023	5.2	5.2	0.0
2024	10.4	10.4	0.0
2025	14.1	14.1	0.0
2026	14.7	14.7	0.0
2027	12.3	14.2	1.9
2028	13.9	16.0	2.1
2029	17.1	19.1	2.0
2030	16.9	18.5	1.6
2031	16.4	17.7	1.3

Table 763 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	BMW			Ford			GM			Honda		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.2	0.2	0.0	0.1	0.1	0.0	0.5	0.5	0.0	0.0	0.0	0.0
2023	0.2	0.2	0.0	1.4	1.4	0.0	0.7	0.7	0.0	0.9	0.9	0.0
2024	0.4	0.4	0.0	2.7	2.7	0.0	3.6	3.6	0.0	0.9	0.9	0.0
2025	0.6	0.6	0.0	2.8	2.8	0.0	4.2	4.2	0.0	1.5	1.5	0.0
2026	0.5	0.5	0.0	2.9	2.9	0.0	4.1	4.1	0.0	1.6	1.6	0.0
2027	0.5	0.5	0.0	2.5	2.6	0.1	3.5	3.9	0.4	1.7	2.9	1.2
2028	0.5	0.5	0.0	3.4	3.5	0.1	3.4	3.7	0.4	2.5	2.8	0.3
2029	0.4	0.4	0.0	4.1	4.1	0.1	3.5	4.4	0.9	2.4	2.7	0.2
2030	0.4	0.4	0.0	3.6	3.6	0.1	3.5	4.3	0.8	2.1	2.4	0.2
2031	0.6	0.5	0.0	3.2	3.3	0.0	4.1	4.8	0.7	1.9	2.0	0.1

Table 764 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Hyundai			KIA			JLR			Karma		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.2	0.2	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2024	0.4	0.4	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.8	0.8	0.0	0.3	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2026	0.9	0.9	0.0	0.4	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2027	0.9	0.9	0.1	0.4	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2028	0.8	0.9	0.1	0.4	0.6	0.2	0.1	0.1	0.0	0.0	0.0	0.0
2029	1.4	1.5	0.2	0.7	0.9	0.2	0.1	0.1	0.0	0.0	0.0	0.0
2030	1.2	1.4	0.1	0.9	1.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0
2031	1.4	1.5	0.1	0.9	1.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

Table 765 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.3	0.0	0.2	0.2	0.0
2025	0.0	0.0	0.0	0.2	0.2	0.0	0.4	0.4	0.0	0.3	0.3	0.0
2026	0.0	0.0	0.0	0.2	0.2	0.0	0.5	0.5	0.0	0.2	0.2	0.0
2027	0.0	0.0	0.0	0.3	0.3	0.0	0.5	0.5	0.0	0.2	0.2	0.0
2028	0.0	0.0	0.0	0.3	0.3	0.0	0.7	0.7	0.0	0.2	0.2	0.0
2029	0.0	0.0	0.0	0.3	0.3	0.0	0.6	0.6	-0.1	0.2	0.2	0.0
2030	0.0	0.0	0.0	0.4	0.4	-0.1	0.6	0.5	-0.1	0.2	0.2	0.0
2031	0.0	0.0	0.0	0.4	0.3	-0.1	0.5	0.4	-0.1	0.2	0.2	0.0

Table 766 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Nissan			Stellantis			Subaru			Tesla		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.7	0.7	0.0	1.5	1.5	0.0	0.4	0.4	0.0	0.0	0.0	0.0
2024	0.9	0.9	0.0	2.8	2.8	0.0	0.4	0.4	0.0	0.0	0.0	0.0
2025	1.3	1.3	0.0	4.1	4.1	0.0	0.5	0.5	0.0	0.0	0.0	0.0
2026	1.2	1.2	0.0	3.4	3.4	0.0	0.6	0.6	0.0	0.0	0.0	0.0
2027	1.2	1.5	0.3	2.7	2.9	0.2	0.7	0.7	0.0	0.0	0.0	0.0
2028	1.7	2.4	0.7	2.6	2.8	0.2	0.9	0.8	0.0	0.0	0.0	0.0
2029	1.5	2.2	0.8	3.3	3.6	0.3	2.0	2.0	0.0	0.0	0.0	0.0
2030	1.4	2.2	0.8	3.1	3.3	0.3	1.8	1.7	-0.1	0.0	0.0	0.0
2031	1.7	2.3	0.6	3.0	3.2	0.2	1.6	1.5	-0.1	0.0	0.0	0.0

Table 767 - Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Toyota			Volvo			VWA			Total		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.9	1.9	0.0
2023	0.6	0.6	0.0	0.0	0.0	0.0	0.4	0.4	0.0	7.6	7.6	0.0
2024	1.2	1.2	0.0	0.0	0.0	0.0	0.6	0.6	0.0	15.1	15.1	0.0
2025	1.7	1.7	0.0	0.2	0.2	0.0	0.8	0.8	0.0	19.8	19.8	0.0
2026	2.4	2.4	0.0	0.1	0.1	0.0	0.7	0.7	0.0	20.1	20.1	0.0
2027	1.8	1.8	-0.1	0.1	0.1	0.0	0.5	0.6	0.1	17.5	19.7	2.2
2028	1.7	1.6	-0.1	0.1	0.1	0.0	0.6	0.6	0.0	19.8	21.6	1.8
2029	2.3	2.2	-0.1	0.0	0.0	0.0	0.5	0.5	0.0	23.3	25.7	2.4
2030	3.3	3.2	-0.1	0.2	0.2	0.0	1.2	1.0	-0.2	23.8	25.8	2.0
2031	3.4	3.1	-0.3	0.1	0.1	0.0	1.1	0.9	-0.1	24.0	25.2	1.2

Table 768 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	BMW			Ford			GM			Honda		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2023	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.4	0.4	0.0
2024	0.3	0.3	0.0	0.3	0.3	0.0	0.5	0.5	0.0	0.4	0.4	0.0
2025	0.3	0.3	0.0	0.3	0.3	0.0	0.6	0.6	0.0	0.8	0.8	0.0
2026	0.2	0.2	0.0	0.2	0.2	0.0	0.6	0.6	0.0	0.7	0.7	0.0
2027	0.3	0.3	0.0	0.2	0.3	0.1	0.5	0.5	0.1	0.7	0.7	0.0
2028	0.3	0.3	0.0	0.2	0.3	0.1	0.4	0.5	0.1	1.7	0.8	-0.8
2029	0.2	0.2	0.0	0.2	0.2	0.1	0.4	1.1	0.6	1.7	1.0	-0.7
2030	0.3	0.3	0.0	0.1	0.2	0.1	0.5	1.1	0.5	1.4	0.8	-0.6
2031	0.2	0.2	0.0	0.1	0.2	0.0	0.9	1.3	0.5	1.3	0.6	-0.6

Table 769 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
Model Year	Hyundai			KIA			JLR			Karma		
	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024	0.4	0.4	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025	0.3	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2026	0.5	0.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2027	0.5	0.6	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2028	0.5	0.5	0.1	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2029	0.6	0.7	0.2	0.5	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2030	0.5	0.6	0.1	0.7	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2031	0.6	0.8	0.1	0.8	0.6	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Table 770 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2025	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2026	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.1	0.0
2027	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2028	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2029	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2030	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.1	0.0
2031	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0

Table 771 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Nissan			Stellantis			Subaru			Tesla		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.4	0.4	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2024	0.5	0.5	0.0	0.7	0.7	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.7	0.7	0.0	0.7	0.7	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2026	0.6	0.6	0.0	0.6	0.6	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2027	0.6	0.7	0.1	0.5	0.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2028	0.5	0.8	0.2	0.5	0.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2029	0.5	0.7	0.2	0.5	0.6	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2030	0.6	0.9	0.3	0.5	0.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2031	0.9	1.1	0.2	0.6	0.6	0.0	0.2	0.2	0.0	0.0	0.0	0.0

Table 772 - Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Toyota			Volvo			VWA			Total		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.8	0.8	0.0
2023	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	2.4	2.4	0.0
2024	0.5	0.5	0.0	0.0	0.0	0.0	0.3	0.3	0.0	4.7	4.7	0.0
2025	0.9	0.9	0.0	0.0	0.0	0.0	0.3	0.3	0.0	5.7	5.7	0.0
2026	0.9	0.9	0.0	0.0	0.0	0.0	0.3	0.3	0.0	5.4	5.4	0.0
2027	0.8	0.8	-0.1	0.0	0.0	0.0	0.3	0.3	0.1	5.2	5.5	0.3
2028	0.8	0.7	-0.1	0.0	0.0	0.0	0.3	0.4	0.0	5.9	5.5	-0.4
2029	0.7	0.7	-0.1	0.0	0.0	0.0	0.3	0.3	0.0	6.2	6.6	0.4
2030	1.6	1.5	-0.1	0.0	0.0	0.0	0.2	0.3	0.0	7.0	7.4	0.4
2031	1.5	1.3	-0.2	0.0	0.0	0.0	0.2	0.3	0.1	7.6	7.5	-0.1

Table 773 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	BMW			Ford			GM			Honda		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2023	0.1	0.1	0.0	1.4	1.4	0.0	0.6	0.6	0.0	0.4	0.4	0.0
2024	0.1	0.1	0.0	2.5	2.5	0.0	3.1	3.1	0.0	0.5	0.5	0.0
2025	0.3	0.3	0.0	2.5	2.5	0.0	3.6	3.6	0.0	0.7	0.7	0.0
2026	0.3	0.3	0.0	2.7	2.7	0.0	3.5	3.5	0.0	0.9	0.9	0.0
2027	0.2	0.2	0.0	2.3	2.3	0.0	3.0	3.3	0.3	1.0	2.2	1.2
2028	0.2	0.2	0.0	3.2	3.2	0.0	2.9	3.2	0.3	0.9	2.0	1.1
2029	0.1	0.2	0.0	3.9	3.9	0.0	3.1	3.4	0.3	0.7	1.7	1.0
2030	0.1	0.1	0.0	3.4	3.4	0.0	3.0	3.2	0.3	0.7	1.5	0.9
2031	0.3	0.3	0.0	3.1	3.1	0.0	3.2	3.5	0.2	0.6	1.4	0.8

Table 774 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Hyundai			KIA			JLR			Karma		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2024	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.5	0.5	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2026	0.4	0.4	0.0	0.3	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2027	0.3	0.3	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2028	0.4	0.4	0.0	0.2	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2029	0.8	0.8	0.0	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0
2030	0.7	0.7	0.0	0.2	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0
2031	0.8	0.7	0.0	0.2	0.3	0.2	0.0	0.1	0.0	0.0	0.0	0.0

Table 775 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Lucid			Mazda			Mercedes-Benz			Mitsubishi		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2024	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
2025	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.2	0.2	0.0
2026	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.1	0.0
2027	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.3	0.0	0.1	0.1	0.0
2028	0.0	0.0	0.0	0.3	0.2	0.0	0.5	0.5	0.0	0.1	0.1	0.0
2029	0.0	0.0	0.0	0.2	0.2	0.0	0.5	0.4	0.0	0.1	0.1	0.0
2030	0.0	0.0	0.0	0.4	0.3	-0.1	0.4	0.4	0.0	0.1	0.1	0.0
2031	0.0	0.0	0.0	0.3	0.2	-0.1	0.4	0.3	0.0	0.1	0.1	0.0

Table 776 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Nissan			Stellantis			Subaru			Tesla		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023	0.3	0.3	0.0	1.3	1.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2024	0.3	0.3	0.0	2.1	2.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0
2025	0.6	0.6	0.0	3.4	3.4	0.0	0.3	0.3	0.0	0.0	0.0	0.0
2026	0.6	0.6	0.0	2.8	2.8	0.0	0.4	0.4	0.0	0.0	0.0	0.0
2027	0.6	0.8	0.2	2.2	2.4	0.2	0.5	0.5	0.0	0.0	0.0	0.0
2028	1.2	1.7	0.5	2.1	2.3	0.2	0.6	0.6	0.0	0.0	0.0	0.0
2029	1.0	1.5	0.5	2.8	3.0	0.2	1.7	1.7	0.0	0.0	0.0	0.0
2030	0.9	1.4	0.5	2.6	2.8	0.2	1.5	1.5	0.0	0.0	0.0	0.0
2031	0.8	1.2	0.4	2.4	2.6	0.2	1.4	1.3	-0.1	0.0	0.0	0.0

Table 777 - Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Regulatory Costs ($b) for Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002												
	Toyota			Volvo			VWA			Total		
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference	No Action Alternative (Baseline)	Alternative PC2LT002	Difference
2022	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	1.1	1.1	0.0
2023	0.2	0.2	0.0	0.0	0.0	0.0	0.3	0.3	0.0	5.2	5.2	0.0
2024	0.7	0.7	0.0	0.0	0.0	0.0	0.3	0.3	0.0	10.4	10.4	0.0
2025	0.8	0.8	0.0	0.1	0.1	0.0	0.5	0.5	0.0	14.1	14.1	0.0
2026	1.5	1.5	0.0	0.1	0.1	0.0	0.4	0.4	0.0	14.7	14.7	0.0
2027	1.0	1.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0	12.3	14.2	1.9
2028	0.9	0.9	0.0	0.0	0.0	0.0	0.2	0.2	0.0	13.9	16.0	2.1
2029	1.6	1.6	0.0	0.0	0.0	0.0	0.2	0.2	0.0	17.1	19.1	2.0
2030	1.7	1.7	0.0	0.1	0.1	0.0	1.0	0.7	-0.2	16.9	18.5	1.6
2031	1.9	1.8	-0.1	0.1	0.1	0.0	0.9	0.6	-0.2	16.4	17.7	1.3

Technology Costs, Price Increases, Sales, and Labor Utilization

Table 778 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	1,000	1,000	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,365	1,365	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,375	1,375	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	17	20	2	13%	1,163	1,310	147	13%	15.1	15.1	0.0	0.0%	946	949	3.5	0.4%
2028	20	22	2	9%	1,287	1,403	116	9%	15.4	15.4	0.0	0.0%	969	971	1.8	0.2%
2029	23	26	2	10%	1,517	1,673	156	10%	15.4	15.4	0.0	0.0%	973	976	2.6	0.3%
2030	24	26	2	8%	1,574	1,706	132	8%	15.1	15.1	0.0	0.0%	959	961	2.8	0.3%
2031	24	25	1	5%	1,605	1,686	81	5%	14.9	15.0	0.0	0.0%	948	949	1.6	0.2%

Table 779 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,131	1,131	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,081	1,081	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	5	0	6%	1,010	1,070	60	6%	5.1	5.1	0.0	0.1%	285	285	0.1	0.0%
2028	6	6	0	-6%	1,132	1,062	-69	-6%	5.2	5.2	0.0	0.0%	289	287	-1.7	-0.6%
2029	6	7	0	6%	1,196	1,271	75	6%	5.2	5.2	0.0	-0.1%	288	287	-1.0	-0.3%
2030	7	7	0	6%	1,364	1,448	83	6%	5.1	5.1	0.0	-0.1%	285	285	-0.6	-0.2%
2031	8	8	0	-1%	1,509	1,499	-10	-1%	5.0	5.0	0.0	0.0%	282	281	-1.2	-0.4%

Table 780 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,078	1,078	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,490	1,490	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,530	1,530	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	12	14	2	15%	1,242	1,435	193	16%	9.9	9.9	0.0	-0.1%	661	665	3.4	0.5%
2028	14	16	2	15%	1,366	1,577	211	15%	10.2	10.2	0.0	0.0%	680	683	3.6	0.5%
2029	17	19	2	12%	1,680	1,877	197	12%	10.2	10.2	0.0	0.0%	685	688	3.6	0.5%
2030	17	18	2	9%	1,680	1,837	157	9%	10.0	10.1	0.0	0.0%	673	677	3.3	0.5%
2031	16	18	1	8%	1,653	1,780	127	8%	9.9	9.9	0.0	0.0%	666	668	2.8	0.4%

Table 781 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,714	1,714	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	1	1	0	0%	1,436	1,436	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-2%	1,324	1,301	-23	-2%	0.4	0.4	0.0	0.0%	19	19	0.0	0.0%
2028	0	0	0	0%	1,229	1,231	2	0%	0.4	0.4	0.0	0.0%	19	19	0.0	0.0%
2029	0	0	0	0%	1,059	1,058	0	0%	0.4	0.4	0.0	0.0%	19	19	0.0	0.1%
2030	0	0	0	-1%	1,139	1,124	-14	-1%	0.4	0.4	0.0	0.0%	19	19	0.0	0.1%
2031	1	1	0	-5%	1,541	1,470	-71	-5%	0.4	0.4	0.0	0.0%	19	19	0.0	0.0%

Table 782 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	3	3	0	3%	1,412	1,458	46	3%	1.8	1.8	0.0	0.0%	155	155	-0.1	-0.1%
2028	3	4	0	2%	1,889	1,929	40	2%	1.8	1.8	0.0	0.0%	159	159	0.0	0.0%
2029	4	4	0	2%	2,230	2,266	36	2%	1.8	1.8	0.0	0.0%	161	161	0.0	0.0%
2030	4	4	0	2%	1,995	2,027	32	2%	1.8	1.8	0.0	0.0%	158	158	0.0	0.0%
2031	3	3	0	1%	1,814	1,839	25	1%	1.8	1.8	0.0	0.0%	156	156	0.0	0.0%

Table 783 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	4	4	0	0%	2,267	2,267	0	0%	1.9	1.9	0.0	0.0%	135	135	0.0	0.0%
2026	4	4	0	0%	2,165	2,165	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2027	3	4	0	11%	1,798	1,999	201	11%	1.9	1.9	0.0	0.0%	140	140	0.6	0.4%
2028	3	4	0	11%	1,690	1,875	185	11%	2.0	2.0	0.0	0.0%	143	143	0.5	0.4%
2029	4	4	1	26%	1,770	2,230	461	26%	2.0	2.0	0.0	0.0%	143	144	1.3	0.9%
2030	4	4	1	23%	1,786	2,194	407	23%	2.0	2.0	0.0	0.0%	141	142	1.1	0.8%
2031	4	5	1	17%	2,120	2,481	361	17%	1.9	1.9	0.0	0.0%	140	141	1.0	0.7%

Table 784 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	2	3	1	72%	1,128	1,935	807	72%	1.5	1.5	0.0	0.0%	124	126	2.7	2.2%
2028	3	3	0	11%	1,689	1,870	181	11%	1.5	1.5	0.0	0.0%	128	129	0.7	0.6%
2029	2	3	0	10%	1,621	1,784	163	10%	1.5	1.5	0.0	0.0%	127	128	0.6	0.5%
2030	2	2	0	10%	1,447	1,590	142	10%	1.5	1.5	0.0	0.0%	125	126	0.6	0.5%
2031	2	2	0	7%	1,276	1,365	88	7%	1.5	1.5	0.0	0.0%	123	123	0.5	0.4%

Table 785 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,039	1,039	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	10%	945	1,039	94	10%	0.9	0.9	0.0	0.0%	21	21	0.0	-0.1%
2028	1	1	0	9%	901	981	79	9%	0.9	0.9	0.0	0.0%	21	21	0.0	-0.1%
2029	1	2	0	11%	1,472	1,638	166	11%	0.9	0.9	0.0	-0.1%	22	22	0.0	-0.1%
2030	1	1	0	10%	1,363	1,495	132	10%	0.9	0.9	0.0	0.0%	22	22	0.0	-0.2%
2031	1	2	0	7%	1,568	1,683	115	7%	0.9	0.9	0.0	0.0%	22	22	0.0	-0.1%

Table 786 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	717	717	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	675	668	-8	-1%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2028	0	1	0	46%	665	975	310	47%	0.6	0.6	0.0	0.0%	26	26	0.0	0.1%
2029	1	1	0	28%	1,083	1,391	308	28%	0.6	0.6	0.0	0.0%	26	26	0.0	0.1%
2030	1	1	0	27%	1,371	1,736	364	27%	0.6	0.6	0.0	0.0%	25	26	0.2	0.7%
2031	1	1	0	5%	1,519	1,597	79	5%	0.6	0.6	0.0	0.0%	25	25	-0.1	-0.6%

Table 787 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,151	2,151	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,765	1,765	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	1,236	1,234	-2	0%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2028	0	0	0	0%	1,060	1,060	-1	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2029	0	0	0	0%	858	858	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2030	0	0	0	7%	913	976	63	7%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2031	0	0	0	19%	612	729	117	19%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%

Table 788 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%

Table 789 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.1%	0	0	0.0	-0.1%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.1%	0	0	0.0	-0.1%

Table 790 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	1%	1,485	1,499	14	1%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2028	0	0	0	-9%	1,499	1,366	-133	-9%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2029	0	0	0	-8%	1,712	1,572	-140	-8%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2030	0	0	0	-13%	2,257	1,960	-297	-13%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2031	0	0	0	-19%	2,059	1,657	-402	-20%	0.2	0.2	0.0	0.0%	2	2	0.0	-0.1%

Table 791 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	0	0	-6%	1,746	1,690	-56	-3%	0.3	0.3	0.0	0.0%	10	10	0.0	-0.1%
2028	1	1	0	-5%	2,506	2,381	-125	-5%	0.3	0.3	0.0	0.0%	11	11	0.0	0.0%
2029	1	1	0	-9%	2,293	2,076	-217	-9%	0.3	0.3	0.0	0.0%	10	10	-0.1	-0.6%
2030	1	1	0	-10%	2,102	1,883	-219	-10%	0.3	0.3	0.0	0.0%	10	10	-0.1	-0.5%
2031	1	0	0	-14%	1,919	1,653	-266	-14%	0.3	0.3	0.0	0.0%	10	10	-0.1	-0.6%

Table 792 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,834	-12	-1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2028	0	0	0	0%	1,630	1,626	-4	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2029	0	0	0	0%	1,448	1,443	-4	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2030	0	0	0	0%	1,298	1,294	-4	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2031	0	0	0	20%	1,355	1,629	274	20%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%

Table 793 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	860	860	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,319	1,319	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,241	1,241	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	26%	1,151	1,451	300	26%	1.0	1.0	0.0	0.0%	61	61	0.0	0.0%
2028	2	2	1	45%	1,623	2,350	727	45%	1.0	1.0	0.0	0.0%	63	63	0.3	0.5%
2029	1	2	1	52%	1,422	2,159	737	52%	1.0	1.0	0.0	0.0%	63	63	0.3	0.4%
2030	1	2	1	58%	1,388	2,200	812	58%	1.0	1.0	0.0	0.0%	62	62	0.5	0.8%
2031	2	2	1	38%	1,666	2,295	629	38%	1.0	1.0	0.0	0.0%	62	62	0.3	0.4%

Table 794 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,476	2,476	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,029	2,029	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	3	0	8%	1,579	1,714	135	9%	1.7	1.7	0.0	0.0%	105	105	0.5	0.4%
2028	3	3	0	9%	1,487	1,622	135	9%	1.8	1.8	0.0	0.0%	107	108	0.5	0.5%
2029	3	4	0	8%	1,889	2,035	146	8%	1.8	1.8	0.0	0.0%	109	110	0.6	0.6%
2030	3	3	0	9%	1,762	1,912	150	8%	1.7	1.7	0.0	0.0%	107	108	0.6	0.6%
2031	3	3	0	7%	1,739	1,877	138	8%	1.7	1.7	0.0	0.0%	106	106	0.5	0.5%

Table 795 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	815	-25	-3%	0.8	0.8	0.0	0.0%	42	42	0.0	-0.1%
2028	1	1	0	-3%	1,047	1,012	-35	-3%	0.8	0.8	0.0	0.0%	43	43	0.0	-0.1%
2029	2	2	0	-2%	2,425	2,383	-42	-2%	0.8	0.8	0.0	0.0%	43	43	0.0	-0.1%
2030	2	2	0	-3%	2,161	2,087	-75	-3%	0.8	0.8	0.0	0.0%	43	43	0.0	-0.1%
2031	2	1	0	-7%	1,948	1,819	-129	-7%	0.8	0.8	0.0	0.0%	42	42	-0.1	-0.2%

Table 796 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	0.1%	56	56	0.0	0.0%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.0%	56	56	0.0	-0.1%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.1%	56	56	-0.1	-0.1%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.1%	55	55	-0.1	-0.1%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.0%	54	54	0.0	0.0%

Table 797 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	717	717	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	1,014	1,014	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	740	715	-25	-3%	2.5	2.5	0.0	0.0%	172	172	-0.1	0.0%
2028	2	2	0	-7%	668	623	-45	-7%	2.5	2.5	0.0	0.0%	175	175	-0.2	-0.1%
2029	2	2	0	-4%	931	897	-34	-4%	2.5	2.5	0.0	0.0%	176	176	-0.1	-0.1%
2030	3	3	0	-2%	1,326	1,296	-30	-2%	2.5	2.5	0.0	0.0%	175	175	-0.1	-0.1%
2031	3	3	0	-8%	1,386	1,273	-114	-8%	2.4	2.4	0.0	0.0%	173	173	-0.3	-0.2%

Table 798 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	622	-55	-8%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2028	0	0	0	-10%	531	477	-54	-10%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2029	0	0	0	-16%	337	284	-53	-16%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.2%
2030	0	0	0	-1%	1,169	1,158	-11	-1%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2031	0	0	0	-7%	1,016	944	-72	-7%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%

Table 799 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT002																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT002	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	940	940	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,243	1,243	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,196	1,196	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	11%	850	946	95	11%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2028	1	1	0	7%	858	920	62	7%	0.7	0.7	0.0	0.0%	8	8	0.0	0.0%
2029	0	1	0	6%	744	787	44	6%	0.7	0.7	0.0	0.0%	8	8	0.0	0.0%
2030	1	1	0	-19%	1,889	1,534	-355	-19%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2031	1	1	0	-14%	1,698	1,467	-231	-14%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%

Table 800 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	1,000	1,000	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,365	1,365	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,375	1,375	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	17	21	4	23%	1,163	1,428	265	23%	15.1	15.1	0.0	0.0%	946	952	6.6	0.7%
2028	20	25	5	24%	1,287	1,596	309	24%	15.4	15.4	0.0	0.0%	969	975	6.6	0.7%
2029	23	29	5	24%	1,517	1,874	357	24%	15.4	15.4	0.0	0.0%	973	980	7.5	0.8%
2030	24	29	5	21%	1,574	1,910	336	21%	15.1	15.1	0.0	0.0%	959	966	7.0	0.7%
2031	24	27	3	14%	1,605	1,826	221	14%	14.9	15.0	0.0	0.0%	948	953	5.3	0.6%

Table 801 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,131	1,131	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,081	1,081	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	5	0	2%	1,010	1,029	19	2%	5.1	5.2	0.0	0.2%	285	285	0.6	0.2%
2028	6	6	0	0%	1,132	1,128	-3	0%	5.2	5.2	0.0	0.3%	289	290	0.4	0.1%
2029	6	7	0	7%	1,196	1,283	87	7%	5.2	5.2	0.0	0.2%	288	289	0.7	0.2%
2030	7	7	0	5%	1,364	1,439	75	5%	5.1	5.1	0.0	0.2%	285	286	0.7	0.2%
2031	8	7	-1	-9%	1,509	1,369	-140	-9%	5.0	5.0	0.0	0.3%	282	282	-0.4	-0.1%

Table 802 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,078	1,078	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,490	1,490	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,530	1,530	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	12	16	4	32%	1,242	1,636	394	32%	9.9	9.9	0.0	-0.2%	661	667	6.0	0.9%
2028	14	19	5	34%	1,366	1,836	470	34%	10.2	10.2	0.0	-0.2%	680	686	6.2	0.9%
2029	17	22	5	29%	1,680	2,175	495	29%	10.2	10.2	0.0	-0.1%	685	692	6.8	1.0%
2030	17	21	5	27%	1,680	2,149	469	28%	10.0	10.0	0.0	-0.1%	673	680	6.3	0.9%
2031	16	20	4	24%	1,653	2,057	404	24%	9.9	9.9	0.0	-0.1%	666	671	5.7	0.9%

Table 803 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,714	1,714	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	1	1	0	0%	1,436	1,436	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-2%	1,324	1,302	-22	-2%	0.4	0.4	0.0	0.0%	19	18	0.0	-0.1%
2028	0	0	0	2%	1,229	1,257	28	2%	0.4	0.4	0.0	0.0%	19	19	0.0	0.0%
2029	0	0	0	2%	1,059	1,085	26	2%	0.4	0.4	0.0	0.0%	19	19	0.0	0.1%
2030	0	0	0	1%	1,139	1,510	371	33%	0.4	0.4	0.0	0.0%	19	19	0.0	0.1%
2031	1	0	0	-12%	1,541	1,350	-191	-12%	0.4	0.4	0.0	0.1%	19	19	-0.1	-0.4%

Table 804 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	3	2	0	0%	1,412	1,409	-3	0%	1.8	1.8	0.0	-0.1%	155	155	-0.2	-0.2%
2028	3	4	0	3%	1,889	1,956	67	4%	1.8	1.8	0.0	-0.1%	159	159	-0.1	-0.1%
2029	4	4	0	3%	2,230	2,290	59	3%	1.8	1.8	0.0	-0.1%	161	161	0.0	0.0%
2030	4	4	0	3%	1,995	2,048	53	3%	1.8	1.8	0.0	-0.1%	158	158	0.0	0.0%
2031	3	3	0	2%	1,814	1,858	44	2%	1.8	1.8	0.0	-0.1%	156	156	0.0	0.0%

Table 805 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	4	4	0	0%	2,267	2,267	0	0%	1.9	1.9	0.0	0.0%	135	135	0.0	0.0%
2026	4	4	0	0%	2,165	2,165	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2027	3	5	1	42%	1,798	2,562	764	42%	1.9	1.9	0.0	-0.1%	140	142	2.2	1.6%
2028	3	5	1	42%	1,690	2,397	707	42%	2.0	2.0	0.0	-0.1%	143	145	2.1	1.4%
2029	4	5	2	53%	1,770	2,699	930	53%	2.0	2.0	0.0	0.0%	143	146	2.7	1.9%
2030	4	5	2	47%	1,786	2,633	847	47%	2.0	2.0	0.0	0.0%	141	143	2.4	1.7%
2031	4	5	1	24%	2,120	2,620	501	24%	1.9	1.9	0.0	0.0%	140	142	2.0	1.4%

Table 806 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	2	3	1	71%	1,128	1,934	806	71%	1.5	1.5	0.0	0.0%	124	126	2.7	2.2%
2028	3	4	1	44%	1,689	2,434	745	44%	1.5	1.5	0.0	0.0%	128	130	2.3	1.8%
2029	2	4	1	49%	1,621	2,411	791	49%	1.5	1.5	0.0	0.0%	127	130	2.6	2.0%
2030	2	3	1	49%	1,447	2,161	714	49%	1.5	1.5	0.0	0.0%	125	127	2.3	1.9%
2031	2	3	1	48%	1,276	1,890	613	48%	1.5	1.5	0.0	0.1%	123	125	2.0	1.6%

Table 807 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,039	1,039	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	13%	945	1,065	120	13%	0.9	0.9	0.0	0.1%	21	21	0.0	0.0%
2028	1	1	0	16%	901	1,044	142	16%	0.9	0.9	0.0	0.1%	21	21	0.0	0.0%
2029	1	1	0	8%	1,472	1,590	118	8%	0.9	0.9	0.0	0.1%	22	22	0.0	0.0%
2030	1	1	0	6%	1,363	1,448	85	6%	0.9	0.9	0.0	0.1%	22	22	0.0	-0.1%
2031	1	1	0	5%	1,568	1,639	72	5%	0.9	0.9	0.0	0.1%	22	22	0.0	-0.1%

Table 808 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	717	717	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-2%	675	663	-12	-2%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2028	0	1	0	81%	665	1,201	536	81%	0.6	0.6	0.0	0.1%	26	26	0.0	0.0%
2029	1	1	0	49%	1,083	1,608	525	49%	0.6	0.6	0.0	0.1%	26	26	0.0	0.1%
2030	1	1	0	39%	1,371	1,907	535	39%	0.6	0.6	0.0	0.1%	25	26	0.2	0.9%
2031	1	1	0	21%	1,519	1,843	324	21%	0.6	0.6	0.0	0.1%	25	25	0.0	0.0%

Table 809 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,151	2,151	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,765	1,765	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	1,236	1,234	-2	0%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2028	0	0	0	0%	1,060	1,060	-1	0%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2029	0	0	0	22%	858	1,050	192	22%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2030	0	0	0	27%	913	1,162	249	27%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2031	0	0	0	122%	612	1,360	748	122%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%

Table 810 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%

Table 811 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%

Table 812 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	1%	1,485	1,499	14	1%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2028	0	0	0	-9%	1,499	1,366	-133	-9%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2029	0	0	0	-8%	1,712	1,573	-139	-8%	0.2	0.2	0.0	0.0%	2	2	0.0	-0.1%
2030	0	0	0	-13%	2,257	1,961	-297	-13%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2031	0	0	0	-20%	2,059	1,658	-401	-19%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%

Table 813 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	1	0	23%	1,746	2,102	357	20%	0.3	0.3	0.0	0.0%	10	10	0.2	2.3%
2028	1	1	0	7%	2,506	2,686	180	7%	0.3	0.3	0.0	0.0%	11	11	0.1	1.1%
2029	1	1	0	0%	2,293	2,299	6	0%	0.3	0.3	0.0	0.0%	10	11	0.0	0.4%
2030	1	1	0	-4%	2,102	2,017	-85	-4%	0.3	0.3	0.0	0.0%	10	10	0.0	0.3%
2031	1	0	0	-8%	1,919	1,762	-157	-8%	0.3	0.3	0.0	0.1%	10	10	0.0	0.1%

Table 814 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,833	-13	-1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2028	0	0	0	-1%	1,630	1,617	-14	-1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2029	0	0	0	-1%	1,448	1,434	-14	-1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2030	0	0	0	-1%	1,298	1,285	-14	-1%	0.1	0.1	0.0	0.1%	2	2	0.0	0.0%
2031	0	0	0	-1%	1,355	1,341	-14	-1%	0.1	0.1	0.0	0.1%	2	2	0.0	0.1%

Table 815 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	860	860	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,319	1,319	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,241	1,241	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	26%	1,151	1,451	300	26%	1.0	1.0	0.0	0.0%	61	61	0.0	0.0%
2028	2	2	1	43%	1,623	2,318	696	43%	1.0	1.0	0.0	0.1%	63	63	0.4	0.6%
2029	1	2	1	50%	1,422	2,133	711	50%	1.0	1.0	0.0	0.1%	63	63	0.3	0.5%
2030	1	2	1	49%	1,388	2,061	673	49%	1.0	1.0	0.0	0.1%	62	62	0.3	0.5%
2031	2	2	1	31%	1,666	2,177	511	31%	1.0	1.0	0.0	0.1%	62	62	0.1	0.2%

Table 816 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,476	2,476	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,029	2,029	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	4	1	32%	1,579	2,081	502	32%	1.7	1.7	0.0	-0.1%	105	107	1.8	1.7%
2028	3	3	1	32%	1,487	1,960	473	32%	1.8	1.8	0.0	-0.1%	107	109	1.7	1.6%
2029	3	4	1	32%	1,889	2,487	598	32%	1.8	1.8	0.0	-0.1%	109	111	1.6	1.5%
2030	3	4	1	32%	1,762	2,332	569	32%	1.7	1.7	0.0	-0.1%	107	108	1.5	1.4%
2031	3	4	1	30%	1,739	2,256	517	30%	1.7	1.7	0.0	-0.1%	106	107	1.4	1.3%

Table 817 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	815	-26	-3%	0.8	0.8	0.0	-0.1%	42	42	-0.1	-0.2%
2028	1	1	0	-3%	1,047	1,016	-30	-3%	0.8	0.8	0.0	-0.1%	43	43	-0.1	-0.2%
2029	2	2	0	-2%	2,425	2,389	-36	-1%	0.8	0.8	0.0	0.0%	43	43	-0.1	-0.1%
2030	2	2	0	-3%	2,161	2,093	-69	-3%	0.8	0.8	0.0	-0.1%	43	43	-0.1	-0.1%
2031	2	1	0	-6%	1,948	1,825	-123	-6%	0.8	0.8	0.0	-0.1%	42	42	-0.1	-0.3%

Table 818 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	0.2%	56	56	0.1	0.2%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	56	56	0.1	0.2%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	56	56	0.1	0.1%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	55	55	0.1	0.2%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	54	55	0.1	0.2%

Table 819 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	717	717	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	1,014	1,014	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	740	715	-25	-3%	2.5	2.5	0.0	0.0%	172	172	-0.1	0.0%
2028	2	2	0	2%	668	682	14	2%	2.5	2.5	0.0	0.0%	175	175	0.0	0.0%
2029	2	2	0	4%	931	967	36	4%	2.5	2.5	0.0	0.0%	176	176	0.1	0.1%
2030	3	3	0	5%	1,326	1,391	65	5%	2.5	2.5	0.0	0.0%	175	175	0.1	0.1%
2031	3	3	0	-2%	1,386	1,354	-33	-2%	2.4	2.4	0.0	0.0%	173	173	-0.1	-0.1%

Table 820 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	623	-55	-8%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.1%
2028	0	0	0	-10%	531	478	-53	-10%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.1%
2029	0	0	0	-16%	337	285	-53	-16%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2030	0	0	0	-2%	1,169	1,140	-29	-2%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2031	0	0	0	-9%	1,016	929	-86	-9%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%

Table 821 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC1LT3																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC1LT3	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	940	940	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,243	1,243	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,196	1,196	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	13%	850	962	112	13%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2028	1	1	0	12%	858	961	103	12%	0.7	0.7	0.0	0.0%	8	8	0.0	0.0%
2029	0	1	0	15%	744	853	109	15%	0.7	0.7	0.0	0.0%	8	8	0.0	0.0%
2030	1	1	0	2%	1,889	1,932	43	2%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2031	1	1	0	3%	1,698	1,744	46	3%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%

Table 822 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	1,000	1,000	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,365	1,365	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,375	1,375	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	17	23	5	30%	1,163	1,507	344	30%	15.1	15.0	0.0	-0.1%	946	954	7.9	0.8%
2028	20	26	6	31%	1,287	1,692	405	32%	15.4	15.4	0.0	0.0%	969	977	8.1	0.8%
2029	23	30	7	30%	1,517	1,969	452	30%	15.4	15.4	0.0	0.0%	973	982	8.8	0.9%
2030	24	30	6	27%	1,574	2,011	437	28%	15.1	15.1	0.0	0.0%	959	967	8.4	0.9%
2031	24	29	5	21%	1,605	1,937	333	21%	14.9	14.9	0.0	0.0%	948	955	7.1	0.8%

Table 823 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,131	1,131	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,081	1,081	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	6	0	6%	1,010	1,068	58	6%	5.1	5.2	0.0	0.3%	285	285	0.7	0.2%
2028	6	6	0	6%	1,132	1,197	66	6%	5.2	5.2	0.0	0.2%	289	290	0.5	0.2%
2029	6	7	1	15%	1,196	1,379	183	15%	5.2	5.2	0.0	0.1%	288	289	0.8	0.3%
2030	7	8	1	13%	1,364	1,555	190	14%	5.1	5.1	0.0	0.2%	285	286	1.1	0.4%
2031	8	7	0	-2%	1,509	1,475	-34	-2%	5.0	5.0	0.0	0.3%	282	282	0.0	0.0%

Table 824 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,078	1,078	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,490	1,490	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,530	1,530	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	12	17	5	39%	1,242	1,735	493	40%	9.9	9.9	0.0	-0.2%	661	668	7.2	1.1%
2028	14	20	6	42%	1,366	1,945	580	42%	10.2	10.2	0.0	-0.2%	680	687	7.6	1.1%
2029	17	23	6	35%	1,680	2,269	589	35%	10.2	10.2	0.0	-0.1%	685	693	8.0	1.2%
2030	17	22	6	33%	1,680	2,243	563	33%	10.0	10.0	0.0	-0.1%	673	681	7.4	1.1%
2031	16	22	5	31%	1,653	2,172	519	31%	9.9	9.9	0.0	-0.1%	666	673	7.1	1.1%

Table 825 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,714	1,714	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	1	1	0	0%	1,436	1,436	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-2%	1,324	1,302	-22	-2%	0.4	0.4	0.0	0.0%	19	18	0.0	-0.1%
2028	0	0	0	2%	1,229	1,257	28	2%	0.4	0.4	0.0	0.0%	19	19	0.0	0.0%
2029	0	0	0	2%	1,059	1,246	187	18%	0.4	0.4	0.0	0.0%	19	19	0.0	0.1%
2030	0	0	0	1%	1,139	1,717	579	51%	0.4	0.4	0.0	0.0%	19	19	0.0	0.0%
2031	1	1	0	-5%	1,541	1,468	-73	-5%	0.4	0.4	0.0	0.1%	19	19	0.0	-0.1%

Table 826 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	3	3	0	4%	1,412	1,473	61	4%	1.8	1.8	0.0	-0.2%	155	155	-0.3	-0.2%
2028	3	4	0	6%	1,889	2,015	125	7%	1.8	1.8	0.0	-0.1%	159	159	-0.1	-0.1%
2029	4	4	0	5%	2,230	2,342	111	5%	1.8	1.8	0.0	-0.1%	161	161	0.0	0.0%
2030	4	4	0	5%	1,995	2,095	100	5%	1.8	1.8	0.0	-0.1%	158	158	0.0	0.0%
2031	3	3	0	5%	1,814	1,901	87	5%	1.8	1.8	0.0	-0.1%	156	156	-0.1	0.0%

Table 827 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	4	4	0	0%	2,267	2,267	0	0%	1.9	1.9	0.0	0.0%	135	135	0.0	0.0%
2026	4	4	0	0%	2,165	2,165	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2027	3	5	2	44%	1,798	2,597	799	44%	1.9	1.9	0.0	-0.1%	140	142	2.2	1.6%
2028	3	5	1	43%	1,690	2,426	736	44%	2.0	2.0	0.0	-0.1%	143	145	2.2	1.5%
2029	4	5	2	54%	1,770	2,730	960	54%	2.0	2.0	0.0	0.0%	143	146	2.8	2.0%
2030	4	5	2	48%	1,786	2,651	865	48%	2.0	2.0	0.0	0.0%	141	143	2.5	1.8%
2031	4	5	1	31%	2,120	2,774	654	31%	1.9	1.9	0.0	0.0%	140	142	2.4	1.7%

Table 828 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	2	3	1	73%	1,128	1,952	824	73%	1.5	1.5	0.0	0.0%	124	126	2.7	2.2%
2028	3	4	1	48%	1,689	2,497	808	48%	1.5	1.5	0.0	0.0%	128	130	2.3	1.8%
2029	2	4	1	53%	1,621	2,472	852	53%	1.5	1.5	0.0	0.0%	127	130	2.6	2.0%
2030	2	3	1	57%	1,447	2,275	827	57%	1.5	1.5	0.0	0.0%	125	128	2.5	2.0%
2031	2	3	1	57%	1,276	2,001	725	57%	1.5	1.5	0.0	0.1%	123	125	2.2	1.8%

Table 829 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,039	1,039	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	0	49%	945	1,412	467	49%	0.9	0.9	0.0	0.1%	21	21	0.0	0.0%
2028	1	1	0	58%	901	1,421	520	58%	0.9	0.9	0.0	0.1%	21	21	0.0	0.0%
2029	1	2	1	38%	1,472	2,025	552	38%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2030	1	2	0	34%	1,363	1,831	468	34%	0.9	0.9	0.0	0.0%	22	22	0.0	-0.1%
2031	1	2	0	19%	1,568	1,859	291	19%	0.9	0.9	0.0	0.1%	22	22	0.0	0.0%

Table 830 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	717	717	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	675	667	-8	-1%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2028	0	1	0	91%	665	1,273	607	91%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2029	1	1	0	54%	1,083	1,668	585	54%	0.6	0.6	0.0	0.0%	26	26	0.0	0.1%
2030	1	1	0	46%	1,371	2,006	635	46%	0.6	0.6	0.0	0.0%	25	26	0.2	0.8%
2031	1	1	0	31%	1,519	1,994	476	31%	0.6	0.6	0.0	0.1%	25	26	0.0	0.1%

Table 831 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,151	2,151	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,765	1,765	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	1,236	1,234	-2	0%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2028	0	0	0	0%	1,060	1,060	-1	0%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2029	0	0	0	22%	858	1,050	193	22%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2030	0	0	0	27%	913	1,162	249	27%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2031	0	0	0	174%	612	1,680	1,068	174%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%

Table 832 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%

Table 833 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.1%	0	0	0.0	0.1%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.2%	0	0	0.0	0.2%

Table 834 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	2%	1,485	1,513	28	2%	0.2	0.2	0.0	-0.2%	2	2	0.0	-0.1%
2028	0	0	0	-8%	1,499	1,380	-119	-8%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2029	0	0	0	-5%	1,712	1,629	-83	-5%	0.2	0.2	0.0	0.0%	2	2	0.0	-0.1%
2030	0	0	0	-11%	2,257	2,016	-241	-11%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2031	0	0	0	-17%	2,059	1,713	-346	-17%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%

Table 835 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	1	0	23%	1,746	2,103	357	20%	0.3	0.3	0.0	0.0%	10	10	0.2	2.3%
2028	1	1	0	7%	2,506	2,687	181	7%	0.3	0.3	0.0	0.0%	11	11	0.1	1.1%
2029	1	1	0	1%	2,293	2,314	21	1%	0.3	0.3	0.0	0.0%	10	11	0.0	0.4%
2030	1	1	0	-3%	2,102	2,031	-71	-3%	0.3	0.3	0.0	0.0%	10	10	0.0	0.3%
2031	1	0	0	-7%	1,919	1,776	-143	-7%	0.3	0.3	0.0	0.1%	10	10	0.0	0.1%

Table 836 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,833	-13	-1%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2028	0	0	0	0%	1,630	1,637	6	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2029	0	0	0	0%	1,448	1,454	6	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2030	0	0	0	0%	1,298	1,304	6	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2031	0	0	0	21%	1,355	1,639	284	21%	0.1	0.1	0.0	0.1%	2	2	0.0	0.1%

Table 837 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	860	860	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,319	1,319	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,241	1,241	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	26%	1,151	1,451	300	26%	1.0	1.0	0.0	0.0%	61	61	0.0	0.0%
2028	2	2	1	41%	1,623	2,285	662	41%	1.0	1.0	0.0	0.0%	63	63	0.3	0.4%
2029	1	2	1	42%	1,422	2,021	599	42%	1.0	1.0	0.0	0.0%	63	63	0.2	0.4%
2030	1	2	1	50%	1,388	2,077	689	50%	1.0	1.0	0.0	0.0%	62	62	0.4	0.7%
2031	2	2	1	31%	1,666	2,180	514	31%	1.0	1.0	0.0	0.1%	62	62	0.2	0.3%

Table 838 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,476	2,476	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,029	2,029	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	4	1	53%	1,579	2,414	835	53%	1.7	1.7	0.0	-0.2%	105	108	3.1	2.9%
2028	3	4	1	52%	1,487	2,265	777	52%	1.8	1.8	0.0	-0.1%	107	110	3.0	2.8%
2029	3	5	2	51%	1,889	2,852	963	51%	1.8	1.8	0.0	-0.1%	109	112	2.9	2.6%
2030	3	5	2	50%	1,762	2,641	879	50%	1.7	1.7	0.0	-0.1%	107	110	2.6	2.4%
2031	3	4	1	46%	1,739	2,549	810	47%	1.7	1.7	0.0	-0.1%	106	108	2.3	2.1%

Table 839 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	815	-26	-3%	0.8	0.8	0.0	-0.2%	42	42	-0.1	-0.2%
2028	1	1	0	-2%	1,047	1,026	-21	-2%	0.8	0.8	0.0	-0.1%	43	43	-0.1	-0.2%
2029	2	2	0	-1%	2,425	2,399	-26	-1%	0.8	0.8	0.0	0.0%	43	43	-0.1	-0.1%
2030	2	2	0	-3%	2,161	2,102	-59	-3%	0.8	0.8	0.0	-0.1%	43	43	-0.1	-0.1%
2031	2	1	0	-6%	1,948	1,834	-113	-6%	0.8	0.8	0.0	-0.1%	42	42	-0.1	-0.3%

Table 840 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	0.2%	56	56	0.1	0.2%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	56	56	0.1	0.2%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.1%	56	56	0.0	0.1%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.1%	55	55	0.1	0.1%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	54	55	0.1	0.2%

Table 841 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	717	717	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	1,014	1,014	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	0%	740	740	0	0%	2.5	2.5	0.0	0.0%	172	172	-0.1	-0.1%
2028	2	2	0	19%	668	799	130	19%	2.5	2.5	0.0	0.0%	175	176	0.4	0.2%
2029	2	3	0	11%	931	1,029	98	11%	2.5	2.5	0.0	0.0%	176	176	0.2	0.1%
2030	3	4	0	10%	1,326	1,465	138	10%	2.5	2.5	0.0	0.0%	175	175	0.2	0.1%
2031	3	3	0	3%	1,386	1,433	47	3%	2.4	2.4	0.0	0.0%	173	173	0.1	0.0%

Table 842 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	623	-55	-8%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.1%
2028	0	0	0	-10%	531	478	-53	-10%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.1%
2029	0	0	0	-16%	337	285	-53	-16%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2030	0	0	0	-9%	1,169	1,068	-101	-9%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%
2031	0	0	0	-12%	1,016	889	-126	-12%	0.1	0.1	0.0	0.0%	3	3	0.0	-0.1%

Table 843 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC2LT4																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC2LT4	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	940	940	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,243	1,243	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,196	1,196	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	17%	850	995	144	17%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2028	1	1	0	15%	858	989	131	15%	0.7	0.7	0.0	0.0%	8	8	0.0	0.0%
2029	0	1	0	18%	744	877	134	18%	0.7	0.7	0.0	0.0%	8	8	0.0	0.0%
2030	1	1	0	3%	1,889	1,953	64	3%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2031	1	1	0	5%	1,698	1,789	91	5%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%

Table 844 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	1,000	1,000	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,365	1,365	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,375	1,375	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	17	25	7	41%	1,163	1,638	475	41%	15.1	15.0	0.0	-0.1%	946	956	10.0	1.1%
2028	20	29	9	47%	1,287	1,889	602	47%	15.4	15.4	0.0	-0.1%	969	980	10.7	1.1%
2029	23	32	9	39%	1,517	2,113	596	39%	15.4	15.4	0.0	-0.1%	973	984	10.6	1.1%
2030	24	33	9	37%	1,574	2,179	605	38%	15.1	15.1	0.0	-0.1%	959	970	11.8	1.2%
2031	24	32	8	35%	1,605	2,172	567	35%	14.9	14.9	0.0	-0.1%	948	959	11.3	1.2%

Table 845 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,131	1,131	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,081	1,081	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	6	1	17%	1,010	1,182	173	17%	5.1	5.1	0.0	0.0%	285	285	0.2	0.1%
2028	6	7	1	23%	1,132	1,396	265	23%	5.2	5.2	0.0	-0.1%	289	289	0.0	0.0%
2029	6	8	2	27%	1,196	1,537	341	28%	5.2	5.2	0.0	-0.2%	288	288	0.1	0.0%
2030	7	9	2	24%	1,364	1,715	350	26%	5.1	5.1	0.0	-0.2%	285	286	0.4	0.1%
2031	8	8	0	5%	1,509	1,590	81	5%	5.0	5.0	0.0	0.1%	282	282	-0.4	-0.2%

Table 846 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,078	1,078	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,490	1,490	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,530	1,530	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	12	19	6	51%	1,242	1,874	632	51%	9.9	9.9	0.0	-0.2%	661	671	9.8	1.5%
2028	14	22	8	56%	1,366	2,140	775	57%	10.2	10.2	0.0	-0.1%	680	690	10.7	1.6%
2029	17	24	7	43%	1,680	2,406	726	43%	10.2	10.2	0.0	0.0%	685	695	10.5	1.5%
2030	17	24	7	42%	1,680	2,413	733	44%	10.0	10.0	0.0	0.0%	673	685	11.4	1.7%
2031	16	24	8	49%	1,653	2,467	813	49%	9.9	9.9	0.0	-0.2%	666	677	11.7	1.8%

Table 847 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,714	1,714	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	1	1	0	0%	1,436	1,436	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	-2%	1,324	1,302	-22	-2%	0.4	0.4	0.0	-0.1%	19	18	0.0	-0.1%
2028	0	0	0	2%	1,229	1,258	28	2%	0.4	0.4	0.0	-0.1%	19	19	0.0	0.0%
2029	0	0	0	2%	1,059	1,472	414	39%	0.4	0.4	0.0	-0.1%	19	19	0.0	0.1%
2030	0	0	0	2%	1,139	1,900	761	67%	0.4	0.4	0.0	-0.1%	19	19	0.0	0.1%
2031	1	1	0	7%	1,541	1,720	179	12%	0.4	0.4	0.0	-0.1%	19	19	0.0	0.2%

Table 848 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	3	3	1	29%	1,412	1,829	417	30%	1.8	1.8	0.0	-0.2%	155	156	0.7	0.4%
2028	3	4	1	22%	1,889	2,315	426	23%	1.8	1.8	0.0	-0.1%	159	160	0.7	0.5%
2029	4	5	1	17%	2,230	2,604	374	17%	1.8	1.8	0.0	0.0%	161	162	0.8	0.5%
2030	4	4	1	17%	1,995	2,326	331	17%	1.8	1.8	0.0	0.0%	158	159	0.6	0.4%
2031	3	4	1	18%	1,814	2,148	334	18%	1.8	1.8	0.0	-0.2%	156	156	0.4	0.3%

Table 849 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	4	4	0	0%	2,267	2,267	0	0%	1.9	1.9	0.0	0.0%	135	135	0.0	0.0%
2026	4	4	0	0%	2,165	2,165	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2027	3	6	2	63%	1,798	2,939	1,141	63%	1.9	1.9	0.0	-0.1%	140	142	2.6	1.9%
2028	3	5	2	63%	1,690	2,762	1,072	63%	2.0	2.0	0.0	-0.1%	143	145	2.5	1.8%
2029	4	6	3	72%	1,770	3,042	1,272	72%	2.0	2.0	0.0	0.0%	143	146	3.1	2.2%
2030	4	6	2	65%	1,786	2,945	1,159	65%	2.0	2.0	0.0	0.0%	141	143	2.8	2.0%
2031	4	6	2	58%	2,120	3,359	1,239	58%	1.9	1.9	0.0	-0.1%	140	143	3.5	2.5%

Table 850 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	2	3	1	78%	1,128	2,008	880	78%	1.5	1.5	0.0	-0.1%	124	127	2.8	2.3%
2028	3	4	2	65%	1,689	2,785	1,095	65%	1.5	1.5	0.0	-0.1%	128	130	2.4	1.8%
2029	2	4	1	51%	1,621	2,451	831	51%	1.5	1.5	0.0	-0.1%	127	129	2.0	1.6%
2030	2	3	1	63%	1,447	2,362	914	63%	1.5	1.5	0.0	-0.1%	125	127	2.3	1.9%
2031	2	3	1	63%	1,276	2,077	801	63%	1.5	1.5	0.0	-0.1%	123	125	2.0	1.7%

Table 851 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,039	1,039	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	1	1	74%	945	1,643	697	74%	0.9	0.9	0.0	-0.1%	21	21	0.0	-0.1%
2028	1	1	1	69%	901	1,524	622	69%	0.9	0.9	0.0	-0.1%	21	21	0.0	-0.2%
2029	1	2	1	43%	1,472	2,110	638	43%	0.9	0.9	0.0	-0.1%	22	22	0.0	-0.2%
2030	1	2	1	44%	1,363	1,965	602	44%	0.9	0.9	0.0	-0.1%	22	22	-0.1	-0.3%
2031	1	2	0	22%	1,568	1,913	345	22%	0.9	0.9	0.0	0.0%	22	21	-0.2	-0.8%

Table 852 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	717	717	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	0	0	-1%	675	668	-8	-1%	0.6	0.6	0.0	-0.1%	25	25	0.0	-0.1%
2028	0	1	0	112%	665	1,413	748	112%	0.6	0.6	0.0	-0.1%	26	26	0.0	0.1%
2029	1	1	0	66%	1,083	1,799	716	66%	0.6	0.6	0.0	-0.1%	26	26	0.1	0.2%
2030	1	1	0	46%	1,371	2,000	629	46%	0.6	0.6	0.0	-0.1%	25	26	0.5	1.8%
2031	1	1	0	39%	1,519	2,109	591	39%	0.6	0.6	0.0	0.0%	25	26	0.4	1.6%

Table 853 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,151	2,151	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,765	1,765	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	1,236	1,234	-2	0%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%
2028	0	0	0	0%	1,060	1,060	-1	0%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2029	0	0	0	22%	858	1,050	192	22%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2030	0	0	0	27%	913	1,520	607	66%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2031	0	0	0	590%	612	4,452	3,839	627%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.2%

Table 854 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%

Table 855 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.1%	0	0	0.0	-0.1%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.3%	0	0	0.0	-0.3%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%

Table 856 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	2%	1,485	1,513	28	2%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2028	0	0	0	-8%	1,499	1,381	-119	-8%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2029	0	0	0	32%	1,712	2,254	542	32%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2030	0	0	0	14%	2,257	2,571	314	14%	0.2	0.2	0.0	0.0%	2	2	0.0	-0.1%
2031	0	0	0	9%	2,059	2,244	185	9%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.2%

Table 857 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	1	0	24%	1,746	2,119	373	21%	0.3	0.3	0.0	-0.1%	10	10	0.2	2.3%
2028	1	1	0	8%	2,506	2,704	198	8%	0.3	0.3	0.0	-0.1%	11	11	0.1	1.1%
2029	1	1	0	2%	2,293	2,330	37	2%	0.3	0.3	0.0	-0.1%	10	11	0.0	0.5%
2030	1	1	0	0%	2,102	2,110	8	0%	0.3	0.3	0.0	-0.1%	10	10	0.0	0.3%
2031	1	1	0	-2%	1,919	1,883	-37	-2%	0.3	0.3	0.0	-0.1%	10	10	0.0	0.0%

Table 858 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,834	-12	-1%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2028	0	0	0	0%	1,630	1,637	7	0%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2029	0	0	0	0%	1,448	1,454	6	0%	0.1	0.1	0.0	-0.1%	2	2	0.0	-0.1%
2030	0	0	0	52%	1,298	1,979	681	52%	0.1	0.1	0.0	-0.1%	2	2	0.2	9.8%
2031	0	0	0	46%	1,355	1,978	623	46%	0.1	0.1	0.0	0.0%	2	2	0.2	9.0%

Table 859 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	860	860	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,319	1,319	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,241	1,241	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	26%	1,151	1,470	319	28%	1.0	1.0	0.0	-0.1%	61	61	-0.1	-0.1%
2028	2	2	1	46%	1,623	2,376	753	46%	1.0	1.0	0.0	-0.1%	63	63	0.4	0.6%
2029	1	2	1	48%	1,422	2,102	680	48%	1.0	1.0	0.0	-0.1%	63	63	0.3	0.5%
2030	1	2	1	58%	1,388	2,193	805	58%	1.0	1.0	0.0	-0.1%	62	62	0.5	0.8%
2031	2	2	1	37%	1,666	2,283	617	37%	1.0	1.0	0.0	0.0%	62	62	0.3	0.4%

Table 860 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,476	2,476	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,029	2,029	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	5	2	68%	1,579	2,660	1,080	68%	1.7	1.7	0.0	-0.1%	105	109	4.1	3.9%
2028	3	4	2	67%	1,487	2,490	1,002	67%	1.8	1.8	0.0	-0.1%	107	111	4.0	3.7%
2029	3	5	2	59%	1,889	3,000	1,111	59%	1.8	1.8	0.0	0.0%	109	113	3.8	3.5%
2030	3	5	2	71%	1,762	3,025	1,263	72%	1.7	1.7	0.0	0.0%	107	111	4.3	4.0%
2031	3	5	2	62%	1,739	2,835	1,096	63%	1.7	1.7	0.0	-0.2%	106	109	3.4	3.3%

Table 861 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	815	-25	-3%	0.8	0.8	0.0	-0.1%	42	42	-0.1	-0.2%
2028	1	1	0	17%	1,047	1,228	181	17%	0.8	0.8	0.0	-0.1%	43	43	0.0	0.0%
2029	2	2	0	-8%	2,425	2,224	-201	-8%	0.8	0.8	0.0	0.0%	43	44	0.1	0.3%
2030	2	2	0	-10%	2,161	1,956	-205	-9%	0.8	0.8	0.0	0.0%	43	43	0.1	0.3%
2031	2	1	0	-13%	1,948	1,698	-250	-13%	0.8	0.8	0.0	-0.1%	42	42	0.0	0.0%

Table 862 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	0.0%	56	56	0.0	0.0%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.1%	56	56	-0.1	-0.1%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.2%	56	56	-0.1	-0.2%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.2%	55	55	-0.1	-0.2%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.1%	54	55	0.0	0.0%

Table 863 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	717	717	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	1,014	1,014	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	-3%	740	716	-24	-3%	2.5	2.5	0.0	-0.1%	172	172	-0.2	-0.1%
2028	2	2	1	33%	668	893	224	34%	2.5	2.5	0.0	-0.1%	175	176	0.7	0.4%
2029	2	3	1	24%	931	1,152	221	24%	2.5	2.5	0.0	-0.1%	176	177	0.6	0.3%
2030	3	4	1	20%	1,326	1,599	272	21%	2.5	2.5	0.0	-0.1%	175	176	0.6	0.3%
2031	3	4	1	24%	1,386	1,727	341	25%	2.4	2.4	0.0	-0.1%	173	175	1.2	0.7%

Table 864 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	-8%	677	622	-55	-8%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.2%
2028	0	0	0	-10%	531	477	-54	-10%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.2%
2029	0	0	0	-16%	337	284	-53	-16%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.2%
2030	0	0	0	-3%	1,169	1,137	-32	-3%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.2%
2031	0	0	0	-9%	1,016	926	-90	-9%	0.1	0.1	0.0	-0.1%	3	3	0.0	-0.2%

Table 865 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC3LT5																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC3LT5	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	940	940	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,243	1,243	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,196	1,196	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	17%	850	994	144	17%	0.6	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2028	1	1	0	68%	858	1,445	587	68%	0.7	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2029	0	1	0	73%	744	1,286	542	73%	0.7	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2030	1	1	0	3%	1,889	1,940	51	3%	0.6	0.6	0.0	-0.1%	8	8	0.0	-0.1%
2031	1	1	0	7%	1,698	1,823	124	7%	0.6	0.6	0.0	-0.1%	8	8	0.0	-0.1%

Table 866 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	132	132	0	0%	14.4	14.4	0.0	0.0%	880	880	0.0	0.0%
2023	7	7	0	0%	503	503	0	0%	15.2	15.2	0.0	0.0%	937	937	0.0	0.0%
2024	15	15	0	0%	1,000	1,000	0	0%	15.1	15.1	0.0	0.0%	944	944	0.0	0.0%
2025	20	20	0	0%	1,365	1,365	0	0%	14.5	14.5	0.0	0.0%	915	915	0.0	0.0%
2026	20	20	0	0%	1,375	1,375	0	0%	14.6	14.6	0.0	0.0%	922	922	0.0	0.0%
2027	17	27	10	56%	1,163	1,829	666	57%	15.1	15.0	0.0	-0.2%	946	959	13.3	1.4%
2028	20	33	13	66%	1,287	2,168	882	69%	15.4	15.3	0.0	-0.2%	969	983	14.5	1.5%
2029	23	38	15	63%	1,517	2,603	1,086	72%	15.4	15.3	-0.1	-0.3%	973	988	15.3	1.6%
2030	24	41	17	73%	1,574	2,885	1,311	83%	15.1	15.1	-0.1	-0.4%	959	978	19.6	2.0%
2031	24	45	21	88%	1,605	3,104	1,499	93%	14.9	14.9	-0.1	-0.5%	948	972	24.6	2.6%

Table 867 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Passenger Car Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	152	152	0	0%	5.5	5.5	0.0	0.0%	298	298	0.0	0.0%
2023	2	2	0	0%	434	434	0	0%	5.6	5.6	0.0	0.0%	305	305	0.0	0.0%
2024	5	5	0	0%	862	862	0	0%	5.5	5.5	0.0	0.0%	302	302	0.0	0.0%
2025	6	6	0	0%	1,131	1,131	0	0%	5.1	5.1	0.0	0.0%	281	281	0.0	0.0%
2026	5	5	0	0%	1,081	1,081	0	0%	5.0	5.0	0.0	0.0%	279	279	0.0	0.0%
2027	5	7	2	41%	1,010	1,444	434	43%	5.1	5.1	0.0	-0.2%	285	285	0.7	0.3%
2028	6	9	3	45%	1,132	1,684	552	49%	5.2	5.2	0.0	-0.6%	289	288	-0.8	-0.3%
2029	6	10	4	62%	1,196	2,114	918	77%	5.2	5.1	-0.1	-1.1%	288	287	-1.0	-0.3%
2030	7	11	4	62%	1,364	2,345	981	72%	5.1	5.1	0.0	-0.6%	285	286	1.0	0.4%
2031	8	10	3	38%	1,509	2,134	624	41%	5.0	5.0	0.0	0.2%	282	284	1.4	0.5%

Table 868 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Total) Light Truck Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	119	119	0	0%	9.0	9.0	0.0	0.0%	583	583	0.0	0.0%
2023	5	5	0	0%	543	543	0	0%	9.6	9.6	0.0	0.0%	632	632	0.0	0.0%
2024	10	10	0	0%	1,078	1,078	0	0%	9.7	9.7	0.0	0.0%	642	642	0.0	0.0%
2025	14	14	0	0%	1,490	1,490	0	0%	9.5	9.5	0.0	0.0%	634	634	0.0	0.0%
2026	15	15	0	0%	1,530	1,530	0	0%	9.6	9.6	0.0	0.0%	643	643	0.0	0.0%
2027	12	20	8	63%	1,242	2,028	786	63%	9.9	9.9	0.0	-0.1%	661	674	12.5	1.9%
2028	14	24	10	75%	1,366	2,414	1,049	77%	10.2	10.2	0.0	0.0%	680	695	15.3	2.3%
2029	17	28	11	63%	1,680	2,849	1,169	70%	10.2	10.2	0.0	0.0%	685	701	16.3	2.4%
2030	17	30	13	78%	1,680	3,159	1,479	88%	10.0	10.0	0.0	-0.4%	673	692	18.6	2.8%
2031	16	35	18	112%	1,653	3,600	1,946	118%	9.9	9.8	-0.1	-0.9%	666	689	23.2	3.5%

Table 869 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (BMW) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	420	420	0	0%	0.4	0.4	0.0	0.0%	17	17	0.0	0.0%
2023	0	0	0	0%	524	524	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2024	0	0	0	0%	1,110	1,110	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2025	1	1	0	0%	1,714	1,714	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2026	1	1	0	0%	1,436	1,436	0	0%	0.4	0.4	0.0	0.0%	18	18	0.0	0.0%
2027	0	0	0	2%	1,324	1,350	26	2%	0.4	0.4	0.0	-0.2%	19	18	0.0	-0.2%
2028	0	0	0	7%	1,229	1,585	356	29%	0.4	0.4	0.0	-0.3%	19	19	0.0	0.0%
2029	0	0	0	7%	1,059	1,998	939	89%	0.4	0.4	0.0	-0.5%	19	19	0.0	0.0%
2030	0	0	0	5%	1,139	2,509	1,371	120%	0.4	0.4	0.0	-0.5%	19	19	0.0	-0.3%
2031	1	1	0	22%	1,541	2,698	1,157	75%	0.4	0.4	0.0	-0.4%	19	19	0.0	0.1%

Table 870 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Ford) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	73	73	0	0%	1.6	1.6	0.0	0.0%	139	139	0.0	0.0%
2023	1	1	0	0%	787	787	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2024	3	3	0	0%	1,570	1,570	0	0%	1.7	1.7	0.0	0.0%	152	152	0.0	0.0%
2025	3	3	0	0%	1,663	1,663	0	0%	1.7	1.7	0.0	0.0%	149	149	0.0	0.0%
2026	3	3	0	0%	1,694	1,694	0	0%	1.7	1.7	0.0	0.0%	151	151	0.0	0.0%
2027	3	5	2	92%	1,412	2,713	1,301	92%	1.8	1.8	0.0	-0.1%	155	158	2.7	1.8%
2028	3	6	3	79%	1,889	3,381	1,492	79%	1.8	1.8	0.0	-0.1%	159	163	3.4	2.2%
2029	4	7	3	82%	2,230	4,060	1,830	82%	1.8	1.8	0.0	-0.1%	161	165	4.4	2.7%
2030	4	7	3	86%	1,995	3,733	1,737	87%	1.8	1.8	0.0	-0.4%	158	162	3.6	2.3%
2031	3	6	3	90%	1,814	3,478	1,663	92%	1.8	1.8	0.0	-0.8%	156	158	2.7	1.7%

Table 871 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (GM) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	269	269	0	0%	1.8	1.8	0.0	0.0%	125	125	0.0	0.0%
2023	0	0	0	0%	358	358	0	0%	1.9	1.9	0.0	0.0%	134	134	0.0	0.0%
2024	4	4	0	0%	1,880	1,880	0	0%	1.9	1.9	0.0	0.0%	138	138	0.0	0.0%
2025	4	4	0	0%	2,267	2,267	0	0%	1.9	1.9	0.0	0.0%	135	135	0.0	0.0%
2026	4	4	0	0%	2,165	2,165	0	0%	1.9	1.9	0.0	0.0%	136	136	0.0	0.0%
2027	3	6	2	67%	1,798	3,008	1,210	67%	1.9	1.9	0.0	-0.2%	140	143	2.9	2.0%
2028	3	6	2	69%	1,690	2,936	1,246	74%	2.0	2.0	0.0	-0.2%	143	146	2.9	2.0%
2029	4	6	3	82%	1,770	3,265	1,496	85%	2.0	2.0	0.0	-0.2%	143	146	3.4	2.4%
2030	4	6	3	74%	1,786	3,129	1,343	75%	2.0	2.0	0.0	-0.4%	141	143	2.7	1.9%
2031	4	9	4	108%	2,120	4,450	2,330	110%	1.9	1.9	0.0	-0.7%	140	145	5.1	3.6%

Table 872 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Honda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	1.5	1.5	0.0	0.0%	118	118	0.0	0.0%
2023	1	1	0	0%	560	560	0	0%	1.5	1.5	0.0	0.0%	125	125	0.0	0.0%
2024	1	1	0	0%	610	610	0	0%	1.5	1.5	0.0	0.0%	124	124	0.0	0.0%
2025	1	1	0	0%	1,040	1,040	0	0%	1.4	1.4	0.0	0.0%	119	119	0.0	0.0%
2026	2	2	0	0%	1,144	1,144	0	0%	1.4	1.4	0.0	0.0%	120	120	0.0	0.0%
2027	2	3	2	100%	1,128	2,260	1,132	100%	1.5	1.5	0.0	-0.2%	124	127	3.5	2.9%
2028	3	4	1	41%	1,689	2,390	701	42%	1.5	1.5	0.0	-0.3%	128	130	1.9	1.5%
2029	2	4	1	58%	1,621	2,576	956	59%	1.5	1.5	0.0	-0.5%	127	130	2.4	1.9%
2030	2	4	2	86%	1,447	2,711	1,264	87%	1.5	1.5	0.0	-0.5%	125	129	3.5	2.8%
2031	2	4	2	91%	1,276	2,442	1,166	91%	1.5	1.5	0.0	-0.4%	123	126	3.2	2.6%

Table 873 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Hyundai) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2023	0	0	0	0%	262	262	0	0%	0.9	0.9	0.0	0.0%	22	22	0.0	0.0%
2024	0	0	0	0%	458	458	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2025	1	1	0	0%	937	937	0	0%	0.9	0.9	0.0	0.0%	20	20	0.0	0.0%
2026	1	1	0	0%	1,039	1,039	0	0%	0.9	0.9	0.0	0.0%	21	21	0.0	0.0%
2027	1	2	1	80%	945	1,703	758	80%	0.9	0.9	0.0	-0.2%	21	21	-0.1	-0.3%
2028	1	2	1	97%	901	1,783	882	98%	0.9	0.9	0.0	-0.4%	21	21	-0.1	-0.5%
2029	1	2	1	82%	1,472	2,702	1,229	83%	0.9	0.9	0.0	-0.6%	22	22	0.2	0.7%
2030	1	2	1	84%	1,363	2,516	1,153	85%	0.9	0.9	0.0	-0.5%	22	22	0.2	0.7%
2031	1	2	1	65%	1,568	2,596	1,028	66%	0.9	0.9	0.0	-0.3%	22	22	0.0	0.2%

Table 874 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (KIA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2023	0	0	0	0%	132	132	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2024	0	0	0	0%	375	375	0	0%	0.6	0.6	0.0	0.0%	26	26	0.0	0.0%
2025	0	0	0	0%	514	514	0	0%	0.6	0.6	0.0	0.0%	24	24	0.0	0.0%
2026	0	0	0	0%	717	717	0	0%	0.6	0.6	0.0	0.0%	25	25	0.0	0.0%
2027	0	1	0	65%	675	1,115	440	65%	0.6	0.6	0.0	-0.2%	25	25	-0.1	-0.2%
2028	0	1	1	219%	665	2,130	1,465	220%	0.6	0.6	0.0	-0.3%	26	26	0.0	-0.1%
2029	1	2	1	123%	1,083	2,784	1,701	157%	0.6	0.6	0.0	-0.6%	26	26	-0.1	-0.3%
2030	1	2	1	121%	1,371	3,049	1,678	122%	0.6	0.6	0.0	-0.5%	25	26	0.9	3.3%
2031	1	2	1	119%	1,519	3,343	1,825	120%	0.6	0.6	0.0	-0.3%	25	27	1.0	4.0%

Table 875 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (JLR) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	478	478	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2023	0	0	0	0%	1,565	1,565	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2024	0	0	0	0%	2,130	2,130	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2025	0	0	0	0%	2,151	2,151	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2026	0	0	0	0%	1,765	1,765	0	0%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2027	0	0	0	0%	1,236	1,234	-2	0%	0.1	0.1	0.0	-0.2%	1	1	0.0	-0.1%
2028	0	0	0	0%	1,060	1,059	-1	0%	0.1	0.1	0.0	-0.1%	1	1	0.0	-0.1%
2029	0	0	0	22%	858	1,408	550	64%	0.1	0.1	0.0	0.0%	1	1	0.0	0.0%
2030	0	0	0	27%	913	3,530	2,617	287%	0.1	0.1	0.0	-0.4%	1	1	0.0	-0.4%
2031	0	0	0	584%	612	5,940	5,328	870%	0.1	0.1	0.0	-0.9%	1	1	0.0	-0.9%

Table 876 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Karma) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	-3,300	-3,300	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	-3,693	-3,693	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2028	0	0	0	0%	-3,948	-3,948	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2029	0	0	0	0%	-4,296	-4,296	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2030	0	0	0	0%	-4,602	-4,602	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%
2031	0	0	0	0%	-4,776	-4,776	0	0%	0.0	0.0	0.0	-1.1%	0	0	0.0	-1.1%

Table 877 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Lucid) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2023	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2024	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2025	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2026	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.0%	0	0	0.0	0.0%
2027	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.2%	0	0	0.0	-0.2%
2028	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.5%	0	0	0.0	-0.5%
2029	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-1.0%	0	0	0.0	-1.0%
2030	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	-0.6%	0	0	0.0	-0.6%
2031	0	0	0	0%	0	0	0	0%	0.0	0.0	0.0	0.3%	0	0	0.0	0.3%

Table 878 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mazda) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	1,102	1,102	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,198	1,198	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	1,281	1,281	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	1,354	1,354	0	0%	0.2	0.2	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	3%	1,485	1,531	46	3%	0.2	0.2	0.0	-0.2%	2	2	0.0	0.0%
2028	0	0	0	-7%	1,499	1,438	-61	-4%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2029	0	1	0	60%	1,712	2,748	1,036	61%	0.2	0.2	0.0	-0.1%	2	2	0.0	-0.1%
2030	0	1	0	28%	2,257	2,903	646	29%	0.2	0.2	0.0	-0.4%	2	2	0.0	-0.4%
2031	0	0	0	23%	2,059	2,549	490	24%	0.2	0.2	0.0	-0.8%	2	2	0.0	-0.8%

Table 879 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mercedes-Benz) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	618	618	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2023	0	0	0	0%	925	925	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2024	0	0	0	0%	947	947	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2025	0	0	0	0%	1,358	1,358	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2026	0	0	0	0%	1,926	1,926	0	0%	0.3	0.3	0.0	0.0%	9	9	0.0	0.0%
2027	0	1	0	23%	1,746	2,104	358	21%	0.3	0.3	0.0	-0.2%	10	10	0.2	2.3%
2028	1	1	0	12%	2,506	2,804	298	12%	0.3	0.3	0.0	-0.3%	11	11	0.2	1.7%
2029	1	1	0	17%	2,293	2,690	397	17%	0.3	0.3	0.0	-0.5%	10	11	0.1	0.9%
2030	1	1	0	29%	2,102	2,715	613	29%	0.3	0.3	0.0	-0.5%	10	10	0.0	0.4%
2031	1	1	0	32%	1,919	2,549	629	33%	0.3	0.3	0.0	-0.4%	10	10	0.0	-0.1%

Table 880 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Mitsubishi) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	217	217	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2023	0	0	0	0%	233	233	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2024	0	0	0	0%	1,377	1,377	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2025	0	0	0	0%	2,723	2,723	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2026	0	0	0	0%	2,018	2,018	0	0%	0.1	0.1	0.0	0.0%	2	2	0.0	0.0%
2027	0	0	0	-1%	1,846	1,834	-12	-1%	0.1	0.1	0.0	-0.2%	2	2	0.0	-0.2%
2028	0	0	0	33%	1,630	2,180	550	34%	0.1	0.1	0.0	-0.3%	2	2	0.0	0.0%
2029	0	0	0	34%	1,448	1,948	500	35%	0.1	0.1	0.0	-0.5%	2	2	0.0	-0.2%
2030	0	0	0	86%	1,298	2,433	1,134	87%	0.1	0.1	0.0	-0.5%	2	2	0.2	9.7%
2031	0	0	0	99%	1,355	2,702	1,347	99%	0.1	0.1	0.0	-0.3%	2	2	0.2	9.0%

Table 881 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Nissan) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	33	33	0	0%	1.0	1.0	0.0	0.0%	59	59	0.0	0.0%
2023	1	1	0	0%	651	651	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2024	1	1	0	0%	860	860	0	0%	1.0	1.0	0.0	0.0%	62	62	0.0	0.0%
2025	1	1	0	0%	1,319	1,319	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2026	1	1	0	0%	1,241	1,241	0	0%	1.0	1.0	0.0	0.0%	60	60	0.0	0.0%
2027	1	1	0	26%	1,151	1,571	421	37%	1.0	1.0	0.0	-0.2%	61	61	-0.1	-0.2%
2028	2	3	1	72%	1,623	2,876	1,253	77%	1.0	1.0	0.0	-0.3%	63	64	1.0	1.5%
2029	1	3	1	74%	1,422	3,080	1,658	117%	1.0	1.0	0.0	-0.6%	63	64	0.7	1.1%
2030	1	3	2	109%	1,388	2,915	1,527	110%	1.0	1.0	0.0	-0.5%	62	63	1.2	1.9%
2031	2	3	1	62%	1,666	2,700	1,034	62%	1.0	1.0	0.0	-0.3%	62	62	0.5	0.7%

Table 882 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Stellantis) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	446	446	0	0%	1.6	1.6	0.0	0.0%	90	90	0.0	0.0%
2023	1	1	0	0%	898	898	0	0%	1.7	1.7	0.0	0.0%	100	100	0.0	0.0%
2024	3	3	0	0%	1,659	1,659	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2025	4	4	0	0%	2,476	2,476	0	0%	1.6	1.6	0.0	0.0%	103	103	0.0	0.0%
2026	3	3	0	0%	2,029	2,029	0	0%	1.7	1.7	0.0	0.0%	103	103	0.0	0.0%
2027	3	5	2	77%	1,579	2,806	1,226	78%	1.7	1.7	0.0	-0.2%	105	110	4.7	4.5%
2028	3	5	2	76%	1,487	2,695	1,207	81%	1.8	1.8	0.0	-0.1%	107	112	4.6	4.2%
2029	3	6	2	68%	1,889	3,278	1,389	74%	1.8	1.8	0.0	-0.1%	109	113	4.3	3.9%
2030	3	7	4	117%	1,762	3,951	2,189	124%	1.7	1.7	0.0	-0.4%	107	114	7.0	6.5%
2031	3	6	3	108%	1,739	3,696	1,957	113%	1.7	1.7	0.0	-0.8%	106	111	5.7	5.4%

Table 883 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Subaru) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.7	0.7	0.0	0.0%	39	39	0.0	0.0%
2023	0	0	0	0%	460	460	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2024	0	0	0	0%	494	494	0	0%	0.8	0.8	0.0	0.0%	42	42	0.0	0.0%
2025	0	0	0	0%	638	638	0	0%	0.8	0.8	0.0	0.0%	40	40	0.0	0.0%
2026	1	1	0	0%	757	757	0	0%	0.8	0.8	0.0	0.0%	41	41	0.0	0.0%
2027	1	1	0	-3%	841	816	-25	-3%	0.8	0.8	0.0	-0.2%	42	42	-0.1	-0.2%
2028	1	1	0	55%	1,047	1,625	579	55%	0.8	0.8	0.0	-0.1%	43	43	0.1	0.1%
2029	2	2	0	6%	2,425	2,570	145	6%	0.8	0.8	0.0	-0.1%	43	44	0.1	0.3%
2030	2	2	0	27%	2,161	2,766	604	28%	0.8	0.8	0.0	-0.4%	43	43	0.7	1.7%
2031	2	2	0	26%	1,948	2,479	532	27%	0.8	0.8	0.0	-0.8%	42	43	0.5	1.1%

Table 884 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Tesla) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2023	0	0	0	0%	7	7	0	0%	0.5	0.5	0.0	0.0%	60	60	0.0	0.0%
2024	0	0	0	0%	11	11	0	0%	0.5	0.5	0.0	0.0%	59	59	0.0	0.0%
2025	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2026	0	0	0	0%	16	16	0	0%	0.5	0.5	0.0	0.0%	55	55	0.0	0.0%
2027	0	0	0	-99%	15	0	-15	-99%	0.5	0.5	0.0	-0.2%	56	56	-0.1	-0.3%
2028	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.6%	56	56	-0.3	-0.6%
2029	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-1.0%	56	56	-0.6	-1.0%
2030	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	-0.6%	55	55	-0.3	-0.6%
2031	0	0	0	-100%	15	0	-15	-100%	0.5	0.5	0.0	0.2%	54	55	0.1	0.1%

Table 885 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Toyota) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	2.4	2.4	0.0	0.0%	165	165	0.0	0.0%
2023	1	1	0	0%	234	234	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2024	1	1	0	0%	492	492	0	0%	2.5	2.5	0.0	0.0%	173	173	0.0	0.0%
2025	2	2	0	0%	717	717	0	0%	2.4	2.4	0.0	0.0%	166	166	0.0	0.0%
2026	2	2	0	0%	1,014	1,014	0	0%	2.4	2.4	0.0	0.0%	168	168	0.0	0.0%
2027	2	2	0	1%	740	747	7	1%	2.5	2.4	0.0	-0.2%	172	172	-0.2	-0.1%
2028	2	3	1	58%	668	1,059	391	58%	2.5	2.5	0.0	-0.3%	175	176	1.0	0.6%
2029	2	3	1	36%	931	1,270	339	36%	2.5	2.5	0.0	-0.4%	176	177	0.5	0.3%
2030	3	4	1	32%	1,326	2,337	1,011	76%	2.5	2.5	0.0	-0.4%	175	175	0.2	0.1%
2031	3	7	4	117%	1,386	3,201	1,815	131%	2.4	2.4	0.0	-0.5%	173	179	5.8	3.4%

Table 886 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (Volvo) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	0	0	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2023	0	0	0	0%	140	140	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2024	0	0	0	0%	195	195	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2025	0	0	0	0%	1,128	1,128	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2026	0	0	0	0%	1,041	1,041	0	0%	0.1	0.1	0.0	0.0%	3	3	0.0	0.0%
2027	0	0	0	6%	677	720	43	6%	0.1	0.1	0.0	-0.2%	3	3	0.0	-0.3%
2028	0	0	0	8%	531	574	43	8%	0.1	0.1	0.0	-0.2%	3	3	0.0	-0.4%
2029	0	0	0	31%	337	442	105	31%	0.1	0.1	0.0	-0.3%	3	3	0.0	-0.6%
2030	0	0	0	36%	1,169	1,592	423	36%	0.1	0.1	0.0	-0.4%	3	3	0.0	-0.5%
2031	0	0	0	38%	1,016	1,411	395	39%	0.1	0.1	0.0	-0.6%	3	3	0.0	-0.3%

Table 887 - Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8

Comparison of Technology Costs, Average Price Increase, Sales, and Labor Utilization for Manufacturer (VWA) Total Fleet Between No Action Alternative (Baseline) and Alternative PC6LT8																
	Technology Costs Increase ($b)				Avg. Vehicle Price Increase ($)				Annual Sales (million vehicles)				Labor (person years)			
	Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative		Standards		Change from Alternative	
Model Year	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent	No Action Alternative (Baseline)	Alternative PC6LT8	Absolute	Percent
2022	0	0	0	0%	283	283	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2023	0	0	0	0%	647	647	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2024	1	1	0	0%	940	940	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2025	1	1	0	0%	1,243	1,243	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2026	1	1	0	0%	1,196	1,196	0	0%	0.6	0.6	0.0	0.0%	8	8	0.0	0.0%
2027	1	1	0	17%	850	994	143	17%	0.6	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2028	1	1	0	76%	858	1,515	657	77%	0.7	0.6	0.0	-0.2%	8	8	0.0	-0.2%
2029	0	1	0	81%	744	2,033	1,290	173%	0.7	0.6	0.0	-0.4%	8	8	0.0	-0.4%
2030	1	2	1	50%	1,889	2,873	984	52%	0.6	0.6	0.0	-0.4%	8	8	0.0	-0.4%
2031	1	2	1	63%	1,698	2,781	1,083	64%	0.6	0.6	0.0	-0.5%	8	8	0.0	-0.5%

CAFE Compliance Credits

Table 888 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for No Action Alternative (Baseline)

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for No Action Alternative (Baseline)										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	7	11	30	31	25	42	65
Ford	-6	16	71	36	14	68	128	241	196	193
GM	-35	-41	42	59	16	38	23	35	49	268
Honda	14	80	29	30	7	39	319	368	302	297
Hyundai	15	496	564	629	781	1,262	167	150	111	160
KIA	10	24	31	19	5	6	5	214	182	265
JLR	-3	4	5	2	4	4	3	2	2	3
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	24	11	6	4	4
Mazda	-2	17	15	10	6	14	16	36	48	47
Mercedes-Benz	-12	7	1	-2	13	22	50	44	38	40
Mitsubishi	-2	-3	5	14	7	8	13	11	10	13
Nissan	-3	45	39	36	26	30	107	94	107	192
Stellantis	-52	-31	-3	61	4	9	4	73	60	100
Subaru	7	43	37	33	14	34	75	279	229	226
Tesla	3,401	3,534	3,476	3,249	3,206	3,114	1,375	815	533	525
Toyota	48	104	117	92	88	100	91	165	657	728
Volvo	15	19	16	18	140	134	56	34	38	39
VWA	-13	-2	22	21	20	19	23	13	98	104
Total	3,489	4,435	4,596	4,431	4,478	5,049	2,543	2,630	2,721	3,285

Table 889 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC2LT002

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC2LT002										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	7	11	21	19	10	18	31
Ford	-6	16	71	36	14	62	109	186	129	106
GM	-35	-41	42	59	16	44	23	100	75	257
Honda	14	80	29	30	7	128	141	136	92	66
Hyundai	15	496	564	629	781	115	65	98	64	102
KIA	10	24	31	19	5	-2	6	139	135	129
JLR	-3	4	5	2	4	3	2	0	0	0
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	5	3	3
Mazda	-2	17	15	10	6	12	10	24	29	26
Mercedes-Benz	-12	7	1	-2	13	16	38	30	21	20
Mitsubishi	-2	-3	5	14	7	6	10	7	4	11
Nissan	-3	45	39	36	26	21	98	81	95	148
Stellantis	-52	-31	-3	61	4	9	3	56	26	43
Subaru	7	43	37	33	14	26	59	212	163	149
Tesla	3,401	3,534	3,476	3,249	3,206	1,583	902	577	383	371
Toyota	48	104	117	92	88	67	41	78	356	369
Volvo	15	19	16	18	140	56	33	20	25	23
VWA	-13	-2	22	21	20	23	23	5	36	44
Total	3,489	4,435	4,596	4,431	4,478	2,275	1,629	1,784	1,665	1,910

Table 890 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC1LT3

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC1LT3										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	7	11	19	17	8	16	24
Ford	-6	16	71	36	14	28	67	142	78	48
GM	-35	-41	42	59	16	103	56	124	86	100
Honda	14	80	29	30	7	116	301	334	258	231
Hyundai	15	496	564	629	781	111	60	87	55	92
KIA	10	24	31	19	5	-4	10	143	132	128
JLR	-3	4	5	2	4	2	-1	-3	-3	0
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	5	3	3
Mazda	-2	17	15	10	6	10	6	19	23	19
Mercedes-Benz	-12	7	1	-2	13	24	49	35	21	17
Mitsubishi	-2	-3	5	14	7	5	9	6	3	4
Nissan	-3	45	39	36	26	18	80	66	67	114
Stellantis	-52	-31	-3	61	4	30	2	68	25	31
Subaru	7	43	37	33	14	16	39	189	137	119
Tesla	3,401	3,534	3,476	3,249	3,206	1,588	909	586	393	385
Toyota	48	104	117	92	88	52	20	58	342	346
Volvo	15	19	16	18	140	55	31	18	22	20
VWA	-13	-2	22	21	20	17	13	-4	53	46
Total	3,489	4,435	4,596	4,431	4,478	2,276	1,713	1,899	1,720	1,734

Table 891 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC2LT4

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC2LT4										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	7	11	17	13	1	8	18
Ford	-6	16	71	36	14	36	63	127	51	12
GM	-35	-41	42	59	16	100	42	100	49	68
Honda	14	80	29	30	7	113	303	329	256	218
Hyundai	15	496	564	629	781	127	76	113	69	87
KIA	10	24	31	19	5	-7	6	136	123	118
JLR	-3	4	5	2	4	1	-1	-4	-5	0
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	5	3	3
Mazda	-2	17	15	10	6	10	4	17	20	14
Mercedes-Benz	-12	7	1	-2	13	23	46	31	16	10
Mitsubishi	-2	-3	5	14	7	4	8	4	1	7
Nissan	-3	45	39	36	26	12	81	48	58	106
Stellantis	-52	-31	-3	61	4	59	18	96	35	34
Subaru	7	43	37	33	14	12	31	177	120	96
Tesla	3,401	3,534	3,476	3,249	3,206	1,586	903	577	382	370
Toyota	48	104	117	92	88	40	11	21	296	289
Volvo	15	19	16	18	140	54	29	15	18	16
VWA	-13	-2	22	21	20	18	10	-11	42	32
Total	3,489	4,435	4,596	4,431	4,478	2,290	1,688	1,801	1,547	1,508

Table 892 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC3LT5

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC3LT5										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	7	11	15	8	-5	-1	11
Ford	-6	16	71	36	14	66	86	149	51	6
GM	-35	-41	42	59	16	110	39	86	22	55
Honda	14	80	29	30	7	114	359	278	225	177
Hyundai	15	496	564	629	781	142	76	110	63	62
KIA	10	24	31	19	5	-11	8	132	92	93
JLR	-3	4	5	2	4	1	-2	-6	-7	-1
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	4	3	3
Mazda	-2	17	15	10	6	8	2	23	27	20
Mercedes-Benz	-12	7	1	-2	13	22	44	27	12	6
Mitsubishi	-2	-3	5	14	7	4	7	2	6	6
Nissan	-3	45	39	36	26	6	77	37	45	87
Stellantis	-52	-31	-3	61	4	80	28	94	42	3
Subaru	7	43	37	33	14	7	35	146	87	58
Tesla	3,401	3,534	3,476	3,249	3,206	1,579	895	566	369	355
Toyota	48	104	117	92	88	26	-6	-6	262	277
Volvo	15	19	16	18	140	53	28	13	15	11
VWA	-13	-2	22	21	20	14	64	25	38	33
Total	3,489	4,435	4,596	4,431	4,478	2,322	1,791	1,696	1,360	1,267

Table 893 - CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC6LT8

CAFE Compliance Credits (in millions) Earned by Manufacturers, Total Fleet by Model Year for Alternative PC6LT8										
Manufacturer	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BMW	-10	-1	5	7	11	13	1	-21	-24	-19
Ford	-6	16	71	36	14	160	187	264	92	-1
GM	-35	-41	42	59	16	94	-3	3	-101	14
Honda	14	80	29	30	7	136	144	136	82	-3
Hyundai	15	496	564	629	781	136	63	110	32	26
KIA	10	24	31	19	5	-22	3	114	83	90
JLR	-3	4	5	2	4	0	-5	-10	-13	-9
Karma	0	0	0	0	1	1	0	0	0	0
Lucid	27	28	27	25	24	12	7	4	3	2
Mazda	-2	17	15	10	6	5	-5	21	22	10
Mercedes-Benz	-12	7	1	-2	13	17	39	23	10	2
Mitsubishi	-2	-3	5	14	7	1	9	1	2	2
Nissan	-3	45	39	36	26	-11	93	23	47	12
Stellantis	-52	-31	-3	61	4	73	-9	33	-5	-74
Subaru	7	43	37	33	14	-6	36	140	104	56
Tesla	3,401	3,534	3,476	3,249	3,206	1,567	872	533	328	304
Toyota	48	104	117	92	88	-8	-60	-123	121	215
Volvo	15	19	16	18	140	52	24	6	9	3
VWA	-13	-2	22	21	20	3	42	-10	12	4
Total	3,489	4,435	4,596	4,431	4,478	2,296	1,472	1,263	809	635

Consumer Impacts

Table 894 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	147	116	156	132	81
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	14	11	15	13	8
Increase in Taxes/Fees	0	0	0	0	0	8	6	9	7	4
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	169	134	180	153	93
Fuel Savings	-2	-2	-2	-2	-2	-235	-155	-256	-248	-208
Mobility Benefit	0	0	0	0	0	10	10	13	14	13
Reallocated Benefit	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2
Refueling Benefit	0	0	0	0	0	28	11	33	29	22
Total Consumer Benefit	1	1	1	1	1	295	194	315	296	242
Net Consumer Benefit	1	1	1	1	1	125	60	136	143	149
Payback	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.0	0.3	0.0

Table 895 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	60	-69	75	83	-10
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	6	-7	7	8	-1
Increase in Taxes/Fees	0	0	0	0	0	3	-4	4	5	-1
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	69	-80	86	96	-12
Fuel Savings	-2	-2	-2	-2	-2	-143	109	-145	-194	-85
Mobility Benefit	0	0	0	0	0	8	4	12	14	11
Reallocated Benefit	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	7	-8	43	49	30
Total Consumer Benefit	1	1	1	1	1	167	-184	119	177	48
Net Consumer Benefit	1	1	1	1	1	98	-104	34	81	59
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0

Table 896 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	193	211	197	157	127
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	18	20	19	15	12
Increase in Taxes/Fees	0	0	0	0	0	11	12	11	9	7
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	222	243	226	180	146
Fuel Savings	-2	-2	-2	-2	-2	-280	-289	-316	-278	-271
Mobility Benefit	0	0	0	0	0	12	13	14	13	13
Reallocated Benefit	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2
Refueling Benefit	0	0	0	0	0	39	21	27	19	17
Total Consumer Benefit	1	1	1	1	1	358	387	418	358	341
Net Consumer Benefit	1	1	1	1	1	137	145	192	178	195
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0

Table 897 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	147	116	156	132	81
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	11	9	12	11	6
Increase in Taxes/Fees	0	0	0	0	0	8	6	9	7	4
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	167	132	177	150	92
Fuel Savings	-1	-1	-1	-1	-1	-183	-119	-198	-192	-161
Mobility Benefit	0	0	0	0	0	8	8	10	11	10
Reallocated Benefit	0	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	22	9	26	23	17
Total Consumer Benefit	1	1	1	1	1	247	160	262	244	197
Net Consumer Benefit	1	1	1	1	1	80	28	85	93	105
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0

Table 898 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	60	-69	75	83	-10
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	5	-5	6	7	-1
Increase in Taxes/Fees	0	0	0	0	0	3	-4	4	5	-1
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	68	-79	85	95	-12
Fuel Savings	-1	-1	-1	-1	-1	-112	89	-109	-148	-62
Mobility Benefit	0	0	0	0	0	6	3	9	11	9
Reallocated Benefit	0	0	0	0	0	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	6	-6	34	39	23
Total Consumer Benefit	1	1	1	1	1	135	-166	92	140	29
Net Consumer Benefit	1	1	1	1	1	67	-87	7	45	41
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 899 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT002 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	193	211	197	157	127
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	15	17	15	12	10
Increase in Taxes/Fees	0	0	0	0	0	11	12	11	9	7
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	218	239	223	178	144
Fuel Savings	-1	-1	-1	-1	-1	-218	-225	-246	-217	-212
Mobility Benefit	0	0	0	0	0	9	10	11	10	10
Reallocated Benefit	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	31	16	21	15	14
Total Consumer Benefit	0	1	1	1	1	302	326	352	299	283
Net Consumer Benefit	0	1	1	1	1	84	86	129	121	139
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0

Table 900 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	265	309	357	336	221
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	24	28	33	31	20
Increase in Taxes/Fees	0	0	0	0	0	14	16	19	18	12
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	304	354	409	385	253
Fuel Savings	-1	-2	-2	-2	-2	-415	-497	-669	-684	-543
Mobility Benefit	0	0	0	0	0	21	26	32	34	30
Reallocated Benefit	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	48	43	78	74	50
Total Consumer Benefit	1	1	1	1	1	525	634	835	829	639
Net Consumer Benefit	1	1	1	1	1	221	280	426	444	387
Payback	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.0	0.7	0.0

Table 901 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	19	-3	87	75	-140
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	2	0	8	7	-13
Increase in Taxes/Fees	0	0	0	0	0	1	0	5	4	-8
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	22	-4	100	86	-161
Fuel Savings	-1	-1	-1	-2	-2	-81	-50	-234	-239	129
Mobility Benefit	0	0	0	0	0	5	5	10	12	1
Reallocated Benefit	0	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	3	4	42	42	-15
Total Consumer Benefit	1	1	1	1	1	94	47	268	264	-178
Net Consumer Benefit	1	1	1	1	1	71	50	169	178	-18
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0

Table 902 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	394	470	495	469	404
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	37	44	47	44	38
Increase in Taxes/Fees	0	0	0	0	0	22	26	27	26	22
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	453	540	568	538	464
Fuel Savings	-2	-2	-2	-2	-2	-580	-717	-885	-904	-876
Mobility Benefit	0	0	0	0	0	29	37	43	46	45
Reallocated Benefit	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	71	63	97	90	84
Total Consumer Benefit	1	1	1	1	1	740	926	1,118	1,109	1,045
Net Consumer Benefit	1	1	1	1	1	287	386	550	571	581
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0

Table 903 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	265	309	357	336	221
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	20	24	28	26	17
Increase in Taxes/Fees	0	0	0	0	0	14	16	19	18	12
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	300	350	403	380	249
Fuel Savings	-1	-1	-1	-1	-1	-323	-387	-520	-532	-421
Mobility Benefit	0	0	0	0	0	16	20	25	27	23
Reallocated Benefit	0	0	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	37	34	61	58	39
Total Consumer Benefit	0	0	0	0	1	439	528	697	686	523
Net Consumer Benefit	0	0	0	0	1	139	178	293	306	273
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3

Table 904 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	19	-3	87	75	-140
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	2	0	7	6	-11
Increase in Taxes/Fees	0	0	0	0	0	1	0	5	4	-8
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	22	-3	98	85	-158
Fuel Savings	-1	-1	-1	-1	-1	-63	-38	-182	-186	104
Mobility Benefit	0	0	0	0	0	4	4	8	9	1
Reallocated Benefit	0	0	0	0	0	-1	-1	0	0	0
Refueling Benefit	0	0	0	0	0	2	3	33	33	-12
Total Consumer Benefit	0	0	0	1	1	75	35	223	218	-156
Net Consumer Benefit	0	0	0	1	1	53	39	125	133	2
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0

Table 905 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC1LT3 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	394	470	495	469	404
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	31	37	39	37	32
Increase in Taxes/Fees	0	0	0	0	0	22	26	27	26	22
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	446	532	560	531	458
Fuel Savings	-1	-1	-1	-1	-1	-451	-558	-688	-703	-682
Mobility Benefit	0	0	0	0	0	23	29	34	36	35
Reallocated Benefit	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Refueling Benefit	0	0	0	0	0	56	50	76	70	65
Total Consumer Benefit	0	0	0	0	0	620	773	934	919	860
Net Consumer Benefit	0	0	0	0	0	174	241	374	388	402
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0

Table 906 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	344	405	452	437	333
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	32	38	42	41	31
Increase in Taxes/Fees	0	0	0	0	0	18	22	24	24	18
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	394	465	519	501	381
Fuel Savings	-1	-1	-1	-1	-1	-526	-662	-828	-875	-771
Mobility Benefit	0	0	0	0	0	26	34	40	44	42
Reallocated Benefit	0	0	0	0	0	0	0	0	0	0
Refueling Benefit	0	0	0	0	0	61	72	97	96	67
Total Consumer Benefit	0	0	1	1	1	664	835	1,036	1,060	916
Net Consumer Benefit	0	0	1	1	1	270	370	517	559	535
Payback	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.0	1.0	0.0

Table 907 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	58	66	183	190	-34
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	6	6	17	18	-3
Increase in Taxes/Fees	0	0	0	0	0	3	4	10	10	-2
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	67	76	210	219	-39
Fuel Savings	0	-1	-1	-1	-1	-144	-166	-398	-456	-100
Mobility Benefit	0	0	0	0	0	8	10	18	22	12
Reallocated Benefit	0	0	0	0	0	0	0	0	0	0
Refueling Benefit	0	0	0	0	0	7	18	56	63	5
Total Consumer Benefit	0	0	1	1	1	168	187	470	525	90
Net Consumer Benefit	0	0	1	1	1	101	111	259	306	129
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0

Table 908 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	493	580	589	563	519
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	46	55	56	53	49
Increase in Taxes/Fees	0	0	0	0	0	27	32	32	31	28
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	566	666	677	646	596
Fuel Savings	-1	-1	-1	-1	-1	-715	-908	-1,043	-1,082	-1,103
Mobility Benefit	0	0	0	0	0	35	46	51	56	57
Reallocated Benefit	0	0	0	0	0	0	-1	0	0	0
Refueling Benefit	0	0	0	0	0	89	100	119	112	98
Total Consumer Benefit	0	0	0	1	1	911	1,158	1,320	1,327	1,326
Net Consumer Benefit	0	0	0	1	1	345	492	643	680	730
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0

Table 909 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	344	405	452	437	333
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	26	31	35	34	26
Increase in Taxes/Fees	0	0	0	0	0	18	22	24	24	18
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	388	458	512	494	376
Fuel Savings	0	0	0	-1	-1	-410	-516	-645	-681	-599
Mobility Benefit	0	0	0	0	0	20	26	31	35	33
Reallocated Benefit	0	0	0	0	0	0	0	0	0	0
Refueling Benefit	0	0	0	0	0	48	56	76	75	52
Total Consumer Benefit	0	0	0	0	0	555	697	865	878	750
Net Consumer Benefit	0	0	0	0	0	166	238	353	383	374
Payback	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.7	0.3

Table 910 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	58	66	183	190	-34
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	5	5	14	15	-3
Increase in Taxes/Fees	0	0	0	0	0	3	4	10	10	-2
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	66	75	207	216	-39
Fuel Savings	0	0	0	-1	-1	-112	-130	-310	-356	-75
Mobility Benefit	0	0	0	0	0	6	8	14	17	9
Reallocated Benefit	0	0	0	0	0	0	0	0	0	0
Refueling Benefit	0	0	0	0	0	6	14	43	49	4
Total Consumer Benefit	0	0	0	0	0	136	152	390	433	64
Net Consumer Benefit	0	0	0	0	0	70	77	182	217	103
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0

Table 911 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC2LT4 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	493	580	589	563	519
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	39	45	46	44	41
Increase in Taxes/Fees	0	0	0	0	0	27	32	32	31	28
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	558	657	668	637	588
Fuel Savings	0	0	-1	-1	-1	-557	-707	-812	-843	-859
Mobility Benefit	0	0	0	0	0	28	36	40	44	45
Reallocated Benefit	0	0	0	0	0	0	0	0	0	0
Refueling Benefit	0	0	0	0	0	70	78	93	88	77
Total Consumer Benefit	0	0	0	0	0	764	969	1,103	1,100	1,090
Net Consumer Benefit	0	0	0	0	0	206	312	436	462	503
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0

Table 912 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	475	602	596	605	567
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	44	57	56	57	53
Increase in Taxes/Fees	0	0	0	0	0	26	33	33	33	31
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	545	692	686	695	651
Fuel Savings	3	2	2	2	2	-689	-931	-1,018	-1,106	-1,091
Mobility Benefit	0	0	0	0	0	32	45	52	56	58
Reallocated Benefit	1	2	2	2	2	3	3	4	4	5
Refueling Benefit	0	0	0	0	0	86	107	111	122	78
Total Consumer Benefit	-1	-1	0	0	0	861	1,168	1,272	1,335	1,313
Net Consumer Benefit	-1	-1	0	0	0	315	476	586	640	662
Payback	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.0	1.0	0.7

Table 913 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	173	265	341	350	81
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	16	25	32	33	8
Increase in Taxes/Fees	0	0	0	0	0	9	14	19	19	4
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	198	304	391	403	93
Fuel Savings	2	2	2	1	1	-198	-341	-511	-566	-141
Mobility Benefit	0	0	0	0	0	12	18	26	31	20
Reallocated Benefit	1	1	1	1	2	2	2	3	3	3
Refueling Benefit	0	0	0	0	0	8	34	64	69	7
Total Consumer Benefit	-2	-1	-1	0	0	232	403	599	640	115
Net Consumer Benefit	-2	-1	-1	0	0	34	98	208	237	22
Payback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0

Table 914 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	632	775	726	733	813
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	60	73	68	69	77
Increase in Taxes/Fees	0	0	0	0	0	35	42	40	40	44
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	727	890	834	842	935
Fuel Savings	3	3	2	2	2	-940	-1,231	-1,278	-1,383	-1,566
Mobility Benefit	0	0	0	0	0	43	59	65	69	77
Reallocated Benefit	2	2	2	3	3	3	3	4	5	5
Refueling Benefit	0	0	0	0	0	126	145	135	148	114
Total Consumer Benefit	-1	-1	0	0	0	1,183	1,558	1,616	1,691	1,913
Net Consumer Benefit	-1	-1	0	0	0	456	668	782	849	978
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0

Table 915 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	475	602	596	605	567
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	37	47	47	48	44
Increase in Taxes/Fees	0	0	0	0	0	26	33	33	33	31
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	538	683	676	686	642
Fuel Savings	1	1	1	1	1	-536	-725	-793	-861	-846
Mobility Benefit	0	0	0	0	0	25	35	40	44	45
Reallocated Benefit	1	1	1	1	1	1	2	2	3	3
Refueling Benefit	0	0	0	0	0	67	84	87	95	61
Total Consumer Benefit	-1	-1	0	0	0	718	974	1,058	1,103	1,070
Net Consumer Benefit	-1	-1	0	0	0	180	291	381	417	428
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.7	0.7

Table 916 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	173	265	341	350	81
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	14	21	27	27	6
Increase in Taxes/Fees	0	0	0	0	0	9	14	19	19	4
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	196	300	386	397	92
Fuel Savings	2	1	1	1	1	-154	-266	-398	-440	-105
Mobility Benefit	0	0	0	0	0	9	14	20	24	16
Reallocated Benefit	0	0	1	1	1	1	1	2	2	2
Refueling Benefit	0	0	0	0	0	6	26	50	54	5
Total Consumer Benefit	-1	-1	-1	0	0	187	330	493	521	75
Net Consumer Benefit	-1	-1	-1	0	0	-9	30	107	124	-17
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0

Table 917 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC3LT5 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	632	775	726	733	813
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	50	61	57	57	64
Increase in Taxes/Fees	0	0	0	0	0	35	42	40	40	44
Lost Consumer Surplus	0	0	0	0	0	0	0	0	0	0
Total Consumer Cost	0	0	0	0	0	717	878	822	831	922
Fuel Savings	1	1	1	1	1	-731	-958	-996	-1,077	-1,217
Mobility Benefit	0	0	0	0	0	33	46	51	54	60
Reallocated Benefit	1	1	1	1	1	2	2	2	3	4
Refueling Benefit	0	0	0	0	0	98	113	105	116	90
Total Consumer Benefit	-1	-1	0	0	0	991	1,302	1,346	1,401	1,569
Net Consumer Benefit	-1	-1	0	0	0	274	424	524	570	647
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0

Table 918 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	666	882	1,086	1,311	1,499
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	63	84	104	124	139
Increase in Taxes/Fees	0	0	0	0	0	36	49	60	72	81
Lost Consumer Surplus	0	0	0	0	0	0	1	1	2	3
Total Consumer Cost	0	0	0	0	0	766	1,015	1,252	1,510	1,722
Fuel Savings	18	18	17	17	18	-901	-1,222	-1,414	-1,769	-2,103
Mobility Benefit	0	0	0	0	1	42	63	73	88	99
Reallocated Benefit	10	12	13	14	16	17	18	20	21	23
Refueling Benefit	1	1	1	1	2	109	136	128	127	75
Total Consumer Benefit	-8	-7	-5	-4	-3	1,146	1,538	1,802	2,228	2,643
Net Consumer Benefit	-8	-7	-5	-4	-3	381	522	550	719	921
Payback	0.0	0.0	0.0	0.0	0.0	1.7	1.7	2.0	2.0	1.7

Table 919 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	434	552	918	981	624
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	41	52	87	92	59
Increase in Taxes/Fees	0	0	0	0	0	24	30	50	54	34
Lost Consumer Surplus	0	0	0	0	0	0	1	1	2	3
Total Consumer Cost	0	0	0	0	0	499	635	1,056	1,129	720
Fuel Savings	16	15	14	13	12	-417	-485	-834	-1,052	-607
Mobility Benefit	0	0	0	0	1	20	31	46	56	50
Reallocated Benefit	6	7	8	9	10	12	13	14	15	17
Refueling Benefit	1	1	1	1	2	40	47	76	115	44
Total Consumer Benefit	-11	-9	-7	-5	-3	532	569	1,012	1,242	672
Net Consumer Benefit	-11	-9	-7	-5	-3	33	-66	-45	113	-48
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0	1.0

Table 920 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 3% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	786	1,049	1,169	1,479	1,946
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	74	99	110	139	184
Increase in Taxes/Fees	0	0	0	0	0	43	57	64	81	106
Lost Consumer Surplus	0	0	0	0	0	0	1	1	2	3
Total Consumer Cost	0	0	0	0	0	903	1,205	1,344	1,701	2,239
Fuel Savings	19	19	19	19	20	-1,154	-1,609	-1,726	-2,137	-2,842
Mobility Benefit	0	0	0	0	1	54	79	87	104	125
Reallocated Benefit	13	14	15	17	19	20	21	23	25	26
Refueling Benefit	1	1	1	1	2	145	181	153	133	91
Total Consumer Benefit	-7	-6	-4	-3	-3	1,467	2,041	2,222	2,733	3,623
Net Consumer Benefit	-7	-6	-4	-3	-3	564	836	877	1,032	1,384
Payback	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0

Table 921 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Total Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	666	882	1,086	1,311	1,499
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	52	70	87	103	116
Increase in Taxes/Fees	0	0	0	0	0	36	49	60	72	81
Lost Consumer Surplus	0	0	0	0	0	0	1	1	2	3
Total Consumer Cost	0	0	0	0	0	755	1,001	1,235	1,489	1,698
Fuel Savings	10	10	10	10	11	-703	-952	-1,101	-1,376	-1,629
Mobility Benefit	0	0	0	0	0	33	49	57	68	77
Reallocated Benefit	5	6	7	8	9	10	11	12	14	15
Refueling Benefit	1	1	1	1	1	85	106	100	99	59
Total Consumer Benefit	-5	-5	-4	-3	-3	955	1,276	1,494	1,836	2,156
Net Consumer Benefit	-5	-5	-4	-3	-3	200	274	259	348	458
Payback	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	2.0	2.3

Table 922 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Passenger Car Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	434	552	918	981	624
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	34	43	72	77	49
Increase in Taxes/Fees	0	0	0	0	0	24	30	50	54	34
Lost Consumer Surplus	0	0	0	0	0	0	1	1	2	3
Total Consumer Cost	0	0	0	0	0	492	626	1,042	1,113	710
Fuel Savings	10	9	8	8	8	-327	-377	-649	-819	-468
Mobility Benefit	0	0	0	0	0	15	24	36	44	39
Reallocated Benefit	3	4	4	5	6	7	8	9	10	11
Refueling Benefit	1	1	1	1	1	31	36	59	90	34
Total Consumer Benefit	-7	-6	-5	-4	-3	441	460	829	1,018	528
Net Consumer Benefit	-7	-6	-5	-4	-3	-51	-166	-213	-96	-182
Payback	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	1.0

Table 923 - Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year

Average Impacts to Consumers Relative to Alternative 0 (Baseline) for the Light Truck Fleet, Alternative PC6LT8 at a 7% Discount Rate (dollars), per Vehicle Model Year										
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Price Increase	0	0	0	0	0	786	1,049	1,169	1,479	1,946
Implicit Opportunity Cost	0	0	0	0	0	0	0	0	0	0
Increase in Financing Cost	0	0	0	0	0	0	0	0	0	0
Increase in Insurance Cost	0	0	0	0	0	62	82	92	116	153
Increase in Taxes/Fees	0	0	0	0	0	43	57	64	81	106
Lost Consumer Surplus	0	0	0	0	0	0	1	1	2	3
Total Consumer Cost	0	0	0	0	0	891	1,189	1,326	1,677	2,208
Fuel Savings	10	11	11	11	12	-899	-1,253	-1,344	-1,662	-2,204
Mobility Benefit	0	0	0	0	0	42	61	67	81	97
Reallocated Benefit	6	7	8	9	10	11	12	14	16	18
Refueling Benefit	0	1	1	1	1	113	141	120	104	72
Total Consumer Benefit	-5	-4	-3	-3	-2	1,223	1,699	1,845	2,255	2,968
Net Consumer Benefit	-5	-4	-3	-3	-2	333	510	519	578	759
Payback	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	3.0

Table 924 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	-0.1
VOC Upstream	-0.3	-0.9	-1.3	-1.8	-3.5
NOx Upstream	0.0	-0.1	-0.1	-0.2	-0.4
SO2 Upstream	0.0	0.1	0.1	0.1	0.2
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.3	-7.8	-11.2	-14.8	-29.6
VOC Tailpipe	-0.2	-0.6	-0.8	-1.1	-2.2
NOx Tailpipe	-0.1	-0.2	-0.3	-0.5	-0.9
SO2 Tailpipe	0.0	0.0	0.0	0.0	-0.1
PM Tailpipe	0.0	0.0	0.0	0.0	-0.1
Fleetwide Change in Total Emissions					
CO Total	-3.3	-7.8	-11.2	-14.9	-29.7
VOC Total	-0.6	-1.5	-2.1	-2.9	-5.7
NOx Total	-0.1	-0.3	-0.5	-0.6	-1.3
SO2 Total	0.0	0.1	0.1	0.1	0.1
PM Total	0.0	0.0	0.0	0.0	-0.1

Table 925 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	0.0
VOC Upstream	0.0	0.1	0.0	0.0	-0.3
NOx Upstream	0.0	0.0	0.0	0.0	0.0
SO2 Upstream	0.0	0.0	0.0	0.0	0.0
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	0.0	1.5	0.2	0.7	-1.1
VOC Tailpipe	0.0	0.1	0.0	0.0	-0.1
NOx Tailpipe	0.0	0.0	0.0	0.0	0.0
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	0.0	1.5	0.2	0.7	-1.1
VOC Total	0.0	0.2	0.0	0.0	-0.4
NOx Total	0.0	0.1	0.0	0.0	-0.1
SO2 Total	0.0	0.0	0.0	0.0	0.0
PM Total	0.0	0.0	0.0	0.0	0.0

Table 926 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	-0.1
VOC Upstream	-0.3	-1.0	-1.3	-1.8	-3.2
NOx Upstream	0.0	-0.1	-0.1	-0.2	-0.3
SO2 Upstream	0.0	0.1	0.1	0.1	0.2
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.3	-9.2	-11.4	-15.5	-28.5
VOC Tailpipe	-0.2	-0.7	-0.8	-1.1	-2.1
NOx Tailpipe	-0.1	-0.3	-0.3	-0.5	-0.9
SO2 Tailpipe	0.0	0.0	0.0	0.0	-0.1
PM Tailpipe	0.0	0.0	0.0	0.0	-0.1
Fleetwide Change in Total Emissions					
CO Total	-3.3	-9.3	-11.4	-15.6	-28.6
VOC Total	-0.5	-1.7	-2.1	-2.9	-5.3
NOx Total	-0.1	-0.4	-0.5	-0.6	-1.2
SO2 Total	0.0	0.1	0.1	0.1	0.1
PM Total	0.0	0.0	0.0	0.0	-0.1

Table 927 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	-0.1	-0.1
VOC Upstream	-0.3	-0.7	-1.0	-1.4	-2.6
NOx Upstream	0.0	-0.1	-0.1	-0.2	-0.3
SO2 Upstream	0.0	0.1	0.1	0.1	0.2
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.2	-7.5	-10.7	-14.2	-28.0
VOC Tailpipe	-0.2	-0.5	-0.8	-1.0	-2.0
NOx Tailpipe	-0.1	-0.2	-0.3	-0.4	-0.8
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	-0.1
Fleetwide Change in Total Emissions					
CO Total	-3.2	-7.5	-10.7	-14.2	-28.1
VOC Total	-0.5	-1.2	-1.8	-2.4	-4.7
NOx Total	-0.1	-0.3	-0.4	-0.6	-1.2
SO2 Total	0.0	0.1	0.1	0.1	0.2
PM Total	0.0	0.0	0.0	0.0	-0.1

Table 928 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	0.0
VOC Upstream	0.0	0.1	0.0	0.0	-0.2
NOx Upstream	0.0	0.0	0.0	0.0	0.0
SO2 Upstream	0.0	0.0	0.0	0.0	0.0
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	0.0	1.4	0.2	0.6	-1.1
VOC Tailpipe	0.0	0.1	0.0	0.0	-0.1
NOx Tailpipe	0.0	0.0	0.0	0.0	-0.1
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Total Emissions					
CO Total	0.0	1.4	0.2	0.6	-1.2
VOC Total	-0.1	0.2	0.0	0.0	-0.3
NOx Total	0.0	0.0	0.0	0.0	-0.1
SO2 Total	0.0	0.0	0.0	0.0	0.0
PM Total	0.0	0.0	0.0	0.0	0.0

Table 929 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.0	0.0	0.0	0.0	-0.1
VOC Upstream	-0.2	-0.8	-1.0	-1.3	-2.4
NOx Upstream	0.0	-0.1	-0.1	-0.1	-0.3
SO2 Upstream	0.0	0.1	0.1	0.1	0.2
PM Upstream	0.0	0.0	0.0	0.0	0.0
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-3.2	-8.9	-10.9	-14.8	-26.9
VOC Tailpipe	-0.2	-0.6	-0.8	-1.1	-1.9
NOx Tailpipe	-0.1	-0.3	-0.3	-0.4	-0.8
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.0	0.0	0.0	0.0	-0.1
Fleetwide Change in Total Emissions					
CO Total	-3.2	-8.9	-10.9	-14.8	-27.0
VOC Total	-0.5	-1.4	-1.7	-2.4	-4.3
NOx Total	-0.1	-0.3	-0.4	-0.6	-1.1
SO2 Total	0.0	0.1	0.1	0.1	0.2
PM Total	0.0	0.0	0.0	0.0	-0.1

Table 930 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) Over Lifetimes of Vehicles Through 2031 for the Total Fleet, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) Over Lifetimes of Vehicles Through 2031 for the Total Fleet, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.1	1.0	0.9	1.3	0.7
VOC Upstream	-29.2	-74.4	-95.6	-125.6	-186.4
NOx Upstream	-1.5	-2.8	-4.2	-5.4	-10.1
SO2 Upstream	3.1	8.5	10.6	14.0	19.3
PM Upstream	-0.1	-0.2	-0.2	-0.3	-0.6
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-377.6	-896.3	-1,198.5	-1,466.4	-2,021.6
VOC Tailpipe	-36.9	-86.0	-111.4	-140.9	-196.5
NOx Tailpipe	-9.4	-21.7	-28.4	-35.8	-51.1
SO2 Tailpipe	-0.5	-1.2	-1.6	-2.1	-3.1
PM Tailpipe	-1.1	-2.4	-3.1	-4.0	-5.8
Fleetwide Change in Total Emissions					
CO Total	-377.5	-895.3	-1,167.6	-1,465.2	-2,020.8
VOC Total	-66.1	-160.4	-207.0	-266.5	-382.9
NOx Total	-10.9	-24.6	-32.6	-41.2	-61.2
SO2 Total	2.6	7.3	9.0	11.9	16.2
PM Total	-1.2	-2.6	-3.3	-4.3	-6.4

Table 931 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) Over Lifetimes of Vehicles Through 2031 for the Light Truck Fleet, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) Over Lifetimes of Vehicles Through 2031 for the Light Truck Fleet, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.3	0.9	0.8	1.6	1.3
VOC Upstream	-25.1	-70.8	-85.5	-111.9	-161.1
NOx Upstream	-1.0	-2.8	-3.7	-4.0	-7.8
SO2 Upstream	2.9	8.0	9.5	13.0	17.2
PM Upstream	-0.1	-0.2	-0.2	-0.2	-0.5
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-356.0	-865.5	-1,056.8	-1,351.5	-1,850.0
VOC Tailpipe	-33.6	-82.5	-100.3	-129.3	-179.0
NOx Tailpipe	-8.5	-20.8	-25.5	-32.5	-45.0
SO2 Tailpipe	-0.4	-1.2	-1.4	-1.8	-2.7
PM Tailpipe	-0.9	-2.3	-2.8	-3.6	-5.0
Fleetwide Change in Total Emissions					
CO Total	-355.8	-864.6	-1,055.9	-1,349.9	-1,848.7
VOC Total	-58.7	-153.3	-185.8	-241.2	-340.1
NOx Total	-9.5	-23.6	-29.1	-36.5	-52.8
SO2 Total	2.5	6.8	8.1	11.2	14.5
PM Total	-1.0	-2.5	-3.0	-3.8	-5.5

Table 932 - Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) Over Lifetimes of Vehicles Through 2031 for the Passenger Car Fleet, by Alternative (1,000 metric tons)

Incremental Change in Criteria Emissions Relative to Alternative 0 (Baseline) Over Lifetimes of Vehicles Through 2031 for the Passenger Car Fleet, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	-0.1	0.1	0.0	-0.4	-0.5
VOC Upstream	-4.1	-3.6	-10.1	-13.7	-25.3
NOx Upstream	-0.5	0.0	-0.5	-1.4	-2.3
SO2 Upstream	0.2	0.5	1.1	1.0	2.1
PM Upstream	0.0	0.0	0.0	-0.1	-0.2
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	-21.6	-30.9	-111.7	-114.9	-171.6
VOC Tailpipe	-3.3	-3.5	-11.1	-11.6	-17.5
NOx Tailpipe	-0.9	-0.9	-2.9	-3.3	-6.1
SO2 Tailpipe	-0.1	-0.1	-0.2	-0.2	-0.4
PM Tailpipe	-0.1	-0.1	-0.3	-0.4	-0.8
Fleetwide Change in Total Emissions					
CO Total	-21.7	-30.7	-111.7	-115.3	-172.1
VOC Total	-7.4	-7.1	-21.2	-25.3	-42.8
NOx Total	-1.4	-0.9	-3.5	-4.7	-8.4
SO2 Total	0.1	0.4	0.9	0.8	1.7
PM Total	-0.1	-0.1	-0.3	-0.5	-1.0

Table 933 - Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	3.7	3.7	3.7	3.7	3.6
VOC Upstream	11.5	10.9	10.6	10.1	8.4
NOx Upstream	6.7	6.7	6.6	6.6	6.4
SO2 Upstream	2.4	2.5	2.5	2.5	2.6
PM Upstream	0.5	0.5	0.5	0.5	0.5
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	113.4	108.9	105.5	101.8	87.0
VOC Tailpipe	8.2	7.9	7.7	7.4	6.3
NOx Tailpipe	3.4	3.3	3.2	3.1	2.6
SO2 Tailpipe	0.2	0.2	0.2	0.1	0.1
PM Tailpipe	0.3	0.3	0.3	0.3	0.3
Fleetwide Change in Total Emissions					
CO Total	117.1	112.6	109.2	105.5	90.7
VOC Total	19.8	18.8	18.2	17.4	14.7
NOx Total	10.1	9.9	9.8	9.6	9.0
SO2 Total	2.6	2.7	2.7	2.6	2.7
PM Total	0.7	0.7	0.7	0.7	0.7

Table 934 - Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	1.0	1.0	1.0	1.0	1.0
VOC Upstream	2.3	2.5	2.4	2.3	2.1
NOx Upstream	1.7	1.8	1.7	1.7	1.7
SO2 Upstream	0.7	0.7	0.7	0.7	0.7
PM Upstream	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	28.2	29.6	28.4	28.8	27.0
VOC Tailpipe	2.0	2.1	2.1	2.1	2.0
NOx Tailpipe	0.8	0.9	0.8	0.9	0.8
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Total Emissions					
CO Total	29.2	30.6	29.4	29.8	28.0
VOC Total	4.4	4.6	4.4	4.4	4.1
NOx Total	2.6	2.6	2.6	2.6	2.5
SO2 Total	0.7	0.7	0.7	0.7	0.7
PM Total	0.2	0.2	0.2	0.2	0.2

Table 935 - Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2035, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	2.7	2.7	2.7	2.7	2.7
VOC Upstream	9.2	8.5	8.2	7.7	6.3
NOx Upstream	5.0	4.9	4.9	4.8	4.7
SO2 Upstream	1.7	1.8	1.8	1.8	1.9
PM Upstream	0.4	0.4	0.4	0.4	0.3
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	85.2	79.3	77.2	73.0	60.0
VOC Tailpipe	6.2	5.8	5.6	5.3	4.4
NOx Tailpipe	2.6	2.4	2.3	2.2	1.8
SO2 Tailpipe	0.1	0.1	0.1	0.1	0.1
PM Tailpipe	0.3	0.2	0.2	0.2	0.2
Fleetwide Change in Total Emissions					
CO Total	88.0	82.0	79.9	75.7	62.7
VOC Total	15.4	14.2	13.8	13.0	10.6
NOx Total	7.5	7.3	7.2	7.0	6.5
SO2 Total	1.8	1.9	1.9	1.9	2.0
PM Total	0.7	0.6	0.6	0.6	0.5

Table 936 - Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Total Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	2.7	2.7	2.6	2.6	2.6
VOC Upstream	8.6	8.1	7.8	7.4	6.2
NOx Upstream	4.8	4.8	4.8	4.7	4.5
SO2 Upstream	1.9	1.9	1.9	1.9	2.0
PM Upstream	0.4	0.4	0.4	0.3	0.3
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	107.1	102.9	99.6	96.2	82.3
VOC Tailpipe	7.6	7.3	7.1	6.8	5.8
NOx Tailpipe	3.0	2.9	2.8	2.7	2.3
SO2 Tailpipe	0.1	0.1	0.1	0.1	0.1
PM Tailpipe	0.3	0.3	0.3	0.3	0.2
Fleetwide Change in Total Emissions					
CO Total	109.8	105.5	102.3	98.8	84.9
VOC Total	16.1	15.4	14.9	14.3	12.0
NOx Total	7.9	7.7	7.6	7.4	6.8
SO2 Total	2.0	2.0	2.0	2.0	2.1
PM Total	0.7	0.7	0.7	0.6	0.5

Table 937 - Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Passenger Car Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	0.7	0.7	0.7	0.7	0.7
VOC Upstream	1.7	1.8	1.7	1.7	1.6
NOx Upstream	1.2	1.3	1.2	1.2	1.2
SO2 Upstream	0.5	0.5	0.5	0.5	0.5
PM Upstream	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	26.9	28.3	27.1	27.5	25.8
VOC Tailpipe	1.9	2.0	1.9	1.9	1.8
NOx Tailpipe	0.7	0.7	0.7	0.7	0.7
SO2 Tailpipe	0.0	0.0	0.0	0.0	0.0
PM Tailpipe	0.1	0.1	0.1	0.1	0.1
Fleetwide Change in Total Emissions					
CO Total	27.6	29.0	27.8	28.2	26.4
VOC Total	3.6	3.8	3.6	3.6	3.3
NOx Total	1.9	2.0	1.9	1.9	1.9
SO2 Total	0.5	0.5	0.5	0.5	0.5
PM Total	0.2	0.2	0.2	0.2	0.2

Table 938 - Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)

Total Criteria Emissions from the MY 2031 Light Truck Fleet in Calendar Year 2040, by Alternative (1,000 metric tons)					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fleetwide Change in Upstream Emissions					
CO Upstream	2.0	2.0	1.9	1.9	1.9
VOC Upstream	6.8	6.3	6.1	5.7	4.6
NOx Upstream	3.6	3.5	3.5	3.5	3.3
SO2 Upstream	1.3	1.4	1.4	1.4	1.5
PM Upstream	0.3	0.3	0.3	0.3	0.2
Fleetwide Change in Tailpipe Emissions					
CO Tailpipe	80.3	74.6	72.6	68.7	56.6
VOC Tailpipe	5.7	5.3	5.2	4.9	4.0
NOx Tailpipe	2.3	2.2	2.1	2.0	1.6
SO2 Tailpipe	0.1	0.1	0.1	0.1	0.1
PM Tailpipe	0.2	0.2	0.2	0.2	0.2
Fleetwide Change in Total Emissions					
CO Total	82.2	76.6	74.5	70.6	58.4
VOC Total	12.5	11.6	11.3	10.6	8.7
NOx Total	5.9	5.7	5.6	5.5	5.0
SO2 Total	1.4	1.5	1.5	1.5	1.6
PM Total	0.5	0.5	0.5	0.5	0.4

Electrification Costs

Table 939 - Incremental Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet

Incremental Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.1	0.9
Electrification Tax Credits ($b)	-22.8	-20.7	-19.0	-15.5	-1.8
Irretrievable Electrification Costs ($b)	-19.3	-18.7	-17.8	-17.4	-13.0
Total Electrification Costs ($b)	-52.7	-50.6	-47.1	-44.8	-24.6

Table 940 - Incremental Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet

Incremental Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.0	0.1
Electrification Tax Credits ($b)	-7.6	-8.3	-7.7	-7.2	-4.4
Irretrievable Electrification Costs ($b)	-6.7	-7.0	-6.7	-6.7	-5.6
Total Electrification Costs ($b)	-13.9	-14.8	-13.7	-13.3	-8.7

Table 941 - Incremental Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet

Incremental Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.0	0.9
Electrification Tax Credits ($b)	-15.2	-12.4	-11.3	-8.4	2.6
Irretrievable Electrification Costs ($b)	-12.6	-11.7	-11.1	-10.7	-7.4
Total Electrification Costs ($b)	-38.7	-35.8	-33.4	-31.6	-15.9

Table 942 - Total Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet

Total Electrification Costs for Manufacturer (Total), MY 2031 Total Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.1	0.9
Electrification Tax Credits ($b)	1.2	3.3	5.0	8.4	22.2
Irretrievable Electrification Costs ($b)	0.6	1.2	2.2	2.6	7.0
Total Electrification Costs ($b)	2.4	4.4	7.9	10.2	30.4

Table 943 - Total Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet

Total Electrification Costs for Manufacturer (Total), MY 2031 Passenger Car Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.0	0.1
Electrification Tax Credits ($b)	-0.1	-0.7	-0.2	0.4	3.2
Irretrievable Electrification Costs ($b)	0.0	-0.3	0.0	0.0	1.1
Total Electrification Costs ($b)	0.3	-0.6	0.5	1.0	5.5

Table 944 - Total Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet

Total Electrification Costs for Manufacturer (Total), MY 2031 Light Truck Fleet					
	Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Retrievable Electrification Costs ($b)	0.0	0.0	0.0	0.0	0.9
Electrification Tax Credits ($b)	1.3	4.0	5.1	8.0	19.0
Irretrievable Electrification Costs ($b)	0.6	1.5	2.2	2.6	5.8
Total Electrification Costs ($b)	2.1	5.0	7.4	9.2	24.9

Fleet Characteristics

Table 945 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT002

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT002												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.3	0.0
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	69%	69%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	31%	31%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.0	0.0	0.0	2.4	1.9	3.0	3.0	2.6	12.8	1.3
Fuel Volume - Total (b gallons)	0.0	0.0	0.0	0.0	0.0	-1.8	-1.2	-2.0	-1.9	-1.6	-8.6	-0.9
Fuel Volume - Lt. Truck (b gallons)	0.0	0.0	0.0	0.0	0.0	-1.5	-1.5	-1.6	-1.4	-1.3	-7.4	-0.7
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.3	0.3	-0.4	-0.5	-0.2	-1.3	-0.1
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	0	11	9	13	13	12	57	6
Fatalities from Curb Weight Change	0	0	0	0	0	0	0	0	1	1	2	0
Total Changes in Fatalities	-2	-3	-3	-3	-3	6	2	10	11	12	29	3
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	1.7	1.3	2.1	2.1	1.8	9	1
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0
Total Change in Injuries (thousands)	-0.3	-0.4	-0.4	-0.4	-0.4	1.0	0.4	1.7	1.7	1.9	4.8	0.5
Property Damage from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	5.3	4.2	6.5	6.4	5.6	27.8	2.8
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.9	0.1
Total Property Damaged Vehicles (thousands)	-0.6	-0.8	-0.9	-0.9	-1.0	3.6	1.7	5.5	5.8	6.3	18.6	1.9

Table 946 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC1LT3

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC1LT3												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.4	0.0
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	68%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	32%	32%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.0	0.0	0.0	4.3	5.4	7.0	7.2	5.7	29.6	3.0
Fuel Volume - Total (b gallons)	0.0	0.0	0.0	0.0	0.0	-3.3	-3.9	-5.3	-5.3	-4.1	-21.9	-2.2
Fuel Volume - Lt. Truck (b gallons)	0.0	0.0	0.0	0.0	0.0	-3.1	-3.9	-4.7	-4.7	-4.5	-20.9	-2.1
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.6	-0.6	0.4	-1.0	-0.1
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	0	20	25	32	33	26	134	13
Fatalities from Curb Weight Change	0	0	0	0	0	0	0	-1	-1	-1	-3	0
Total Changes in Fatalities	-2	-2	-2	-2	-3	12	18	32	32	26	110	11
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	3.1	3.9	5.0	5.1	4.1	21	2
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.2	-0.5	0.0
Total Change in Injuries (thousands)	-0.2	-0.3	-0.3	-0.3	-0.4	2.0	2.9	5.0	5.0	4.1	17.6	1.8
Property Damage from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	9.5	12.0	15.4	15.8	12.6	65.1	6.5
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.5	-0.6	-0.5	-1.4	-0.1
Total Property Damaged Vehicles (thousands)	-0.4	-0.6	-0.7	-0.7	-0.8	6.6	9.5	15.9	15.9	13.0	57.7	5.8

Table 947 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT4

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC2LT4												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	0.0	0.0	-0.5	0.0
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	68%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	32%	32%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.0	0.0	0.0	5.5	7.3	8.9	9.5	8.3	39.3	3.9
Fuel Volume - Total (b gallons)	0.0	0.0	0.0	0.0	0.0	-4.1	-5.2	-6.5	-6.7	-5.8	-28.4	-2.8
Fuel Volume - Lt. Truck (b gallons)	0.0	0.0	0.0	0.0	0.0	-3.8	-4.8	-5.5	-5.6	-5.6	-25.3	-2.5
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.4	-1.0	-1.1	-0.2	-3.0	-0.3
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	0	25	33	40	43	38	179	18
Fatalities from Curb Weight Change	0	0	0	0	0	0	0	-1	-1	-1	-2	0
Total Changes in Fatalities	-1	-1	-1	-1	-1	17	29	42	44	40	167	17
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	3.9	5.2	6.3	6.7	5.9	28	3
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.3	0.0
Total Change in Injuries (thousands)	-0.1	-0.1	-0.1	-0.2	-0.2	2.7	4.6	6.6	7.0	6.2	26.3	2.6
Property Damage from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	12.1	16.0	19.5	20.8	18.2	86.5	8.6
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.4	-0.3	-0.3	-0.9	-0.1
Total Property Damaged Vehicles (thousands)	-0.2	-0.3	-0.3	-0.4	-0.4	8.7	14.4	20.6	21.8	19.4	83.2	8.3

Table 948 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC3LT5

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC3LT5												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.2	-0.2	-0.3	-1.3	-0.1
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	68%	69%	69%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	32%	31%	31%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.0	0.0	0.0	6.9	9.9	11.2	11.9	11.2	51.2	5.1
Fuel Volume - Total (b gallons)	0.0	0.0	0.0	0.0	0.0	-5.5	-7.4	-8.0	-8.5	-8.3	-37.6	-3.8
Fuel Volume - Lt. Truck (b gallons)	0.0	0.0	0.0	0.0	0.0	-5.0	-6.5	-6.6	-7.1	-8.0	-33.1	-3.3
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-0.5	-0.9	-1.3	-1.5	-0.3	-4.5	-0.4
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	0	31	45	51	54	51	233	23
Fatalities from Curb Weight Change	0	0	0	0	0	0	0	-1	-1	0	-2	0
Total Changes in Fatalities	3	3	3	3	3	24	41	51	54	46	229	23
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	4.9	7.1	7.9	8.4	7.9	36	4
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	-0.3	0.0
Total Change in Injuries (thousands)	0.5	0.5	0.4	0.4	0.4	3.7	6.4	7.9	8.5	7.1	35.8	3.6
Property Damage from Rebound Miles (thousands)	0.0	0.0	0.0	0.0	0.0	15.2	21.8	24.6	26.1	24.5	112.3	11.2
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.7	-0.3	0.0	-0.8	-0.1
Total Property Damaged Vehicles (thousands)	1.1	1.1	1.1	1.1	1.1	11.4	19.6	24.3	26.2	22.2	109.1	10.9

Table 949 - Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC6LT8

Changes in Fleet Characteristics for Model Years 2022-2031 for Alternative PC6LT8												
Model Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Avg.
Changes in Fleet Size, Usage and Fuel Consumption												
Changes in Fleet Size (m)	0.1	0.1	0.0	0.0	0.0	-0.5	-0.6	-0.9	-1.2	-1.6	-4.5	-0.5
Light Truck Share (%)	64%	65%	66%	67%	68%	68%	68%	69%	69%	68%	N/A	67%
Pass. Car Share (%)	36%	35%	34%	33%	32%	32%	32%	31%	31%	32%	N/A	33%
VMT from Rebound (b)	0.0	0.0	0.1	0.1	0.1	9.3	13.8	15.9	18.7	20.1	78.0	7.8
Fuel Volume - Total (b gallons)	0.1	0.1	0.1	0.1	0.1	-7.1	-9.7	-11.2	-13.8	-16.2	-57.3	-5.7
Fuel Volume - Lt. Truck (b gallons)	0.1	0.1	0.1	0.1	0.1	-6.0	-8.3	-8.9	-11.0	-14.8	-48.6	-4.9
Fuel Volume - Pass. Car (b gallons)	0.0	0.0	0.0	0.0	0.0	-1.1	-1.3	-2.3	-2.7	-1.4	-8.7	-0.9
Changes in Fatalities by Source												
Fatalities from Rebound Miles	0	0	0	0	1	42	63	72	85	91	354	35
Fatalities from Curb Weight Change	0	0	0	0	0	0	0	-1	0	0	-1	0
Total Changes in Fatalities	21	22	23	23	24	50	65	62	61	48	398	40
Changes in Non-Fatal Safety Impacts												
Injuries from Rebound Miles (thousands)	0.0	0.0	0.1	0.1	0.1	6.6	9.8	11.2	13.2	14.1	55	6
Injuries from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.1	0.0	-0.2	0.0
Total Change in Injuries (thousands)	3.0	3.2	3.3	3.4	3.6	7.6	10.0	9.6	9.5	7.5	60.8	6.1
Property Damage from Rebound Miles (thousands)	0.1	0.1	0.1	0.2	0.2	20.3	30.1	34.7	40.8	43.5	170.0	17.0
Property Damage from Curb Weight (thousands)	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	-0.4	0.2	0.0	-0.3	0.0
Total Property Damaged Vehicles (thousands)	6.8	7.5	7.9	8.1	8.8	21.4	28.6	27.5	28.0	22.5	167.2	16.7

Liquid Fuel and Electricity Consumption

Table 950 - Change in Liquid Fuel Consumed (b Gallons), Total Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Liquid Fuel Consumed (b Gallons), Total Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	1268.0	0.0	0.0	0.0	0.0	-1.8	-1.2	-2.0	-1.9	-1.6	1259.3
Alternative PC1LT3	1268.0	0.0	0.0	0.0	0.0	-3.3	-3.9	-5.3	-5.3	-4.1	1246.1
Alternative PC2LT4	1268.1	0.0	0.0	0.0	0.0	-4.1	-5.2	-6.5	-6.7	-5.8	1239.7
Alternative PC3LT5	1268.4	0.0	0.0	0.0	0.0	-5.5	-7.4	-8.0	-8.5	-8.3	1230.8
Alternative PC6LT8	1270.0	0.1	0.1	0.1	0.1	-7.1	-9.7	-11.2	-13.8	-16.2	1212.6

Table 951 - Change in Liquid Fuel Consumed (b Gallons), Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Liquid Fuel Consumed (b Gallons), Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	481.0	0.0	0.0	0.0	0.0	-0.3	0.3	-0.4	-0.5	-0.2	479.7
Alternative PC1LT3	481.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.6	-0.6	0.4	480.0
Alternative PC2LT4	481.1	0.0	0.0	0.0	0.0	-0.3	-0.4	-1.0	-1.1	-0.2	478.0
Alternative PC3LT5	481.2	0.0	0.0	0.0	0.0	-0.5	-0.9	-1.3	-1.5	-0.3	476.8
Alternative PC6LT8	482.0	0.0	0.0	0.0	0.0	-1.1	-1.3	-2.3	-2.7	-1.4	473.2

Table 952 - Change in Liquid Fuel Consumed (b Gallons), Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Liquid Fuel Consumed (b Gallons), Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	787.0	0.0	0.0	0.0	0.0	-1.5	-1.5	-1.6	-1.4	-1.3	779.6
Alternative PC1LT3	787.0	0.0	0.0	0.0	0.0	-3.1	-3.9	-4.7	-4.7	-4.5	766.1
Alternative PC2LT4	787.0	0.0	0.0	0.0	0.0	-3.8	-4.8	-5.5	-5.6	-5.6	761.7
Alternative PC3LT5	787.2	0.0	0.0	0.0	0.0	-5.0	-6.5	-6.6	-7.1	-8.0	754.1
Alternative PC6LT8	788.0	0.1	0.1	0.1	0.1	-6.0	-8.3	-8.9	-11.0	-14.8	739.3

Table 953 - Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Total Fleet, by Alternative

Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Total Fleet, by Alternative				
	Lifetime Fuel Expenditures		Lifetime Increase	
	7% Discount Rate	3% Discount Rate	7% Discount Rate	3% Discount Rate
No Action Alternative (Baseline)	10,046	12,928	0	0
Alternative PC2LT002	9,885	12,719	-161	-208
Alternative PC1LT3	9,624	12,384	-421	-543
Alternative PC2LT4	9,446	12,157	-599	-771
Alternative PC3LT5	9,200	11,837	-846	-1,091
Alternative PC6LT8	8,416	10,825	-1,629	-2,103

Table 954 - Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Passenger Car Fleet, by Alternative

Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Passenger Car Fleet, by Alternative				
	Lifetime Fuel Expenditures		Lifetime Increase	
	7% Discount Rate	3% Discount Rate	7% Discount Rate	3% Discount Rate
No Action Alternative (Baseline)	6,807	8,656	0	0
Alternative PC2LT002	6,745	8,571	-62	-85
Alternative PC1LT3	6,911	8,785	104	129
Alternative PC2LT4	6,731	8,556	-75	-100
Alternative PC3LT5	6,702	8,515	-105	-141
Alternative PC6LT8	6,339	8,049	-468	-607

Table 955 - Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Light Truck Fleet, by Alternative

Estimated Average Per Vehicle Fuel Costs ($) for MY 2031 Light Truck Fleet, by Alternative				
	Lifetime Fuel Expenditures		Lifetime Increase	
	7% Discount Rate	3% Discount Rate	7% Discount Rate	3% Discount Rate
No Action Alternative (Baseline)	11,682	15,086	0	0
Alternative PC2LT002	11,470	14,814	-212	-271
Alternative PC1LT3	11,000	14,210	-682	-876
Alternative PC2LT4	10,823	13,983	-859	-1,103
Alternative PC3LT5	10,465	13,519	-1,217	-1,566
Alternative PC6LT8	9,478	12,244	-2,204	-2,842

Table 956 - Change in Electricity (G-Wh) Consumed, Total Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Electricity (G-Wh) Consumed, Total Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	98.0	0.0	0.0	0.0	0.0	19.5	13.5	22.6	20.4	17.6	191.6
Alternative PC1LT3	98.0	0.0	0.0	0.0	0.0	38.1	43.9	60.7	59.4	47.5	347.6
Alternative PC2LT4	98.0	0.0	0.0	0.0	0.0	47.7	57.1	73.4	73.5	63.4	413.1
Alternative PC3LT5	98.1	0.0	0.0	0.0	0.0	63.3	81.5	87.7	93.1	88.9	512.7
Alternative PC6LT8	98.2	0.1	0.2	0.2	0.3	80.9	99.2	113.5	138.9	167.1	698.6

Table 957 - Change in Electricity (G-Wh) Consumed, Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Electricity (G-Wh) Consumed, Passenger Car Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	66.8	0.0	0.0	0.0	0.0	3.1	-3.8	3.6	5.0	2.7	77.4
Alternative PC1LT3	66.8	0.0	0.0	0.0	0.0	1.8	1.0	6.7	6.7	-3.1	79.9
Alternative PC2LT4	66.8	0.0	0.0	0.0	0.0	3.3	4.0	10.7	12.2	2.4	99.5
Alternative PC3LT5	66.9	0.0	0.0	0.0	0.0	3.5	7.5	12.1	12.8	1.0	103.8
Alternative PC6LT8	67.0	0.1	0.1	0.1	0.1	10.6	9.2	17.2	23.3	10.2	137.8

Table 958 - Change in Electricity (G-Wh) Consumed, Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year

Change in Electricity (G-Wh) Consumed, Light Truck Fleet, Undiscounted Over the Lifetime of the Model Year											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Alternative PC2LT002	31.2	0.0	0.0	0.0	0.0	16.4	17.3	19.0	15.5	14.9	114.2
Alternative PC1LT3	31.2	0.0	0.0	0.0	0.0	36.3	42.9	54.0	52.7	50.6	267.7
Alternative PC2LT4	31.2	0.0	0.0	0.0	0.0	44.4	53.1	62.6	61.3	61.1	313.6
Alternative PC3LT5	31.2	0.0	0.0	0.0	0.0	59.8	73.9	75.6	80.3	87.9	408.9
Alternative PC6LT8	31.2	0.0	0.1	0.1	0.1	70.3	90.0	96.3	115.6	157.0	560.8

Regulatory Costs per Vehicle, by Vehicle Type

Table 959 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Total)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Total)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,509	1,653	1,605
Alternative PC2LT002	1,499	1,780	1,686
Alternative PC1LT3	1,369	2,057	1,826
Alternative PC2LT4	1,475	2,172	1,937
Alternative PC3LT5	1,590	2,467	2,172
Alternative PC6LT8	2,134	3,600	3,104

Table 960 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (BMW)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (BMW)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,357	1,722	1,541
Alternative PC2LT002	1,218	1,717	1,470
Alternative PC1LT3	1,218	1,480	1,350
Alternative PC2LT4	1,218	1,714	1,468
Alternative PC3LT5	1,306	2,128	1,720
Alternative PC6LT8	2,124	3,268	2,698

Table 961 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Ford)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Ford)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	640	1,942	1,814
Alternative PC2LT002	895	1,942	1,839
Alternative PC1LT3	563	2,000	1,858
Alternative PC2LT4	895	2,011	1,901
Alternative PC3LT5	1,059	2,267	2,148
Alternative PC6LT8	2,493	3,586	3,478

Table 962 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (GM)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (GM)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	2,093	2,127	2,120
Alternative PC2LT002	3,227	2,276	2,481
Alternative PC1LT3	2,282	2,713	2,620
Alternative PC2LT4	2,226	2,924	2,774
Alternative PC3LT5	3,120	3,425	3,359
Alternative PC6LT8	3,494	4,715	4,450

Table 963 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Honda)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Honda)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,751	815	1,276
Alternative PC2LT002	879	1,837	1,365
Alternative PC1LT3	1,366	2,401	1,890
Alternative PC2LT4	1,392	2,597	2,001
Alternative PC3LT5	1,288	2,847	2,077
Alternative PC6LT8	1,796	3,079	2,442

Table 964 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Hyundai)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Hyundai)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,236	2,000	1,568
Alternative PC2LT002	1,522	1,894	1,683
Alternative PC1LT3	1,286	2,103	1,639
Alternative PC2LT4	1,525	2,296	1,859
Alternative PC3LT5	1,549	2,388	1,913
Alternative PC6LT8	2,300	2,987	2,596

Table 965 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (KIA)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (KIA)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	2,344	573	1,519
Alternative PC2LT002	1,945	1,199	1,597
Alternative PC1LT3	1,699	2,008	1,843
Alternative PC2LT4	1,767	2,255	1,994
Alternative PC3LT5	1,578	2,719	2,109
Alternative PC6LT8	2,841	3,925	3,343

Table 966 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (JLR)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (JLR)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,652	588	612
Alternative PC2LT002	1,784	705	729
Alternative PC1LT3	1,783	1,350	1,360
Alternative PC2LT4	1,782	1,678	1,680
Alternative PC3LT5	2,051	4,507	4,452
Alternative PC6LT8	3,887	5,988	5,940

Table 967 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Karma)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Karma)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	-4,776	0	-4,776
Alternative PC2LT002	-4,776	0	-4,776
Alternative PC1LT3	-4,776	0	-4,776
Alternative PC2LT4	-4,776	0	-4,776
Alternative PC3LT5	-4,776	0	-4,776
Alternative PC6LT8	-4,776	0	-4,776

Table 968 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Lucid)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Lucid)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	0	0	0
Alternative PC2LT002	0	0	0
Alternative PC1LT3	0	0	0
Alternative PC2LT4	0	0	0
Alternative PC3LT5	0	0	0
Alternative PC6LT8	0	0	0

Table 969 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mazda)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mazda)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	2,791	1,948	2,059
Alternative PC2LT002	2,790	1,485	1,657
Alternative PC1LT3	2,790	1,485	1,658
Alternative PC2LT4	2,789	1,549	1,713
Alternative PC3LT5	2,789	2,161	2,244
Alternative PC6LT8	2,790	2,512	2,549

Table 970 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mercedes-Benz)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mercedes-Benz)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,139	2,566	1,919
Alternative PC2LT002	953	2,233	1,653
Alternative PC1LT3	726	2,624	1,762
Alternative PC2LT4	757	2,624	1,776
Alternative PC3LT5	990	2,624	1,883
Alternative PC6LT8	2,010	3,001	2,549

Table 971 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mitsubishi)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Mitsubishi)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	821	1,921	1,355
Alternative PC2LT002	1,357	1,917	1,629
Alternative PC1LT3	799	1,917	1,341
Alternative PC2LT4	1,357	1,939	1,639
Alternative PC3LT5	1,365	2,629	1,978
Alternative PC6LT8	2,045	3,407	2,702

Table 972 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Nissan)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Nissan)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,690	1,638	1,666
Alternative PC2LT002	2,059	2,572	2,295
Alternative PC1LT3	1,715	2,722	2,177
Alternative PC2LT4	2,059	2,322	2,180
Alternative PC3LT5	2,063	2,543	2,283
Alternative PC6LT8	2,163	3,338	2,700

Table 973 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Stellantis)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Stellantis)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	3,069	1,561	1,739
Alternative PC2LT002	3,143	1,708	1,877
Alternative PC1LT3	2,958	2,162	2,256
Alternative PC2LT4	3,140	2,470	2,549
Alternative PC3LT5	2,726	2,849	2,835
Alternative PC6LT8	3,566	3,714	3,696

Table 974 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Subaru)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Subaru)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,821	1,968	1,948
Alternative PC2LT002	1,643	1,847	1,819
Alternative PC1LT3	1,644	1,854	1,825
Alternative PC2LT4	1,644	1,865	1,834
Alternative PC3LT5	1,946	1,658	1,698
Alternative PC6LT8	1,969	2,562	2,479

Table 975 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Tesla)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Tesla)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	0	270	15
Alternative PC2LT002	0	0	0
Alternative PC1LT3	0	0	0
Alternative PC2LT4	0	0	0
Alternative PC3LT5	0	0	0
Alternative PC6LT8	0	0	0

Table 976 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Toyota)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Toyota)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	1,623	1,245	1,386
Alternative PC2LT002	1,398	1,198	1,273
Alternative PC1LT3	1,402	1,324	1,354
Alternative PC2LT4	1,451	1,423	1,433
Alternative PC3LT5	1,582	1,813	1,727
Alternative PC6LT8	2,224	3,788	3,201

Table 977 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Volvo)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (Volvo)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	457	1,237	1,016
Alternative PC2LT002	262	1,214	944
Alternative PC1LT3	257	1,197	929
Alternative PC2LT4	315	1,118	889
Alternative PC3LT5	257	1,192	926
Alternative PC6LT8	348	1,838	1,411

Table 978 - Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (VWA)

Estimated Average Per Vehicle Regulatory Costs ($) for MY 2031, by Alternative for Manufacturer (VWA)			
	Passenger Cars	Light Trucks	Total Fleet
No Action Alternative (Baseline)	884	2,179	1,698
Alternative PC2LT002	1,226	1,609	1,467
Alternative PC1LT3	930	2,228	1,744
Alternative PC2LT4	1,051	2,227	1,789
Alternative PC3LT5	1,853	1,805	1,823
Alternative PC6LT8	1,994	3,251	2,781

Change in Safety Parameters

Table 979 - Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Total Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Total Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	21	109	175	282	643
Fatality Costs ($ Billion, 3% Discount Rate)	0.2	0.9	1.3	2.2	4.9
Fatality Costs ($ Billion, 7% Discount Rate)	0.1	0.5	0.8	1.2	2.8
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	0.5	2.0	3.1	4.9	10.7
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	0.3	1.2	1.8	2.8	6.0
Total Crash Costs ($ Billion, 3% Discount Rate)	0.7	2.9	4.5	7.1	15.6
Total Crash Costs ($ Billion, 7% Discount Rate)	0.5	1.7	2.6	4.0	8.8

Table 980 - Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Passenger Car Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Passenger Car Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	-11	57	78	64	183
Fatality Costs ($ Billion, 3% Discount Rate)	-0.1	0.5	0.6	0.5	1.5
Fatality Costs ($ Billion, 7% Discount Rate)	0.0	0.3	0.4	0.3	0.9
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	-0.1	1.1	1.4	1.1	3.0
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	0.0	0.6	0.8	0.7	1.8
Total Crash Costs ($ Billion, 3% Discount Rate)	-0.2	1.5	2.0	1.7	4.5
Total Crash Costs ($ Billion, 7% Discount Rate)	-0.1	0.9	1.2	1.0	2.7

Table 981 - Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Light Truck Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts over the Lifetime of MY 1983-2031 for Light Truck Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	32	51	97	219	460
Fatality Costs ($ Billion, 3% Discount Rate)	0.3	0.4	0.7	1.7	3.4
Fatality Costs ($ Billion, 7% Discount Rate)	0.2	0.2	0.4	0.9	1.9
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	0.6	1.0	1.7	3.8	7.6
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	0.4	0.6	1.0	2.1	4.2
Total Crash Costs ($ Billion, 3% Discount Rate)	0.9	1.4	2.5	5.4	11.0
Total Crash Costs ($ Billion, 7% Discount Rate)	0.5	0.8	1.4	3.0	6.1

Table 982 - Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Total Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Total Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	56	107	150	271	585
Fatality Costs ($ Billion, 3% Discount Rate)	0.4	0.7	1.0	1.7	3.7
Fatality Costs ($ Billion, 7% Discount Rate)	0.2	0.3	0.4	0.8	1.6
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	0.9	1.6	2.3	4.0	8.6
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	0.4	0.7	1.0	1.8	3.7
Total Crash Costs ($ Billion, 3% Discount Rate)	1.2	2.3	3.2	5.8	12.3
Total Crash Costs ($ Billion, 7% Discount Rate)	0.5	1.0	1.4	2.5	5.3

Table 983 - Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Passenger Car Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Passenger Car Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	158	173	262	273	713
Fatality Costs ($ Billion, 3% Discount Rate)	1.0	1.1	1.6	1.7	4.5
Fatality Costs ($ Billion, 7% Discount Rate)	0.4	0.5	0.7	0.7	1.9
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	2.4	2.6	3.9	4.1	10.6
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	1.0	1.1	1.7	1.7	4.5
Total Crash Costs ($ Billion, 3% Discount Rate)	3.3	3.7	5.5	5.8	15.0
Total Crash Costs ($ Billion, 7% Discount Rate)	1.4	1.6	2.3	2.5	6.4

Table 984 - Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Light Truck Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%

Vehicle-Mass-Related Fatality Impacts for CY 2039-2048 for Light Truck Fleet, Compared to Alternative 0 (Baseline) - Fatalities Undiscounted, Dollars Discounted at 3% and 7%					
Category	Regulatory Alternative				
	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities	-103	-66	-112	-1	-128
Fatality Costs ($ Billion, 3% Discount Rate)	-0.6	-0.4	-0.7	0.0	-0.7
Fatality Costs ($ Billion, 7% Discount Rate)	-0.3	-0.2	-0.3	0.0	-0.3
Non-Fatal Crash Costs ($ Billion, 3% Discount Rate)	-1.5	-1.0	-1.6	0.0	-2.0
Non-Fatal Crash Costs ($ Billion, 7% Discount Rate)	-0.6	-0.4	-0.7	0.0	-0.8
Total Crash Costs ($ Billion, 3% Discount Rate)	-2.1	-1.4	-2.3	0.0	-2.7
Total Crash Costs ($ Billion, 7% Discount Rate)	-0.9	-0.6	-0.9	0.1	-1.1

Table 985 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	1	-1	-1	-1	-1	12	12	12	13	10	57
Light Trucks	-4	-1	-1	-1	-2	0	6	20	18	16	51
Total	-3	-2	-2	-2	-3	12	18	32	32	26	109

Table 986 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	6	0	0	-1	-1	15	14	13	16	15	78
Light Trucks	1	0	-1	-1	-1	2	15	29	28	24	97
Total	7	-1	-1	-1	-1	17	29	42	44	40	175

Table 987 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	32	1	1	1	1	6	4	3	3	11	64
Light Trucks	24	2	2	2	2	17	36	48	51	35	219
Total	56	3	3	3	3	24	41	51	54	46	282

Table 988 - Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Baseline), Undiscounted

Incremental Vehicle-Mass-Related Fatality Impacts by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Baseline), Undiscounted											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	138	9	8	7	7	5	-11	-26	4	41	183
Light Trucks	128	13	14	15	16	45	76	88	58	6	460
Total	266	22	23	23	24	50	65	62	61	48	643

Table 989 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Light Trucks	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
Total	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.2

Table 990 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.5
Light Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.4
Total	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.9

Table 991 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.6
Light Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.7
Total	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	1.3

Table 992 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5
Light Trucks	0.2	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4	0.2	1.7
Total	0.5	0.0	0.0	0.0	0.0	0.2	0.3	0.4	0.4	0.3	2.2

Table 993 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Baseline), 3% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Baseline), 3% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	1.2	0.1	0.1	0.1	0.1	0.0	-0.1	-0.2	0.0	0.3	1.5
Light Trucks	1.0	0.1	0.1	0.1	0.1	0.3	0.6	0.6	0.4	0.0	3.4
Total	2.2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.4	0.3	4.9

Table 994 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT002 Compared to Alternative 0 (Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Table 995 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC1LT3 Compared to Alternative 0 (Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.3
Light Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
Total	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.5

Table 996 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC2LT4 Compared to Alternative 0 (Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4
Light Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.4
Total	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.8

Table 997 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC3LT5 Compared to Alternative 0 (Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Light Trucks	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.9
Total	0.3	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	1.2

Table 998 - Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Baseline), 7% Discount Rate

Incremental Vehicle-Mass-Related Fatality Costs ($ billion) by Model Year and Fleet, Alternative PC6LT8 Compared to Alternative 0 (Baseline), 7% Discount Rate											
Model Year	1983-2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Passenger Cars	0.7	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.2	0.9
Light Trucks	0.6	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.0	1.9
Total	1.3	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	2.8

Table 999 - Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Total Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Total Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	2	-3	-2	-2	-1
Fatalities from Rebound Effect	57	134	179	233	355
Fatalities from Sales/Scrappage	-38	-23	-2	52	289
Total Changes in Fatalities	21	109	175	282	643
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Fatality Costs From Rebound Effect	0.4	1.0	1.3	1.7	2.6
Fatality Costs from Sales/Scrappage	-0.2	-0.1	0.0	0.4	2.3
Total - Fatality Costs ($b)	0.2	0.9	1.3	2.2	4.9
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Non-Fatal Crash Costs From Rebound Effect	1.0	2.4	3.1	4.1	6.2
Non-Fatal Crash Costs from Sales/Scrappage	-0.5	-0.3	0.0	0.9	4.5
Total - Non-Fatal Crash Costs ($b)	0.5	2.0	3.1	4.9	10.7
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.2	0.4	0.5	0.6	0.9
Property Damage Costs From Sales/Scrappage	-0.1	0.0	0.0	0.1	0.3
Total - Property Damage Costs ($b)	0.1	0.3	0.5	0.7	1.2
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	-0.1	-0.1	0.0	0.0
Crash Costs from Rebound Effect	1.6	3.7	5.0	6.4	9.7
Crash Costs from Sales/Scrappage	-0.9	-0.4	0.0	1.4	7.1
Total - Societal Crash Costs ($b)	0.8	3.2	4.9	7.7	16.8

Table 997 - Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Passenger Car Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Passenger Car Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	2	2	2	4	9
Fatalities from Rebound Effect	11	11	24	34	69
Fatalities from Sales/Scrappage	-24	45	52	25	104
Total Changes in Fatalities	-11	57	78	64	183
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.1
Fatality Costs From Rebound Effect	0.1	0.1	0.2	0.3	0.5
Fatality Costs from Sales/Scrappage	-0.2	0.4	0.4	0.2	0.9
Total - Fatality Costs ($b)	-0.1	0.5	0.6	0.5	1.5
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	0.1	0.2
Non-Fatal Crash Costs From Rebound Effect	0.2	0.2	0.4	0.6	1.2
Non-Fatal Crash Costs from Sales/Scrappage	-0.4	0.8	0.9	0.5	1.7
Total - Non-Fatal Crash Costs ($b)	-0.1	1.1	1.4	1.1	3.0
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.0	0.0	0.1	0.1	0.2
Property Damage Costs From Sales/Scrappage	0.0	0.1	0.1	0.0	0.1
Total - Property Damage Costs ($b)	0.0	0.2	0.2	0.1	0.3
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.1	0.1	0.1	0.1	0.2
Crash Costs from Rebound Effect	0.3	0.3	0.7	0.9	1.9
Crash Costs from Sales/Scrappage	-0.6	1.3	1.5	0.7	2.6
Total - Societal Crash Costs ($b)	-0.2	1.7	2.2	1.8	4.8

Table 998 - Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Light Truck Fleet, 3% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Light Truck Fleet, 3% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-1	-5	-4	-6	-10
Fatalities from Rebound Effect	46	124	154	199	285
Fatalities from Sales/Scrappage	-14	-68	-53	26	185
Total Changes in Fatalities	32	51	97	219	460
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	-0.1
Fatality Costs From Rebound Effect	0.3	0.9	1.2	1.5	2.1
Fatality Costs from Sales/Scrappage	-0.1	-0.5	-0.4	0.2	1.4
Total - Fatality Costs ($b)	0.3	0.4	0.7	1.7	3.4
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	-0.1	-0.1	-0.1	-0.2
Non-Fatal Crash Costs From Rebound Effect	0.8	2.2	2.7	3.5	5.0
Non-Fatal Crash Costs from Sales/Scrappage	-0.2	-1.1	-0.9	0.4	2.8
Total - Non-Fatal Crash Costs ($b)	0.6	1.0	1.7	3.8	7.6
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.1	0.3	0.4	0.5	0.7
Property Damage Costs From Sales/Scrappage	0.0	-0.2	-0.1	0.0	0.2
Total - Property Damage Costs ($b)	0.1	0.2	0.3	0.5	0.9
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	-0.1	-0.1	-0.2	-0.3
Crash Costs from Rebound Effect	1.3	3.4	4.3	5.5	7.8
Crash Costs from Sales/Scrappage	-0.3	-1.8	-1.4	0.6	4.4
Total - Societal Crash Costs ($b)	1.0	1.5	2.7	6.0	12.0

Table 999 - Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Total Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Total Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	2	-3	-2	-2	-1
Fatalities from Rebound Effect	57	134	179	233	355
Fatalities from Sales/Scrappage	-38	-23	-2	52	289
Total Changes in Fatalities	21	109	175	282	643
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Fatality Costs From Rebound Effect	0.2	0.6	0.8	1.0	1.5
Fatality Costs from Sales/Scrappage	-0.1	0.0	0.0	0.3	1.3
Total - Fatality Costs ($b)	0.1	0.5	0.8	1.2	2.8
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Non-Fatal Crash Costs From Rebound Effect	0.6	1.3	1.8	2.3	3.5
Non-Fatal Crash Costs from Sales/Scrappage	-0.3	-0.1	0.0	0.5	2.5
Total - Non-Fatal Crash Costs ($b)	0.3	1.2	1.8	2.8	6.0
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.1	0.2	0.3	0.4	0.5
Property Damage Costs From Sales/Scrappage	0.0	0.0	0.0	0.0	0.2
Total - Property Damage Costs ($b)	0.1	0.2	0.3	0.4	0.7
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	0.0	0.0	0.0	0.0
Crash Costs from Rebound Effect	0.9	2.1	2.8	3.6	5.5
Crash Costs from Sales/Scrappage	-0.4	-0.2	0.1	0.8	4.0
Total - Societal Crash Costs ($b)	0.5	1.9	2.8	4.4	9.5

Table 1000 - Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Passenger Car Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Passenger Car Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	2	2	2	4	9
Fatalities from Rebound Effect	11	11	24	34	69
Fatalities from Sales/Scrappage	-24	45	52	25	104
Total Changes in Fatalities	-11	57	78	64	183
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Fatality Costs From Rebound Effect	0.0	0.0	0.1	0.1	0.3
Fatality Costs from Sales/Scrappage	-0.1	0.2	0.2	0.2	0.5
Total - Fatality Costs ($b)	0.0	0.3	0.4	0.3	0.9
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	0.0	0.1
Non-Fatal Crash Costs From Rebound Effect	0.1	0.1	0.2	0.3	0.7
Non-Fatal Crash Costs from Sales/Scrappage	-0.2	0.5	0.6	0.3	1.0
Total - Non-Fatal Crash Costs ($b)	0.0	0.6	0.8	0.7	1.8
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.0	0.0	0.0	0.1	0.1
Property Damage Costs From Sales/Scrappage	0.0	0.1	0.1	0.0	0.1
Total - Property Damage Costs ($b)	0.0	0.1	0.1	0.1	0.2
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	0.0	0.0	0.1	0.1
Crash Costs from Rebound Effect	0.2	0.2	0.4	0.5	1.1
Crash Costs from Sales/Scrappage	-0.3	0.8	0.9	0.5	1.6
Total - Societal Crash Costs ($b)	-0.1	1.0	1.3	1.1	2.8

Table 1001 - Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Light Truck Fleet, 7% Percent Discount Rate, by Alternative

Change in Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Light Truck Fleet, 7% Percent Discount Rate, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fatalities					
Fatalities From Mass Changes	-1	-5	-4	-6	-10
Fatalities from Rebound Effect	46	124	154	199	285
Fatalities from Sales/Scrappage	-14	-68	-53	26	185
Total Changes in Fatalities	32	51	97	219	460
Fatality Costs ($b)					
Fatality Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Fatality Costs From Rebound Effect	0.2	0.5	0.7	0.8	1.2
Fatality Costs from Sales/Scrappage	0.0	-0.3	-0.2	0.1	0.8
Total - Fatality Costs ($b)	0.2	0.2	0.4	0.9	1.9
Non-Fatal Crash Costs ($b)					
Non-Fatal Crash Costs From Mass Changes	0.0	0.0	0.0	-0.1	-0.1
Non-Fatal Crash Costs From Rebound Effect	0.5	1.2	1.5	2.0	2.8
Non-Fatal Crash Costs from Sales/Scrappage	-0.1	-0.6	-0.5	0.2	1.5
Total - Non-Fatal Crash Costs ($b)	0.4	0.6	1.0	2.1	4.2
Property Damage Costs ($b)					
Property Damage Costs From Mass Changes	0.0	0.0	0.0	0.0	0.0
Property Damage Costs From Rebound Effect	0.1	0.2	0.2	0.3	0.4
Property Damage Costs From Sales/Scrappage	0.0	-0.1	-0.1	0.0	0.1
Total - Property Damage Costs ($b)	0.1	0.1	0.2	0.3	0.5
Societal Crash Costs ($b)					
Crash Costs from Mass Changes	0.0	-0.1	-0.1	-0.1	-0.1
Crash Costs from Rebound Effect	0.7	2.0	2.4	3.1	4.4
Crash Costs from Sales/Scrappage	-0.1	-1.0	-0.8	0.3	2.4
Total - Societal Crash Costs ($b)	0.6	0.9	1.5	3.4	6.6

Table 1002 - Change in Non-Fatal Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Total Fleet, by Alternative

Change in Non-Fatal Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Total Fleet, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Fatal Injuries					
Non-Fatal Injuries From Mass Changes	269	-465	-302	-284	-155
Non-Fatal Injuries from Rebound Effect	8,963	20,997	27,889	36,301	55,281
Non-Fatal Injuries from Sales/Scrappage	-5,612	-3,301	-341	6,893	39,101
Total Changes in Non-Fatal Injuries	3,620	17,231	27,246	42,910	94,227
Property Damaged Vehicles					
Property Damaged Vehicles From Mass Changes	851	-1,398	-888	-797	-324
Property Damaged Vehicles from Rebound Effect	27,824	65,133	86,467	112,303	170,174
Property Damaged Vehicles from Sales/Scrappage	-11,963	-6,244	-292	11,673	62,204
Total Changes in Property Damaged Vehicles	16,711	57,492	85,287	123,179	232,053

Table 1003 - Change in Non-Fatal Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Passenger Car Fleet, by Alternative

Change in Non-Fatal Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Passenger Car Fleet, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Fatal Injuries					
Non-Fatal Injuries From Mass Changes	356	290	356	649	1,427
Non-Fatal Injuries from Rebound Effect	1,764	1,668	3,796	5,329	10,846
Non-Fatal Injuries from Sales/Scrappage	-3,697	7,033	7,946	3,360	13,559
Total Changes in Non-Fatal Injuries	-1,577	8,991	12,098	9,339	25,832
Property Damaged Vehicles					
Property Damaged Vehicles From Mass Changes	1,115	899	1,115	2,043	4,481
Property Damaged Vehicles from Rebound Effect	5,445	5,187	11,782	16,494	33,445
Property Damaged Vehicles from Sales/Scrappage	-9,390	22,750	24,258	5,906	17,025
Total Changes in Property Damaged Vehicles	-2,831	28,836	37,155	24,443	54,950

Table 1004 - Change in Non-Fatal Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Light Truck Fleet, by Alternative

Change in Non-Fatal Safety Parameters from Alternative 0 (Baseline) for MY 1983-2031 for Light Truck Fleet, by Alternative					
Alternative	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Non-Fatal Injuries					
Non-Fatal Injuries From Mass Changes	-87	-754	-658	-933	-1,582
Non-Fatal Injuries from Rebound Effect	7,199	19,329	24,093	30,971	44,435
Non-Fatal Injuries from Sales/Scrappage	-1,916	-10,334	-8,287	3,533	25,542
Total Changes in Non-Fatal Injuries	5,197	8,240	15,148	33,571	68,395
Property Damaged Vehicles					
Property Damaged Vehicles From Mass Changes	-264	-2,297	-2,002	-2,840	-4,805
Property Damaged Vehicles from Rebound Effect	22,378	59,946	74,685	95,809	136,729
Property Damaged Vehicles from Sales/Scrappage	-2,573	-28,994	-24,550	5,767	45,179
Total Changes in Property Damaged Vehicles	19,542	28,656	48,132	98,736	177,103