

**Table L9. New light duty vehicle sales by technology, Low Oil Price case**

thousand vehicles

Region and technology	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
<b>Americas</b>								
Electric	831.7	934.1	1,427.0	1,578.4	1,627.1	1,726.2	1,837.9	2.9%
Hydrogen	2.2	1.7	2.4	2.8	2.9	3.0	3.2	1.3%
Liquefied petroleum gas	4.0	3.0	3.2	3.1	3.1	3.1	3.4	-0.5%
Natural gas	258.7	170.4	114.4	83.7	55.7	40.6	33.3	-7.1%
Diesel	437.6	538.9	648.3	628.2	617.1	673.5	719.3	1.8%
Motor gasoline	19,927.4	20,339.6	20,726.3	20,549.7	20,877.3	21,714.1	23,419.6	0.6%
Plug-in hybrid	206.9	413.7	697.3	1,070.9	1,321.9	1,588.8	1,598.7	7.6%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>21,668.5</b>	<b>22,401.4</b>	<b>23,618.8</b>	<b>23,916.9</b>	<b>24,505.0</b>	<b>25,749.3</b>	<b>27,615.4</b>	<b>0.9%</b>
<b>United States</b>								
Electric	706.6	742.1	1,202.7	1,369.1	1,423.9	1,533.5	1,653.3	3.1%
Hydrogen	2.2	1.7	2.4	2.8	2.9	3.0	3.2	1.3%
Liquefied petroleum gas	0.5	0.9	1.0	1.2	1.4	1.7	2.3	6.0%
Natural gas	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.2%
Diesel	74.7	140.6	142.4	141.6	154.2	167.4	190.5	3.4%
Motor gasoline	13,408.8	14,369.6	13,979.1	13,601.2	14,195.5	14,658.2	15,762.5	0.6%
Plug-in hybrid	183.7	330.8	482.9	545.5	569.2	611.7	665.8	4.7%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>14,376.9</b>	<b>15,586.1</b>	<b>15,810.9</b>	<b>15,661.7</b>	<b>16,347.5</b>	<b>16,975.9</b>	<b>18,278.0</b>	<b>0.9%</b>
<b>Canada</b>								
Electric	112.8	154.6	144.2	113.9	110.2	109.1	114.7	0.1%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7%
Liquefied petroleum gas	0.3	0.2	0.3	0.3	0.3	0.3	0.3	-0.2%
Natural gas	1.7	1.1	0.6	0.7	0.7	0.8	0.8	-2.5%
Diesel	117.3	96.0	138.4	150.5	155.3	160.3	162.0	1.2%
Motor gasoline	1,499.4	1,391.1	1,430.5	1,496.0	1,530.5	1,573.9	1,591.1	0.2%
Plug-in hybrid	16.6	44.7	54.0	93.9	141.7	207.9	274.1	10.5%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>1,748.1</b>	<b>1,687.8</b>	<b>1,768.0</b>	<b>1,855.3</b>	<b>1,938.6</b>	<b>2,052.3</b>	<b>2,143.0</b>	<b>0.7%</b>
<b>Mexico</b>								
Electric	7.4	18.0	30.2	33.6	30.5	25.0	20.7	3.7%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4%
Liquefied petroleum gas	3.2	1.8	1.8	1.7	1.4	1.1	0.8	-4.7%
Natural gas	4.5	2.0	1.7	2.0	2.0	1.7	1.3	-4.4%
Diesel	7.1	5.6	5.6	6.1	6.6	7.1	7.3	0.1%
Motor gasoline	1,823.0	1,413.1	1,444.3	1,587.8	1,738.3	1,905.6	2,007.4	0.3%
Plug-in hybrid	1.5	14.2	30.0	77.5	137.9	175.4	165.9	18.3%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>1,846.8</b>	<b>1,454.8</b>	<b>1,513.7</b>	<b>1,708.8</b>	<b>1,916.7</b>	<b>2,115.9</b>	<b>2,203.4</b>	<b>0.6%</b>
<b>Brazil</b>								
Electric	2.7	5.7	19.8	27.5	26.4	25.9	23.5	8.1%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1%
Liquefied petroleum gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Natural gas	125.8	66.8	51.0	41.1	26.7	17.9	15.2	-7.3%
Diesel	85.0	113.4	145.8	112.6	88.9	105.2	109.2	0.9%
Motor gasoline	2,230.0	2,067.9	2,579.1	2,605.8	2,199.0	2,221.7	2,559.8	0.5%
Plug-in hybrid	4.0	18.2	103.4	283.1	372.9	472.1	399.0	17.9%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>2,447.5</b>	<b>2,272.0</b>	<b>2,899.1</b>	<b>3,070.0</b>	<b>2,713.9</b>	<b>2,842.8</b>	<b>3,106.6</b>	<b>0.9%</b>
<b>Other Americas</b>								



<b>Total</b>	<b>34,421.0</b>	<b>36,529.5</b>	<b>42,167.4</b>	<b>46,870.7</b>	<b>48,649.7</b>	<b>50,069.9</b>	<b>51,687.7</b>	<b>1.5%</b>
<b>Japan</b>								
Electric	66.0	86.8	167.2	128.9	149.0	136.8	113.8	2.0%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1%
Liquefied petroleum gas	5.9	5.2	6.7	6.0	5.4	5.1	4.9	-0.7%
Natural gas	1.4	0.8	0.5	0.4	0.4	0.4	0.4	-4.6%
Diesel	141.1	131.4	124.2	125.4	124.6	131.3	135.5	-0.1%
Motor gasoline	3,144.5	3,065.1	2,932.9	2,670.6	2,401.1	2,312.8	2,195.0	-1.3%
Plug-in hybrid	44.8	116.0	129.9	174.1	205.4	220.9	215.6	5.8%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>3,403.6</b>	<b>3,405.3</b>	<b>3,361.4</b>	<b>3,105.6</b>	<b>2,885.8</b>	<b>2,807.3</b>	<b>2,665.1</b>	<b>-0.9%</b>
<b>South Korea</b>								
Electric	75.3	65.8	276.9	399.7	605.0	729.3	795.3	8.8%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7%
Liquefied petroleum gas	50.3	29.2	26.3	44.9	37.8	30.9	23.1	-2.7%
Natural gas	49.3	20.9	11.9	18.5	12.9	6.8	3.6	-8.9%
Diesel	191.0	175.0	154.9	142.8	118.3	124.0	156.0	-0.7%
Motor gasoline	1,069.5	1,117.1	925.3	797.0	581.7	482.1	389.8	-3.5%
Plug-in hybrid	14.5	80.5	212.6	236.9	203.9	154.2	115.5	7.7%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>1,449.9</b>	<b>1,488.5</b>	<b>1,607.9</b>	<b>1,639.9</b>	<b>1,559.6</b>	<b>1,527.3</b>	<b>1,483.2</b>	<b>0.1%</b>
<b>Australia and New Zealand</b>								
Electric	34.4	29.9	51.3	52.0	62.1	63.7	63.4	2.2%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7%
Liquefied petroleum gas	0.4	0.0	3.1	2.3	2.0	1.9	1.7	5.5%
Natural gas	2.4	0.1	0.2	0.1	0.0	0.0	0.0	-19.5%
Diesel	110.9	122.9	117.3	108.7	98.6	91.8	85.1	-0.9%
Motor gasoline	873.1	931.0	869.4	825.3	765.9	723.4	678.0	-0.9%
Plug-in hybrid	8.3	18.2	71.7	159.7	264.1	365.9	430.8	15.2%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>1,029.5</b>	<b>1,102.0</b>	<b>1,112.9</b>	<b>1,148.0</b>	<b>1,192.7</b>	<b>1,246.7</b>	<b>1,259.1</b>	<b>0.7%</b>
<b>China</b>								
Electric	4,681.1	4,672.5	5,656.3	7,237.7	7,706.2	7,850.1	8,091.7	2.0%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1%
Liquefied petroleum gas	66.6	73.9	39.3	43.4	36.3	25.8	16.7	-4.8%
Natural gas	990.1	569.1	243.0	422.7	513.4	499.4	358.5	-3.6%
Diesel	43.9	40.3	25.2	69.5	64.2	55.5	48.5	0.4%
Motor gasoline	13,210.0	12,136.0	9,503.8	9,091.2	8,357.3	7,190.0	6,243.3	-2.6%
Plug-in hybrid	1,006.8	1,833.1	3,937.7	3,684.2	3,618.0	2,896.6	2,371.6	3.1%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>19,998.6</b>	<b>19,324.9</b>	<b>19,405.5</b>	<b>20,548.6</b>	<b>20,295.5</b>	<b>18,517.3</b>	<b>17,130.2</b>	<b>-0.6%</b>
<b>India</b>								
Electric	17.1	30.9	32.9	56.7	107.3	225.1	455.8	12.4%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4%
Liquefied petroleum gas	132.4	95.7	182.4	233.3	260.2	278.1	314.1	3.1%
Natural gas	140.6	171.3	165.2	138.6	109.9	89.0	67.4	-2.6%
Diesel	1,854.9	2,571.6	3,872.3	5,335.6	5,774.3	5,335.6	5,274.5	3.8%
Motor gasoline	2,181.5	3,219.8	5,423.7	6,254.3	6,393.9	7,677.7	8,489.4	5.0%
Plug-in hybrid	4.0	20.3	244.1	454.2	994.9	1,431.3	1,847.2	24.6%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>4,330.4</b>	<b>6,109.5</b>	<b>9,920.7</b>	<b>12,472.7</b>	<b>13,640.6</b>	<b>15,036.8</b>	<b>16,448.4</b>	<b>4.9%</b>
<b>Other Asia</b>								
Electric	24.5	114.1	124.0	164.6	173.9	188.1	157.5	6.9%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1%
Liquefied petroleum gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1%
Natural gas	120.8	26.3	39.6	53.3	62.7	69.4	63.1	-2.3%
Diesel	1,040.8	1,263.0	1,478.5	1,589.8	1,686.0	2,196.4	2,513.4	3.2%
Motor gasoline	3,018.6	3,629.0	4,963.1	5,821.2	6,648.7	7,735.8	9,319.6	4.1%

Plug-in hybrid	4.3	66.9	153.8	327.1	504.1	744.8	648.0	19.6%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>4,209.0</b>	<b>5,099.2</b>	<b>6,759.0</b>	<b>7,956.0</b>	<b>9,075.5</b>	<b>10,934.5</b>	<b>12,701.7</b>	<b>4.0%</b>
<b>Africa and Middle East</b>								
Electric	31.1	74.3	72.4	89.9	107.8	113.2	110.2	4.6%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5%
Liquefied petroleum gas	8.9	11.9	2.2	0.5	0.2	0.1	0.1	-15.5%
Natural gas	102.3	60.1	51.2	48.8	35.7	28.1	23.4	-5.1%
Diesel	100.2	110.4	133.5	149.7	185.0	189.0	223.7	2.9%
Motor gasoline	3,294.1	3,741.5	4,507.5	4,825.6	4,810.5	5,566.8	6,495.7	2.5%
Plug-in hybrid	9.9	38.9	125.1	299.5	519.0	649.0	555.0	15.4%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>3,546.5</b>	<b>4,037.1</b>	<b>4,891.8</b>	<b>5,414.0</b>	<b>5,658.2</b>	<b>6,546.2</b>	<b>7,408.2</b>	<b>2.7%</b>
<b>Africa</b>								
Electric	2.2	7.5	16.8	24.9	27.1	28.0	32.2	10.0%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5%
Liquefied petroleum gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5%
Natural gas	8.8	8.1	5.3	3.3	2.1	1.1	0.8	-8.3%
Diesel	73.5	83.2	105.9	127.1	164.2	171.8	209.5	3.8%
Motor gasoline	662.2	830.7	1,110.9	1,293.1	1,390.5	1,751.5	2,111.8	4.2%
Plug-in hybrid	1.0	4.3	15.7	30.4	48.6	56.3	52.7	15.2%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>747.8</b>	<b>933.9</b>	<b>1,254.6</b>	<b>1,478.8</b>	<b>1,632.6</b>	<b>2,008.6</b>	<b>2,406.9</b>	<b>4.3%</b>
<b>Middle East</b>								
Electric	28.9	66.8	55.6	65.0	80.6	85.2	78.0	3.6%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5%
Liquefied petroleum gas	8.9	11.9	2.2	0.5	0.2	0.1	0.1	-15.7%
Natural gas	93.5	52.0	45.8	45.5	33.6	27.0	22.6	-4.9%
Diesel	26.7	27.2	27.6	22.7	20.8	17.2	14.2	-2.2%
Motor gasoline	2,631.8	2,910.8	3,396.6	3,532.5	3,420.0	3,815.3	4,383.9	1.8%
Plug-in hybrid	9.0	34.6	109.4	269.0	470.3	592.7	502.4	15.5%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>2,798.8</b>	<b>3,103.3</b>	<b>3,637.2</b>	<b>3,935.2</b>	<b>4,025.6</b>	<b>4,537.6</b>	<b>5,001.2</b>	<b>2.1%</b>
<b>World</b>								
Electric	7,772.1	7,996.1	12,029.4	17,661.8	20,445.1	21,211.4	22,374.7	3.8%
Hydrogen	2.2	1.7	2.4	2.8	2.9	3.0	3.2	1.3%
Liquefied petroleum gas	534.7	368.7	646.5	751.5	785.6	886.9	1,132.5	2.7%
Natural gas	2,147.5	1,347.5	770.7	867.7	869.6	808.3	634.3	-4.3%
Diesel	8,503.6	9,516.6	12,328.8	11,429.4	10,748.8	12,715.3	12,632.8	1.4%
Motor gasoline	58,876.9	59,941.8	58,066.7	57,194.9	56,577.2	59,855.7	63,372.7	0.3%
Plug-in hybrid	2,320.8	4,894.8	7,724.8	9,291.5	11,143.6	9,394.0	9,294.3	5.1%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>80,157.7</b>	<b>84,067.2</b>	<b>91,569.2</b>	<b>97,199.6</b>	<b>100,572.9</b>	<b>104,874.5</b>	<b>109,444.5</b>	<b>1.1%</b>

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run lp\_230823.090253 and Annual Energy Outlook 2023 (March 2023), [www.eia.gov/aeo](http://www.eia.gov/aeo)

Note: Totals may not equal sum of components due to independent rounding.