

**Table L9. New light duty vehicle sales by technology, High 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	928.2	2,158.0	3,962.5	4,501.3	4,828.0	5,374.6	6,074.4	6.9%
Hydrogen	2.7	2.8	4.1	4.8	4.7	4.7	4.6	1.9%
Liquefied petroleum gas	4.1	1.8	1.5	1.4	1.4	1.5	1.8	-2.9%
Natural gas	258.7	228.3	348.3	363.2	271.2	212.5	186.4	-1.2%
Diesel	467.0	529.1	524.7	519.2	474.1	466.7	491.9	0.2%
Motor gasoline	19,617.0	18,663.9	16,540.7	15,604.4	15,492.3	15,623.0	15,993.5	-0.7%
Plug-in hybrid	224.0	556.9	914.5	1,512.7	1,900.0	2,188.1	2,117.2	8.4%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>21,501.7</b>	<b>22,140.9</b>	<b>22,296.3</b>	<b>22,507.0</b>	<b>22,971.7</b>	<b>23,871.1</b>	<b>24,869.9</b>	<b>0.5%</b>
<b>United States</b>								
Electric	804.6	1,860.5	3,251.7	3,477.6	3,509.6	3,589.0	3,690.1	5.6%
Hydrogen	2.7	2.8	4.1	4.8	4.7	4.7	4.6	1.9%
Liquefied petroleum gas	0.6	1.0	1.0	1.0	1.1	1.2	1.6	3.7%
Natural gas	0.6	1.3	0.9	0.8	0.8	0.8	0.9	1.9%
Diesel	104.2	116.5	90.5	82.1	85.7	82.4	94.3	-0.4%
Motor gasoline	13,096.7	12,921.7	10,761.7	10,136.2	10,545.8	10,713.8	10,967.1	-0.6%
Plug-in hybrid	200.8	457.7	596.6	641.8	660.4	693.4	728.9	4.7%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>14,210.2</b>	<b>15,361.5</b>	<b>14,706.5</b>	<b>14,344.4</b>	<b>14,808.2</b>	<b>15,085.3</b>	<b>15,487.5</b>	<b>0.3%</b>
<b>Canada</b>								
Electric	112.4	231.7	438.1	473.8	526.1	612.4	700.1	6.8%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7%
Liquefied petroleum gas	0.3	0.1	0.0	0.0	0.0	0.1	0.1	-5.2%
Natural gas	1.7	0.4	0.0	0.0	0.0	0.0	0.2	-8.0%
Diesel	117.3	102.6	107.6	118.9	114.6	104.7	94.3	-0.8%
Motor gasoline	1,499.9	1,302.3	1,130.3	1,074.4	1,020.6	948.8	869.0	-1.9%
Plug-in hybrid	16.6	50.5	91.9	188.1	277.3	386.3	479.4	12.8%
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>1,687.6</b>	<b>1,767.9</b>	<b>1,855.3</b>	<b>1,938.7</b>	<b>2,052.3</b>	<b>2,143.0</b>	<b>0.7%</b>
<b>Mexico</b>								
Electric	6.7	34.1	118.3	214.2	320.3	506.9	734.3	18.3%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4%
Liquefied petroleum gas	3.2	0.6	0.5	0.4	0.3	0.2	0.2	-10.1%
Natural gas	4.5	0.6	0.6	1.5	1.5	1.2	0.8	-5.8%
Diesel	7.0	6.7	6.5	6.2	6.3	6.4	6.1	-0.5%
Motor gasoline	1,823.8	1,469.7	1,272.3	1,287.5	1,313.9	1,290.9	1,184.9	-1.5%
Plug-in hybrid	1.5	20.5	50.0	140.9	243.5	283.6	237.3	19.8%
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>1,532.2</b>	<b>1,448.2</b>	<b>1,650.7</b>	<b>1,885.8</b>	<b>2,089.3</b>	<b>2,163.7</b>	<b>0.6%</b>
<b>Brazil</b>								
Electric	2.6	9.8	64.7	177.0	242.4	321.8	450.7	20.2%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Liquefied petroleum gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.1%
Natural gas	125.7	99.1	186.6	225.6	172.0	134.7	124.0	0.0%
Diesel	85.0	121.7	132.3	126.3	95.6	87.9	93.4	0.3%
Motor gasoline	2,230.1	1,903.1	2,192.2	2,030.6	1,636.0	1,645.3	1,927.9	-0.5%
Plug-in hybrid	4.0	21.7	141.6	446.3	584.8	665.5	553.3	19.2%
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>2,155.5</b>	<b>2,717.4</b>	<b>3,005.8</b>	<b>2,730.8</b>	<b>2,855.2</b>	<b>3,149.3</b>	<b>0.9%</b>
<b>Other Americas</b>								



<b>Total</b>	<b>34,421.0</b>	<b>35,126.2</b>	<b>40,602.9</b>	<b>45,599.0</b>	<b>47,650.4</b>	<b>48,952.9</b>	<b>50,518.9</b>	<b>1.4%</b>
<b>Japan</b>								
Electric	66.1	150.0	297.9	426.6	717.6	984.4	1,222.2	11.0%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1%
Liquefied petroleum gas	5.9	2.8	2.2	1.8	0.9	0.7	0.7	-7.5%
Natural gas	1.4	1.3	1.3	2.2	2.5	2.4	2.3	1.9%
Diesel	141.1	147.4	134.6	123.0	108.1	97.4	88.0	-1.7%
Motor gasoline	3,144.3	2,953.3	2,763.7	2,357.5	1,858.3	1,538.6	1,204.5	-3.4%
Plug-in hybrid	44.8	136.4	152.8	191.8	196.6	178.7	144.7	4.3%
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>3,391.2</b>	<b>3,352.5</b>	<b>3,102.9</b>	<b>2,884.0</b>	<b>2,802.1</b>	<b>2,662.3</b>	<b>-0.9%</b>
<b>South Korea</b>								
Electric	75.3	94.5	359.4	720.0	1,027.1	1,127.9	1,156.9	10.2%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9%
Liquefied petroleum gas	50.2	21.2	18.5	12.1	5.5	3.4	2.5	-10.2%
Natural gas	49.3	30.4	49.9	47.1	19.2	9.2	4.1	-8.5%
Diesel	191.0	154.9	150.3	115.8	76.4	72.7	86.7	-2.8%
Motor gasoline	1,069.5	1,125.5	899.6	579.1	335.2	252.1	189.5	-6.0%
Plug-in hybrid	14.5	81.3	142.9	172.8	105.9	74.5	54.2	4.8%
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>1,507.9</b>	<b>1,620.6</b>	<b>1,646.9</b>	<b>1,569.3</b>	<b>1,539.8</b>	<b>1,493.8</b>	<b>0.1%</b>
<b>Australia and New Zealand</b>								
Electric	34.4	56.8	113.0	154.2	223.0	298.3	376.7	8.9%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5%
Liquefied petroleum gas	0.4	0.0	1.5	0.8	0.6	0.3	0.2	-1.9%
Natural gas	2.4	0.1	0.4	0.2	0.1	0.1	0.0	-14.6%
Diesel	110.9	132.9	93.6	133.5	113.0	97.8	84.3	-1.0%
Motor gasoline	873.1	894.0	827.3	681.5	597.3	540.6	479.8	-2.1%
Plug-in hybrid	8.3	22.7	81.4	180.6	260.7	312.5	321.0	13.9%
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>1,106.5</b>	<b>1,117.2</b>	<b>1,150.9</b>	<b>1,194.6</b>	<b>1,249.6</b>	<b>1,262.0</b>	<b>0.7%</b>
<b>China</b>								
Electric	4,689.7	6,024.4	7,981.4	11,042.4	11,717.7	11,627.5	11,863.0	3.4%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Liquefied petroleum gas	66.5	38.1	15.3	10.7	5.7	2.5	0.9	-14.1%
Natural gas	998.0	784.5	616.0	1,060.4	1,266.4	1,166.2	794.7	-0.8%
Diesel	43.8	32.1	18.8	40.5	31.6	22.9	16.7	-3.4%
Motor gasoline	13,193.8	10,447.4	7,458.3	6,418.2	5,423.3	4,223.2	3,303.7	-4.8%
Plug-in hybrid	1,006.7	1,609.1	3,268.5	2,063.4	1,896.9	1,441.1	1,121.3	0.4%
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>18,935.6</b>	<b>19,358.2</b>	<b>20,635.6</b>	<b>20,341.5</b>	<b>18,483.5</b>	<b>17,100.3</b>	<b>-0.6%</b>
<b>India</b>								
Electric	17.1	51.9	415.4	1,012.3	1,877.4	3,192.6	4,939.7	22.4%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5%
Liquefied petroleum gas	132.1	60.2	85.7	102.2	107.6	111.7	113.5	-0.5%
Natural gas	140.6	234.7	157.0	142.9	107.6	82.7	64.9	-2.7%
Diesel	1,855.0	2,425.9	3,883.5	4,733.5	4,759.7	4,626.5	4,349.3	3.1%
Motor gasoline	2,181.6	2,647.2	4,079.3	5,081.2	5,134.4	5,048.2	4,805.4	2.9%
Plug-in hybrid	4.0	19.7	258.9	513.2	1,075.5	1,482.3	1,680.5	24.1%
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>5,439.6</b>	<b>8,879.8</b>	<b>11,585.2</b>	<b>13,062.3</b>	<b>14,543.8</b>	<b>15,953.2</b>	<b>4.8%</b>
<b>Other Asia</b>								
Electric	19.9	161.0	410.2	1,024.5	1,964.3	3,425.2	5,285.6	22.1%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3%
Liquefied petroleum gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4%
Natural gas	121.0	12.7	1.5	5.0	12.1	28.7	45.2	-3.5%
Diesel	1,041.3	1,278.5	1,577.6	1,562.8	1,517.2	1,515.5	1,451.2	1.2%
Motor gasoline	3,022.5	3,211.8	4,029.2	4,272.5	4,210.3	4,351.4	4,535.2	1.5%

Plug-in hybrid	4.3	81.3	255.9	612.6	894.7	1,013.3	730.0	20.1%
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>4,745.4</b>	<b>6,274.5</b>	<b>7,477.4</b>	<b>8,598.7</b>	<b>10,334.1</b>	<b>12,047.2</b>	<b>3.8%</b>
<b>Africa and Middle East</b>								
Electric	29.5	162.6	333.6	626.7	959.2	1,584.4	2,452.8	17.1%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2%
Liquefied petroleum gas	8.9	3.8	0.3	0.1	0.0	0.0	0.0	-20.5%
Natural gas	102.4	21.3	7.6	15.5	27.3	21.9	18.2	-6.0%
Diesel	100.1	129.5	169.7	178.5	173.3	191.3	202.1	2.5%
Motor gasoline	3,295.6	4,004.4	4,285.9	4,074.9	3,778.9	4,004.5	4,182.1	0.9%
Plug-in hybrid	10.0	59.0	238.2	615.7	842.4	945.5	690.1	16.3%
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>4,380.5</b>	<b>5,035.4</b>	<b>5,511.5</b>	<b>5,781.1</b>	<b>6,747.5</b>	<b>7,545.3</b>	<b>2.7%</b>
<b>Africa</b>								
Electric	2.1	14.9	73.1	174.5	249.8	402.0	683.4	22.9%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1%
Liquefied petroleum gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8%
Natural gas	8.8	5.2	2.2	2.4	1.4	1.0	0.7	-8.6%
Diesel	73.4	91.8	128.8	148.4	153.2	176.2	190.9	3.5%
Motor gasoline	662.4	817.2	1,018.4	1,092.8	1,142.3	1,338.4	1,462.0	2.9%
Plug-in hybrid	1.0	6.0	28.0	60.1	90.7	104.7	89.0	17.4%
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>935.0</b>	<b>1,250.6</b>	<b>1,478.3</b>	<b>1,637.4</b>	<b>2,022.3</b>	<b>2,426.1</b>	<b>4.3%</b>
<b>Middle East</b>								
Electric	27.4	147.7	260.5	452.2	709.4	1,182.4	1,769.4	16.0%
Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2%
Liquefied petroleum gas	8.9	3.8	0.3	0.1	0.0	0.0	0.0	-20.7%
Natural gas	93.6	16.1	5.4	13.1	25.9	20.9	17.5	-5.8%
Diesel	26.7	37.7	40.9	30.1	20.1	15.1	11.2	-3.1%
Motor gasoline	2,633.2	3,187.2	3,267.5	2,982.1	2,636.6	2,666.0	2,720.0	0.1%
Plug-in hybrid	9.0	53.0	210.2	555.6	751.7	840.8	601.1	16.2%
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>3,445.5</b>	<b>3,784.8</b>	<b>4,033.2</b>	<b>4,143.7</b>	<b>4,725.2</b>	<b>5,119.3</b>	<b>2.2%</b>
<b>World</b>								
Electric	7,877.8	11,763.9	20,047.7	28,388.3	35,262.2	41,837.8	48,874.6	6.7%
Hydrogen	2.7	2.8	4.1	4.8	4.7	4.7	4.6	1.9%
Liquefied petroleum gas	531.7	218.8	329.9	289.1	231.6	196.1	166.7	-4.1%
Natural gas	2,159.4	1,809.5	1,601.9	2,117.5	2,275.8	2,255.6	1,957.8	-0.3%
Diesel	8,537.2	9,359.4	10,499.0	10,301.7	10,026.5	9,128.4	8,433.5	0.0%
Motor gasoline	58,543.9	54,618.3	48,219.9	45,127.7	41,569.3	39,701.6	38,339.8	-1.5%
Plug-in hybrid	2,338.1	4,750.4	8,017.5	8,333.9	8,746.0	8,886.2	7,842.2	4.4%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Total</b>	<b>79,991.0</b>	<b>82,523.0</b>	<b>88,720.0</b>	<b>94,563.0</b>	<b>98,116.0</b>	<b>102,010.4</b>	<b>105,619.2</b>	<b>1.0%</b>

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hp\_230822.081357 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.