

Table L2. Transportation sector passenger transport energy consumption by region and mode, High Zero-carbon Technology Cost case
quadrillion British thermal units

Region and mode	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Americas								
Light-duty vehicles	19.3	18.9	17.8	17.0	16.6	16.6	17.1	-0.4%
Air	3.7	4.1	4.3	4.6	4.9	5.3	5.6	1.5%
Buses	1.0	1.2	1.2	1.3	1.3	1.3	1.4	1.0%
Two- and three-wheeled vehicles	0.3	0.4	0.5	0.6	0.7	0.8	0.9	4.2%
Rail	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.2%
Total	24.4	24.6	24.0	23.5	23.6	24.1	25.1	0.1%
Europe and Eurasia								
Light-duty vehicles	8.9	8.2	6.9	6.0	5.4	5.1	5.0	-2.1%
Air	2.5	3.2	3.4	3.7	3.9	4.1	4.3	1.9%
Buses	1.3	1.3	1.3	1.3	1.2	1.2	1.1	-0.6%
Two- and three-wheeled vehicles	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4%
Rail	0.2	0.2	0.1	0.1	0.1	0.1	0.1	-1.2%
Total	13.0	12.9	11.9	11.2	10.8	10.6	10.6	-0.7%
Asia Pacific								
Light-duty vehicles	12.7	13.5	14.4	15.1	15.8	16.8	17.9	1.2%
Air	2.2	3.9	4.8	5.6	6.4	7.1	7.9	4.6%
Buses	2.5	2.5	2.6	2.7	2.7	2.7	2.7	0.3%
Two- and three-wheeled vehicles	2.1	2.4	2.7	3.0	3.3	3.5	3.7	2.0%
Rail	0.3	0.3	0.3	0.3	0.2	0.2	0.2	-0.5%
Total	19.8	22.6	24.8	26.7	28.3	30.4	32.4	1.8%
Africa and Middle East								
Light-duty vehicles	4.5	4.5	4.6	4.8	4.9	5.2	5.6	0.8%
Air	1.0	1.3	1.5	1.8	2.0	2.3	2.6	3.6%
Buses	1.8	2.1	2.5	2.9	3.5	4.1	4.8	3.5%
Two- and three-wheeled vehicles	0.1	0.1	0.1	0.2	0.3	0.3	0.4	5.9%
Rail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3%
Total	7.4	8.0	8.8	9.7	10.7	12.0	13.4	2.2%
World								
Light-duty vehicles	45.4	45.2	43.8	42.8	42.7	43.7	45.6	0.0%
Air	9.4	12.5	14.1	15.6	17.2	18.8	20.4	2.8%
Buses	6.6	7.1	7.6	8.2	8.7	9.3	9.9	1.4%
Two- and three-wheeled vehicles	2.6	3.0	3.4	3.9	4.4	4.8	5.2	2.5%
Rail	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-0.3%
Total	64.5	68.2	69.4	71.0	73.4	77.0	81.5	0.8%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hz_230821.151430 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

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