International Energy Outlook 2023 Release date: October 2023

Table L3. Transportation sector freight transport energy consumption by region and mode, Low Economic Growth case quadrillion British thermal units

Basis and said				2025	2040	2045		Average annual percentage change,
	2022						2050	
Region and mode	2022	2025	2030	2035	2040	2045	2050	2022–2050
Americas								0.40/
Heavy-duty trucks	11.1	10.6	10.1	9.8	9.7	9.8	10.0	-0.4%
Rail	0.8	0.8	0.7	0.7	0.7	0.7	0.7	-0.3%
Marine vessels	1.9	1.9	1.9	1.9	1.9	1.9	1.8	-0.1%
Natural gas pipeline	1.0	0.8	0.6	0.6	0.6	0.7	0.7	-1.4%
Air freighter	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2%
Total	14.9	14.2	13.5	13.2	13.1	13.2	13.3	-0.4%
Europe and Eurasia								
Heavy-duty trucks	7.4	7.2	6.8	6.6	6.5	6.6	6.8	-0.3%
Rail	0.7	0.7	0.7	0.7	0.6	0.6	0.6	-0.6%
Marine vessels	2.1	2.4	2.5	2.5	2.5	2.4	2.3	0.4%
Natural gas pipeline	0.2	0.5	0.4	0.4	0.4	0.4	0.4	2.2%
Air freighter	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0%
Total	10.9	11.1	10.8	10.5	10.5	10.5	10.5	-0.1%
Asia Pacific								
Heavy-duty trucks	10.9	11.2	11.2	11.3	11.4	11.8	12.0	0.3%
Rail	0.9	1.0	1.0	1.0	1.0	0.9	0.9	-0.1%
Marine vessels	6.1	6.8	7.2	7.2	7.1	6.9	6.7	0.3%
Natural gas pipeline	0.0	0.1	0.1	0.1	0.1	0.1	0.1	3.6%
Air freighter	0.8	0.7	0.7	0.7	0.7	0.6	0.6	-0.8%
Total	18.7	19.7	20.1	20.2	20.2	20.4	20.3	0.3%
Africa and Middle East								
Heavy-duty trucks	4.2	4.3	4.3	4.4	4.5	4.6	4.8	0.4%
Rail	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3%
Marine vessels	1.4	1.6	1.7	1.7	1.7	1.6	1.6	0.4%
Natural gas pipeline	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1.2%
Air freighter	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.4%
Total	6.0	6.2	6.3	6.4	6.4	6.5	6.6	0.4%
World	0.0		0.5	0.4	0.4	0.5	0.0	511,70
Heavy-duty trucks	33.7	33.4	32.4	32.0	32.2	32.9	33.6	0.0%
Rail	2.5	2.5	2.4	2.4	2.4	2.3	2.3	-0.3%
								0.3%
Marine vessels	11.5	12.7	13.2	13.3	13.1	12.8	12.4	
Natural gas pipeline	1.4	1.4	1.3	1.2	1.2	1.2	1.2	-0.4%
Air freighter	1.4	1.3	1.3	1.3	1.3	1.3	1.3	-0.4%
Total	50.5	51.2	50.6	50.2	50.2	50.6	50.8	0.0%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run Im_230821.151939 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

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