Table F7. Delivered energy consumption in Other Americas by end-use sector and fuel, Low Zero-carbon Technology Cost case quadrillion British thermal units

Sector and fuel 2022 2025 2030 2035 2040 2045 Residential	2050	2022–2050
Liquid fuels 0.3 0.3 0.3 0.4 0.4 Natural gas 0.5 0.5 0.5 0.6 0.6 0.6 Coal 0.0		
Natural gas 0.5 0.5 0.5 0.6 0.6 0.6 Coal 0.0		0.5%
Coal 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.8 0.7 0.8 0.8 0.9 0.9 Renewables 0.0 0.0 0.0 0.0 0.0 0.0 Total 1.6 1.6 1.7 1.7 1.8 1.9 Commercial Liquid fuels 0.1 0.0	0.4	0.6%
Belectricity 0.8 0.7 0.8 0.8 0.9 0.9 0.9 0.0 0	0.0	0.1%
Renewables 0.0 0.0 0.0 0.0 0.0 0.0 Total 1.6 1.6 1.7 1.7 1.8 1.9 Commercial Usual Materials Liquid fuels 0.1 0.0 <td>1.0</td> <td>0.9%</td>	1.0	0.9%
Total 1.6 1.6 1.7 1.7 1.8 1.9 Commercial Liquid fuels 0.1 0.0	0.0	0.8%
Commercial Liquid fuels 0.1 0.0	1.9	0.7%
Liquid fuels 0.1 0.1 0.1 0.1 0.1 0.1 Natural gas 0.1 0.0	1.5	0.776
Natural gas 0.1 0.1 0.1 0.1 0.1 0.1 Coal 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.5 0.6 0.6 0.7 0.8 0.9 Renewables 0.0 0.0 0.0 0.0 0.0 0.0 Total 0.7 0.8 0.8 0.9 1.0 1.1 Industrial Industrial Liquid fuels 1.8 1.9 2.0 2.2 2.4 2.7 Natural gas 2.0 2.1 2.3 2.5 2.7 3.0 Coal 0.2 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation	0.1	1.0%
Coal 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.5 0.6 0.6 0.7 0.8 0.9 Renewables 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 0.7 0.8 0.8 0.9 1.0 1.1 Industrial Liquid fuels 1.8 1.9 2.0 2.2 2.4 2.7 Natural gas 2.0 2.1 2.3 2.5 2.7 3.0 Coal 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Eliquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas	0.1	1.2%
Belectricity		0.5%
Renewables 0.0 0.0 0.0 0.0 0.0 0.0 Total 0.7 0.8 0.8 0.9 1.0 1.1 Industrial Use of the part of the	0.0	
Total 0.7 0.8 0.8 0.9 1.0 1.1 Industrial Liquid fuels 1.8 1.9 2.0 2.2 2.4 2.7 Natural gas 2.0 2.1 2.3 2.5 2.7 3.0 Coal 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation 1.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 <td>1.0</td> <td>2.3%</td>	1.0	2.3%
Industrial Liquid fuels 1.8 1.9 2.0 2.2 2.4 2.7 Natural gas 2.0 2.1 2.3 2.5 2.7 3.0 Coal 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	0.0	0.8%
Liquid fuels 1.8 1.9 2.0 2.2 2.4 2.7 Natural gas 2.0 2.1 2.3 2.5 2.7 3.0 Coal 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	1.3	2.0%
Natural gas 2.0 2.1 2.3 2.5 2.7 3.0 Coal 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3		
Coal 0.2 0.2 0.3 0.3 0.3 0.3 Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	2.9	1.7%
Electricity 0.8 0.8 0.9 1.0 1.1 1.2 Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	3.2	1.6%
Renewables 0.9 0.9 1.1 1.2 1.4 1.5 Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	0.4	2.1%
Total 5.7 5.9 6.6 7.2 7.9 8.7 Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	1.3	1.8%
Transportation Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	1.7	2.3%
Liquid fuels 3.8 4.0 4.2 4.4 4.7 5.1 Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	9.5	1.8%
Natural gas 0.2 0.2 0.3 0.3 0.2 0.2 Coal 0.0		
Coal 0.0 0.0 0.0 0.0 0.0 0.0 Electricity 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	5.4	1.3%
Electricity 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total 4.0 4.3 4.5 4.7 5.0 5.3	0.2	0.0%
Total 4.0 4.3 4.5 4.7 5.0 5.3	0.0	0.0%
	0.1	12.3%
Components of energy use	5.7	1.2%
End-use consumption		
Liquid fuels 6.1 6.3 6.7 7.1 7.7 8.3	8.9	1.4%
Natural gas 2.8 2.9 3.2 3.4 3.6 3.9	4.1	1.4%
Coal 0.2 0.2 0.3 0.3 0.3 0.3	0.4	2.1%
Electricity 2.1 2.1 2.3 2.6 2.8 3.1	3.4	1.7%
Renewables 0.9 0.9 1.1 1.2 1.4 1.5	1.7	2.3%
Total end-use consumption 12.1 12.6 13.6 14.6 15.8 17.1	18.4	1.5%
Electricity-related losses 4.0 4.0 4.3 4.5 4.8 5.2	5.6	1.2%
Discrepancy 0.3 0.1 0.1 0.1 0.2 0.2	0.2	-1.9%
Total 16.4 16.8 18.0 19.3 20.7 22.4	24.1	1.4%
Electric power		
Liquid fuels 0.6 0.7 0.3 0.1 0.0 0.0	0.0	-17.4%
Natural gas 1.5 1.5 1.6 1.6 1.6 1.6	1.6	0.2%
Coal 0.2 0.2 0.4 0.7 0.9 0.9	0.9	5.5%
Nuclear 0.1 0.1 0.2 0.2 0.2 0.2	0.2	1.9%
Renewables 3.6 3.6 4.0 4.4 4.8 5.5	6.2	1.9%
Total 6.1 6.2 6.6 7.1 7.6 8.2	8.9	1.4%
Total energy consumption	0.3	2.470
Liquid fuels 7.0 7.2 7.2 7.4 7.8 8.4	9.0	0.9%
		1.0%
	5.7	
Coal 0.4 0.4 0.7 1.0 1.2 1.3	1.3	4.1%
Nuclear 0.1 0.1 0.2 0.2 0.2 0.2	0.2	1.9%
Renewables 4.5 4.6 5.1 5.6 6.2 7.0	7.9	2.0%

Total 16.4 16.8 18.0 19.3 20.7 22.4 24.1 1.4%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run lz_230821.151531 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

Note: Totals may not equal sum of components due to independent rounding. End-use sector electricity consumption and end-use sector delivered energy consumption do not include electrical system energy losses incurred in the generation, transmission, and distribution of electricity. Electricity-related losses include energy losses during generation due to thermal efficiency, energy losses during transmission and distribution, and parasitic load. In all regions except the United States, fuel consumed to produce district heat is allocated to the residential, commercial, and industrial end-use sectors according to their respective share of heat demand. We converted electricity generation from renewable sources such as hydroelectric, wind, or solar to British thermal units at a rate of 8,124 British thermal units per kilowatthour, which reflects the average projected conversion efficiency of the U.S. fossil-fueled generating fleet in the Annual Energy Outlook 2021 over the projection period (2022–2050).