International Energy Outlook 2023 Release date: October 2023

## Table F18. Delivered energy consumption in Other Asia Pacific by end-use sector and fuel, Low Economic Growth case

quadrillion British thermal units

Costor and find	2022	2025	2020	2025	2040	2045	2050	Average annua percentage change
Sector and fuel	2022	2025	2030	2035	2040	2045	2050	2022–2050
Residential								
Liquid fuels	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.7%
Natural gas	0.5	0.6	0.6	0.6	0.6	0.7	0.7	1.1%
Coal	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3%
Electricity	2.2	2.4	2.6	2.9	3.1	3.4	3.6	1.7%
Renewables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Total	3.6	3.8	4.1	4.4	4.7	5.0	5.3	1.4%
Commercial								
Liquid fuels	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.9%
Natural gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.1%
Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6%
Electricity	1.5	1.6	1.8	2.0	2.1	2.3	2.5	1.9%
Renewables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Total	1.8	2.0	2.2	2.4	2.6	2.8	3.0	1.8%
Industrial								
Liquid fuels	3.5	3.8	4.3	4.5	4.8	5.0	5.1	1.3%
Natural gas	4.5	4.9	5.6	5.8	6.0	6.2	6.3	1.2%
Coal	4.5	4.7	5.2	5.6	5.9	6.1	6.3	1.2%
Electricity	2.1	2.2	2.5	2.7	2.9	3.1	3.2	1.6%
Renewables	3.0	3.2	3.6	4.0	4.3	4.5	4.6	1.6%
Total	17.6	18.8	21.2	22.7	23.9	24.9	25.6	1.4%
Transportation								
Liquid fuels	10.7	12.1	13.0	13.9	14.7	15.3	15.8	1.4%
Natural gas	0.2	0.2	0.2	0.3	0.3	0.4	0.6	4.2%
Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Electricity	0.0	0.0	0.0	0.1	0.1	0.2	0.2	11.6%
Total	10.9	12.3	13.3	14.2	15.1	15.9	16.6	1.5%
Components of energy use			2010			1010	2010	
End-use consumption								
Liquid fuels	15.3	16.9	18.5	19.6	20.7	21.6	22.2	1.3%
Natural gas	5.3	5.8	6.5	6.8	7.1	7.4	7.8	1.4%
Coal	4.6	4.8	5.3	5.7	6.0	6.2	6.4	1.2%
Electricity	5.8	6.2	7.0	7.6	8.2	9.0	9.6	1.8%
								1.6%
Renewables	3.0	3.2	3.7	4.0	4.3	4.5	4.6	1.0%
Total end-use consumption	33.9	36.9	40.9	43.8	46.3	48.7	50.6	2.1%
Electricity-related losses	9.0	9.5	11.3	13.1	13.9	15.0	15.9	2.1/0
Discrepancy	0.3	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	
Total	43.2	46.2	51.9	56.6	59.9	63.3	66.1	1.5%
Electric power								44.50
Liquid fuels	0.4	0.5	0.2	0.1	0.1	0.0	0.0	-14.5%
Natural gas	4.5	4.8	4.7	4.1	3.9	3.9	3.9	-0.5%
Coal	6.1	5.9	7.8	10.1	10.3	10.3	11.2	2.2%
Nuclear	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-0.5%
Renewables	3.3	4.2	5.2	6.1	7.5	9.3	10.0	4.1%
Total	14.8	15.7	18.3	20.8	22.1	23.9	25.5	2.0%
Total energy consumption								
Liquid fuels	16.0	17.1	18.4	19.4	20.3	21.1	21.7	1.1%
Natural gas	9.8	10.6	11.2	11.0	11.0	11.4	11.7	0.6%
Coal	10.7	10.8	13.1	15.8	16.4	16.6	17.7	1.8%
Nuclear	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-0.5%
Renewables	6.3	7.4	8.9	10.1	11.8	13.8	14.6	3.1%

Total				43.2	46.2	51.9	56.6	59.9	63.3	66.1	1.5%
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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. 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).