

Table F10. Total Non-OECD delivered energy consumption by end-use sector and fuel, Reference case

quadrillion British thermal units

Sector and fuel	2020	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2020–2050
Residential								
Liquid fuels	6.3	6.0	6.3	6.5	6.7	6.9	7.0	0.4
Natural gas	12.1	12.7	13.6	14.1	14.8	15.1	15.6	0.9
Coal	4.8	4.6	4.5	4.4	4.3	4.2	4.2	-0.5
Electricity	11.7	14.1	16.8	19.5	22.9	26.7	30.2	3.2
Renewables	0.9	0.9	1.0	1.0	1.0	1.1	1.1	0.8
Total	35.8	38.3	42.0	45.6	49.8	54.0	58.2	1.6
Commercial								
Liquid fuels	1.7	1.5	1.6	1.7	1.8	1.8	1.9	0.4
Natural gas	3.1	3.4	3.7	3.8	4.0	4.2	4.3	1.1
Coal	1.5	1.5	1.5	1.5	1.6	1.6	1.7	0.3
Electricity	6.7	8.1	9.3	10.4	11.8	13.3	14.4	2.6
Renewables	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
Total	13.2	14.6	16.3	17.6	19.4	21.0	22.4	1.8
Industrial								
Liquid fuels	36.0	42.6	47.7	52.6	56.9	60.8	64.1	1.9
Natural gas	34.6	40.6	44.2	47.7	51.3	54.2	56.7	1.7
Coal	57.2	60.6	63.1	65.7	68.4	71.6	74.5	0.9
Electricity	25.5	29.8	31.6	33.9	36.0	37.8	39.3	1.5
Renewables	14.3	17.5	20.0	22.5	24.8	27.1	29.3	2.4
Total	167.6	191.0	206.6	222.4	237.4	251.5	263.8	1.5
Transportation								
Liquid fuels	51.7	61.8	66.8	70.7	74.3	77.8	80.4	1.5
Natural gas	2.9	3.8	4.7	5.7	6.9	8.3	9.9	4.1
Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	1.1	1.4	1.7	2.2	2.8	3.5	4.2	4.4
Renewables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	55.7	67.0	73.2	78.6	84.0	89.6	94.4	1.8
All end-use sectors								
Liquid fuels	95.6	111.9	122.4	131.5	139.7	147.3	153.4	1.6
Natural gas	52.7	60.4	66.1	71.4	77.0	81.8	86.5	1.7
Coal	63.6	66.7	69.0	71.6	74.3	77.4	80.4	0.8
Electricity	45.1	53.4	59.4	66.0	73.6	81.3	88.1	2.3
Renewables	15.3	18.5	21.1	23.6	26.0	28.3	30.5	2.3
Delivered energy	272.3	310.9	338.1	364.1	390.6	416.1	438.9	1.6
Electricity-related losses	92.4	103.1	109.2	120.0	132.5	145.2	155.7	1.8
Discrepancy	3.9	5.5	6.6	7.6	8.6	9.6	10.5	3.3
Total	368.6	419.6	453.9	491.7	531.7	570.8	605.1	1.7
Electric power								
Liquid fuels	3.9	5.2	2.2	1.0	0.5	0.2	0.1	-10.8
Natural gas	28.0	29.4	30.6	29.4	28.9	28.8	29.8	0.2
Coal	68.6	69.6	66.4	70.2	73.3	76.8	76.2	0.4
Nuclear	7.9	9.9	12.1	13.9	15.6	16.9	18.2	2.8
Renewables	35.8	49.1	64.0	78.3	94.4	110.4	126.0	4.3
Total	144.2	163.2	175.3	192.7	212.7	233.0	250.3	1.9
Total energy consumption								
Liquid fuels	100.1	118.6	126.6	134.7	142.7	150.4	156.7	1.5
Natural gas	79.3	88.4	95.3	99.3	104.4	109.1	114.8	1.2
Coal	128.9	133.4	132.7	139.2	145.2	151.9	154.4	0.6
Nuclear	8.2	10.3	12.5	14.4	16.2	17.6	18.9	2.8
Renewables	52.1	68.9	86.8	104.1	123.1	141.8	160.2	3.8

Total	368.6	419.6	453.9	491.7	531.7	570.8	605.1	1.7
--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	------------

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2021), run r_210719.163829; and EIA, *Annual Energy Outlook 2021* , (February 2021), www.eia.gov/aeo

Notes:

- * Totals may not equal sum of components due to independent rounding.
- * End-use sector electricity consumption does not include electrical system energy losses incurred in the generation, transmission, and distribution of electricity.
- * End-use sector delivered energy consumption does 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.