

quadrillion British thermal units

Sector and fuel	2020	2025	2030	2035	2040	2045
Residential						
Liquid fuels	1.2	1.0	1.1	1.2	1.3	1.4
Natural gas	0.0	0.1	0.1	0.1	0.1	0.1
Coal	0.1	0.1	0.1	0.1	0.1	0.1
Electricity	1.3	2.0	3.0	4.2	5.5	7.2
Renewables	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.6	3.2	4.3	5.7	7.1	8.8
Commercial						
Liquid fuels	0.1	0.1	0.1	0.2	0.2	0.2
Natural gas	0.1	0.1	0.1	0.1	0.1	0.1
Coal	0.2	0.2	0.3	0.3	0.4	0.4
Electricity	0.5	0.6	0.9	1.2	1.5	1.8
Renewables	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.8	1.1	1.4	1.8	2.1	2.5
Industrial						
Liquid fuels	3.4	5.0	6.9	9.1	11.3	13.8
Natural gas	1.4	2.2	3.3	4.3	5.4	6.7
Coal	6.3	9.5	13.0	16.9	20.9	25.3
Electricity	2.3	3.5	4.7	5.8	7.0	8.3
Renewables	2.1	3.5	4.9	6.4	7.9	9.5
Total	15.5	23.7	32.8	42.4	52.6	63.5
Transportation						
Liquid fuels	4.0	6.0	7.8	9.5	10.8	11.8
Natural gas	0.3	0.4	0.6	0.8	1.2	1.6
Coal	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.1	0.2	0.3	0.6	1.0	1.6
Renewables	0.0	0.0	0.0	0.0	0.0	0.0
Total	4.3	6.6	8.7	10.9	13.0	15.0
All end-use sectors						
Liquid fuels	8.7	12.1	16.0	19.9	23.6	27.1
Natural gas	1.8	2.8	4.0	5.4	6.8	8.6
Coal	6.6	9.8	13.4	17.3	21.4	25.9
Electricity	4.2	6.3	8.8	11.8	15.0	18.8
Renewables	2.1	3.5	5.0	6.4	7.9	9.5
Delivered energy	23.4	34.6	47.2	60.8	74.8	89.8
Electricity-related losses	7.9	13.9	17.7	22.0	27.4	34.4
Discrepancy	0.3	0.7	1.0	1.3	1.7	2.1
Total	31.5	49.2	66.0	84.2	103.9	126.3
Electric power						

Liquid fuels	0.0	0.1	0.0	0.0	0.0	0.0
Natural gas	0.5	0.6	0.5	0.4	0.3	0.3
Coal	8.1	11.5	11.6	11.7	12.3	15.0
Nuclear	0.4	0.5	0.7	0.8	1.1	1.3
Renewables	3.0	7.5	13.6	20.8	28.6	36.5
Total	12.0	20.2	26.5	33.8	42.3	53.1

Total energy consumption

Liquid fuels	8.8	12.5	16.3	20.3	24.0	27.6
Natural gas	2.1	3.1	4.2	5.3	6.6	8.2
Coal	15.0	21.8	25.6	29.7	34.5	41.8
Nuclear	0.4	0.6	0.8	0.8	1.1	1.4
Renewables	5.2	11.2	19.1	28.0	37.6	47.4
Total	31.5	49.2	66.0	84.2	103.9	126.3

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2021), run hp_210719.163813; and EIA, (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.
- * End-use sector delivered energy consumption does not include electrical system energy losses incurred in the generation, transmission and distribution.
- * Electricity-related losses include energy losses during generation due to thermal efficiency, energy losses during transmission and distribution.

2050	Average annual percentage change, 2020–2050
1.4	0.7
0.1	3.2
0.1	0.7
9.0	6.7
0.0	0.8
10.7	4.8
0.2	1.8
0.2	2.5
0.4	3.0
2.1	5.2
0.0	0.8
2.9	4.2
16.5	5.4
8.0	6.0
30.2	5.4
9.6	4.8
11.2	5.8
75.5	5.4
12.3	3.8
2.4	7.7
0.0	0.0
2.2	10.8
0.0	0.0
16.9	4.6
30.4	4.2
10.7	6.2
30.7	5.3
22.9	5.8
11.3	5.8
106.0	5.2
41.6	5.7
2.4	7.5
150.1	5.3

0.0	-11.3
0.3	-1.7
14.9	2.1
1.6	4.4
47.6	9.7
64.4	5.8
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31.0	4.3
10.1	5.4
46.8	3.9
1.6	4.4
60.6	8.5
150.1	5.3

Annual Energy Outlook 2021 ,

n, and distribution of electricity.
mission, and distribution of electricity.
ind distribution, and parasitic load.