Table F3. Delivered energy consumption in the United States by end-use sector and fuel, High Economic Growth case

quadrillion British thermal units

| Sector and fuel | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | Average annual percentage change, 2020–2050 |
|-----------------------------|-------------|-------|-------|-------|-------------|-------|-------------|---|
| Residential | | | | | | | | |
| Liquid fuels | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | -0.8 |
| Natural gas | 5.0 | 5.0 | 5.0 | 4.9 | 4.9 | 5.0 | 5.0 | 0.0 |
| Coal | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Electricity | 5.1 | 5.2 | 5.3 | 5.5 | 5.8 | 6.0 | 6.3 | 0.7 |
| Renewables | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | -0.9 |
| Total | 11.4 | 11.5 | 11.6 | 11.7 | 11.9 | 12.1 | 12.3 | 0.3 |
| Commercial | | | | | | | | |
| Liquid fuels | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.3 |
| Natural gas | 3.3 | 3.6 | 3.6 | 3.7 | 3.7 | 3.8 | 3.8 | 0.4 |
| Coal | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.4 |
| Electricity | 4.3 | 4.7 | 4.8 | 4.9 | 5.1 | 5.4 | 5.8 | 0.9 |
| Renewables | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Total | 8.6 | 9.4 | 9.5 | 9.6 | 9.9 | 10.2 | 10.6 | 0.7 |
| Industrial | 3.3 | J | 3.3 | 3.0 | 3.3 | | _0.0 | 0.7 |
| Liquid fuels | 8.3 | 9.9 | 10.7 | 11.6 | 12.3 | 12.9 | 13.7 | 1.7 |
| Natural gas | 10.7 | 12.2 | 13.0 | 13.8 | 15.0 | 16.3 | 17.7 | 1.7 |
| Coal | 0.9 | 1.0 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.1 |
| Electricity | 3.1 | 3.5 | 3.8 | 4.1 | 4.4 | 4.7 | 5.0 | 1.6 |
| Renewables | 2.4 | 2.6 | 2.7 | 2.9 | 3.1 | 3.4 | 3.8 | 1.5 |
| Total | 25.5 | 29.3 | 31.2 | 33.3 | 35.9 | 38.5 | 41.5 | 1.6 |
| Transportation | 25.5 | 25.5 | 31.2 | 33.3 | 33.3 | 30.3 | 71.3 | 1.0 |
| Liquid fuels | 24.0 | 27.1 | 27.0 | 27.0 | 27.5 | 28.3 | 29.4 | 0.7 |
| Natural gas | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 1.1 | 1.3 | 1.6 |
| Coal | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Electricity | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.5 | 8.9 |
| Renewables | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 24.8 | 28.0 | 27.9 | 28.0 | 28.7 | 29.8 | 31.1 | 0.8 |
| All end-use sectors | 24.0 | 20.0 | 27.3 | 20.0 | 20.7 | 23.0 | 31.1 | 0.8 |
| Liquid fuels | 34.0 | 38.8 | 39.4 | 40.2 | 41.4 | 42.8 | 44.6 | 0.9 |
| Natural gas | 19.8 | 21.7 | 22.4 | 23.3 | 24.7 | 26.1 | 27.7 | 1.1 |
| Coal | 1.0 | 1.0 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.1 |
| | | 13.5 | 14.0 | 14.7 | | 16.4 | 17.5 | 1.1 |
| Electricity Renewables | 12.5 3.0 | 3.2 | 3.3 | 3.4 | 15.5 3.6 | 3.9 | | |
| Delivered energy | 70.2 | 78.1 | 80.1 | 82.6 | 86.3 | 90.5 | 4.3 95.5 | 1.2 |
| Electricity-related losses | 23.3 | 23.5 | 23.3 | 23.8 | 24.6 | 25.5 | 26.6 | 0.4 |
| Discrepancy | -0.6 | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 | -0.6 | 0.4 |
| Total | 92.9 | | | | | | | 0.9 |
| | 92.9 | 101.1 | 102.9 | 105.9 | 110.4 | 115.4 | 121.5 | 0.9 |
| Electric power Liquid fuels | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -3.0 |
| | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | |
| Natural gas | 12.0 | 11.1 | 10.9 | 11.2 | 12.1 6.4 | 12.9 | 13.8 | 0.4 |
| Coal | 8.1 | 7.2 | 7.0 | 6.7 | | 6.2 | 6.1 | -0.9 |
| Nuclear | 8.2 | 7.8 | 6.8 | 6.6 | 6.6 | 6.6 | 6.6 | -0.7 |
| Renewables | 7.3 | 10.9 | 12.5 | 13.9 | 14.9 | 16.1 | 17.5 | 3.0 |
| Total | 35.8 | 37.0 | 37.4 | 38.5 | 40.1 | 41.9 | 44.1 | 0.7 |
| Total energy consumption | 22.5 | 20.4 | 20.0 | 20.0 | 40.0 | 42.2 | 4.4 | |
| Liquid fuels | 33.5 | 38.4 | 39.0 | 39.8 | 40.9 | 42.3 | 44.1 | 0.9 |
| Natural gas | 31.8 | 32.7 | 33.3 | 34.5 | 36.8 | 39.1 | 41.5 | 0.9 |
| Coal | 9.1 | 8.1 | 8.0 | 7.7 | 7.5 | 7.4 | 7.4 | -0.7 |

Table F3. Delivered energy consumption in the United States by end-use sector and fuel, High Economic Growth case

quadrillion British thermal units

| Sector and fuel | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | Average annual percentage change, 2020–2050 |
|-----------------|------|-------|-------|-------|-------|-------|-------|---|
| Nuclear | 8.2 | 7.8 | 6.8 | 6.6 | 6.6 | 6.6 | 6.6 | -0.7 |
| Renewables | 10.3 | 14.1 | 15.8 | 17.4 | 18.5 | 20.0 | 21.8 | 2.5 |
| Total | 92.9 | 101.1 | 102.9 | 105.9 | 110.4 | 115.4 | 121.5 | 0.9 |

Sources: U.S. Energy Information Administration (EIA), World Energy Projection System (2021), run hm_210719.163753; 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.