

Table E3.gen. Electricity generation: United States, Reference case

billion kilowatthours

Fuel	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Liquid fuels	11	10	7	7	6	5	5	-3.1%
Natural gas	1,685	1,431	1,169	1,036	1,115	1,169	1,209	-1.2%
Coal	849	770	359	354	314	292	256	-4.2%
Nuclear	772	782	758	700	625	626	625	-0.8%
Renewables	1,004	1,365	2,264	2,662	2,908	3,134	3,425	4.5%
Hydro	276	300	296	292	289	288	285	0.1%
Wind	440	513	967	1,127	1,150	1,182	1,218	3.7%
Geothermal	16	17	21	24	28	31	37	3.2%
Solar	205	468	911	1,151	1,378	1,573	1,828	8.1%
Other	67	68	68	68	63	59	57	-0.6%
Net generation to grid	4,321	4,357	4,557	4,760	4,969	5,226	5,520	0.9%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run r_230822.081459 and Annual Energy Outlook 2023 (March 2023), www.eia.gov/aeo

Note: Totals may not equal sum of components due to independent rounding. Net generation to grid represents gross generation minus losses from thermal efficiency and parasitic load.