International Energy Outlook 2023

Release date: October 2023

Table E3.gen. Electricity generation: United States, High Zero-carbon Technology Cost case

billion kilowatthours

Fuel	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Liquid fuels	11	10	8	8	7	5	5	-2.7%
Natural gas	1,686	1,459	1,414	1,314	1,394	1,542	1,667	0.0%
Coal	849	787	525	514	477	458	426	-2.4%
Nuclear	772	782	775	734	734	734	734	-0.2%
Renewables	1,003	1,300	1,805	2,146	2,317	2,441	2,621	3.5%
Hydro	276	299	300	298	294	294	293	0.2%
Wind	440	513	884	1,026	1,067	1,092	1,149	3.5%
Geothermal	16	17	20	23	26	31	38	3.2%
Solar	205	403	530	723	851	942	1,055	6.0%
Other	67	68	72	76	79	82	86	0.9%
Net generation to grid	4,321	4,339	4,528	4,716	4,928	5,181	5,453	0.8%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hz_230821.151430 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.