International Energy Outlook 2023

Release date: October 2023

Table E16.gen. Electricity generation: China, High Zero-carbon Technology Cost case

billion kilowatthours

Fuel	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Liquid fuels	13	12	1	0	0	0	0	-16.8%
Natural gas	302	357	398	494	712	975	1,155	4.9%
Coal	5,248	5,137	5,203	5,299	5,099	4,844	4,857	-0.3%
Nuclear	383	416	538	674	799	903	998	3.5%
Renewables	2,573	3,064	3,575	3,815	4,265	4,744	4,840	2.3%
Hydro	1,221	1,300	1,379	1,428	1,474	1,515	1,551	0.9%
Wind	653	724	870	1,063	1,448	1,822	1,835	3.8%
Geothermal	0	0	0	0	0	0	0	0.1%
Solar	575	986	1,284	1,293	1,301	1,268	1,285	2.9%
Other	123	54	42	31	43	140	169	1.1%
Net generation to grid	8,519	8,986	9,716	10,282	10,875	11,467	11,851	1.2%

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

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.