International Energy Outlook 2023

Release date: October 2023

Table E1.cap. Electricity installed generating capacity: World, High Zero-carbon Technology Cost case

gigawatts

Fuel	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Liquid fuels	391	378	219	143	110	99	95	-4.9%
Natural gas	1,931	2,045	2,181	2,299	2,489	2,741	2,963	1.5%
Coal	2,271	2,321	2,196	2,222	2,275	2,319	2,364	0.1%
Nuclear	400	425	425	450	465	470	482	0.7%
Renewables	3,297	4,035	4,800	5,380	6,026	6,762	7,415	2.9%
Hydro	1,211	1,317	1,376	1,414	1,437	1,463	1,485	0.7%
Wind	873	1,028	1,296	1,523	1,804	2,121	2,325	3.6%
Geothermal	15	17	27	30	33	34	35	3.1%
Solar	1,019	1,467	1,883	2,188	2,512	2,897	3,317	4.3%
Other	179	205	218	225	240	246	253	1.2%
Battery storage	52	69	105	181	271	451	625	9.3%
Pumped hydro	169	200	211	213	213	213	213	0.8%
Total capacity	8,511	9,473	10,137	10,889	11,848	13,055	14,155	1.8%

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.