

Table E9.gen. Electricity generation: Western Europe, Reference case

billion kilowatthours

Fuel	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Liquid fuels	97	97	67	50	37	36	36	-3.5%
Natural gas	777	792	792	750	718	690	668	-0.5%
Coal	501	447	270	259	246	313	343	-1.3%
Nuclear	734	723	733	727	720	702	702	-0.2%
Renewables	1,649	1,863	2,143	2,464	2,817	3,002	3,236	2.4%
Hydro	621	697	706	753	754	754	754	0.7%
Wind	474	544	623	695	930	947	962	2.6%
Geothermal	22	38	52	51	51	57	57	3.4%
Solar	209	184	313	478	554	673	849	5.1%
Other	323	399	449	488	529	570	614	2.3%
Net generation to grid	3,758	3,922	4,005	4,250	4,539	4,744	4,985	1.0%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run r_230822.081459

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.