

**Table E1.gen. Electricity generation: World, High Zero-carbon Technology Cost case**

billion kilowatthours

<b>Fuel</b>	<b>2022</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>2050</b>	<b>Average annual percentage change, 2022–2050</b>
Liquid fuels	733	737	380	196	108	70	57	-8.7%
Natural gas	6,700	6,692	6,914	7,080	7,585	8,316	8,933	1.0%
Coal	9,696	9,384	9,350	9,700	9,847	9,957	10,146	0.2%
Nuclear	2,666	2,786	3,037	3,195	3,290	3,324	3,406	0.9%
Renewables	8,448	9,966	12,025	13,931	15,851	17,808	19,456	3.0%
Hydro	4,320	4,706	4,971	5,253	5,337	5,447	5,533	0.9%
Wind	1,967	2,354	3,171	3,916	4,971	5,851	6,396	4.3%
Geothermal	67	110	190	212	236	248	255	4.9%
Solar	1,421	2,160	3,014	3,860	4,590	5,398	6,341	5.5%
Other	673	636	679	690	716	865	931	1.2%
<b>Net generation to grid</b>	<b>28,243</b>	<b>29,564</b>	<b>31,706</b>	<b>34,102</b>	<b>36,680</b>	<b>39,475</b>	<b>41,997</b>	<b>1.4%</b>

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](http://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.