International Energy Outlook 2023

Release date: October 2023

Table E21.gen. Electricity generation: Middle East, High Oil Price case

billion kilowatthours

Fuel	2022	2025	2030	2035	2040	2045	2050	Average annual percentage change, 2022–2050
Liquid fuels	300	307	164	77	34	13	3	-15.2%
Natural gas	990	1,031	1,074	1,235	1,347	1,460	1,558	1.6%
Coal	0	0	0	0	0	0	0	-5.9%
Nuclear	24	41	58	73	83	83	83	4.6%
Renewables	42	96	158	169	177	189	197	5.7%
Hydro	23	25	29	29	29	29	29	0.8%
Wind	3	19	38	40	40	42	42	10.4%
Geothermal	0	0	0	0	0	0	0	0.0%
Solar	16	51	91	100	108	117	125	7.5%
Other	0	0	0	0	0	0	1	--
Net generation to grid	1,357	1,475	1,453	1,555	1,641	1,745	1,841	1.1%

Data source: U.S. Energy Information Administration, World Energy Projection System (2023), run hp_230822.081357

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.