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## FACTS AND FIGURES

# World Nuclear Power Reactors & Uranium Requirements

UPDATED TUESDAY, 7 JANUARY 2025

World Nuclear Association's Country Profiles, linked to below, provide more details of what is tabulated here.

COUNTRY	NUCLEAR ELECTRICITY GENERATION 2023		REACTORS OPERABLE		REACTORS UNDER CONSTRUCTION		REACTORS PLANNED		REACTORS PROPOSED		URANIUM REQUIRED 2024
	TWh	%	No.	MWe	No.	MWe	No.	MWe	No.	MWe	tonnes U
<a href="#"><u>Argentina</u></a>	9.0	6.3	3	1641	1	29	1	1150	1	750	219
<a href="#"><u>Armenia</u></a>	2.5	31.1	1	416	0	0	0	0	1	1060	55
<a href="#"><u>Bangladesh</u></a>	0	0	0	0	2	2400	0	0	2	2400	371
<a href="#"><u>Belarus</u></a>	11.0	28.6	2	2220	0	0	0	0	0	0	357
<b>WORLD*</b>	<b>2602</b>	<b>c. 9%</b>	<b>440</b>	<b>398,553</b>	<b>65</b>	<b>70,005</b>	<b>86</b>	<b>82,622</b>	<b>344</b>	<b>365,050</b>	<b>67,517</b>
	<b>TWh</b>	<b>% e</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>tonnes U</b>

COUNTRY	NUCLEAR ELECTRICITY GENERATION 2023		REACTORS OPERABLE		REACTORS UNDER CONSTRUCTION		REACTORS PLANNED		REACTORS PROPOSED		URANIUM REQUIRED 2024
<u>Belgium</u>	31.3	41.2	5	3908	0	0	0	0	0	0	516
<u>Brazil</u>	13.7	2.2	2	1884	1	1405	0	0	8	8000	339
<u>Bulgaria</u>	15.5	40.4	2	2006	0	0	2	2300	0	0	334
<u>Canada</u>	83.5	13.7	17	12,669	0	0	2	400	9	5700	1455
<u>China</u>	406.5	4.9	58	56,888	29	33,165	36	38,710	158	186,450	13,132
<u>Czech Republic</u>	28.7	40.0	6	4212	0	0	1	1200	3	3600	715
<u>Egypt</u>	0	0	0	0	4	4800	0	0	0	0	0
<u>Finland</u>	32.8	42.0	5	4369	0	0	0	0	0	0	616
<u>France</u>	323.8	64.8	57	63,000	0	0	0	0	6	9900	8232
<u>Germany</u>	6.7	1.4	0	0	0	0	0	0	0	0	0
<u>Ghana</u>	0	0	0	0	0	0	0	0	1	1000	0
<u>Hungary</u>	15.1	48.8	4	1916	0	0	2	2400	0	0	320
<u>India</u>	44.6	3.1	23	7425	7	5900	12	8400	28	32,000	1725
<u>Iran</u>	6.1	1.7	1	915	1	1057	2	1417	6	5200	153
<u>Japan</u> †	77.5	5.6	33	31,679	2	2756	1	1385	8	11,562	2180
<u>Kazakhstan</u>	0	0	0	0	0	0	0	0	1	1200	0
<b>WORLD*</b>	<b>2602</b>	<b>c. 9%</b>	<b>440</b>	<b>398,553</b>	<b>65</b>	<b>70,005</b>	<b>86</b>	<b>82,622</b>	<b>344</b>	<b>365,050</b>	<b>67,517</b>
	<b>TWh</b>	<b>% e</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>tonnes U</b>

COUNTRY	NUCLEAR ELECTRICITY GENERATION 2023		REACTORS OPERABLE		REACTORS UNDER CONSTRUCTION		REACTORS PLANNED		REACTORS PROPOSED		URANIUM REQUIRED 2024
<u><a href="#">Korea RO (South)</a></u>	171.6	31.5	26	25,825	2	2680	2	2800	0	0	4309
<u><a href="#">Mexico</a></u>	12.0	4.9	2	1552	0	0	0	0	2	2000	237
<u><a href="#">Netherlands</a></u>	3.8	3.4	1	482	0	0	0	0	2	2000	69
<u><a href="#">Pakistan</a></u>	22.4	17.4	6	3262	1	1100	0	0	0	0	555
<u><a href="#">Poland</a></u>	0	0	0	0	0	0	3	3750	26	10,000	0
<u><a href="#">Romania</a></u>	10.3	18.9	2	1300	0	0	2	1440	6	462	185
<u><a href="#">Russia</a></u>	204.0	18.4	36	26,802	6	4102	14	8930	36	37,716	5436
<u><a href="#">Saudi Arabia</a></u>	0	0	0	0	0	0	0	0	2	2900	0
<u><a href="#">Slovakia</a></u>	17.0	61.3	5	2308	1	471	0	0	1	1200	527
<u><a href="#">Slovenia</a></u>	5.3	36.8	1	688	0	0	0	0	1	1200	127
<u><a href="#">South Africa</a></u>	8.2	4.4	2	1854	0	0	0	0	2	2400	277
<u><a href="#">Spain</a></u>	54.4	20.3	7	7123	0	0	0	0	0	0	1218
<u><a href="#">Sweden</a></u>	46.6	28.6	6	7008	0	0	2	2500	0	0	932
<u><a href="#">Switzerland</a></u>	23.4	32.4	4	2973	0	0	0	0	0	0	412
<u><a href="#">Turkey</a></u>	0	0	0	0	4	4800	0	0	8	9600	882
<b>WORLD*</b>	<b>2602</b>	<b>c. 9%</b>	<b>440</b>	<b>398,553</b>	<b>65</b>	<b>70,005</b>	<b>86</b>	<b>82,622</b>	<b>344</b>	<b>365,050</b>	<b>67,517</b>
	<b>TWh</b>	<b>% e</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>tonnes U</b>

COUNTRY	NUCLEAR ELECTRICITY GENERATION 2023		REACTORS OPERABLE		REACTORS UNDER CONSTRUCTION		REACTORS PLANNED		REACTORS PROPOSED		URANIUM REQUIRED 2024
<u><b>Ukraine</b></u> † ‡	50.0	50.7	15	13,107	2	1900	2	2500	7	8750	1673
<u><b>UAE</b></u>	31.2	19.7	4	5348	0	0	0	0	2	2800	853
<u><b>United Kingdom</b></u>	37.3	12.5	9	5883	2	3440	2	3340	2	2300	817
<u><b>USA</b></u>	779.2	18.6	94	96,952	0	0	0	0	13	10,500	18,137
<u><b>Uzbekistan</b></u>	0	0	0	0	0	0	0	0	2	2400	0
<b>WORLD*</b>	<b>2602</b>	<b>c. 9%</b>	<b>440</b>	<b>398,553</b>	<b>65</b>	<b>70,005</b>	<b>86</b>	<b>82,622</b>	<b>344</b>	<b>365,050</b>	<b>67,517</b>
	<b>TWh</b>	<b>% e</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>No.</b>	<b>MWe</b>	<b>tonnes U</b>

## Sources:

Reactor and electricity data: International Atomic Energy Agency Power Reactor Information System (PRIS); US Energy Information Administration; company data; World Nuclear Association estimates  
 World Nuclear Association, *The Nuclear Fuel Report* (published September 2023, Reference Scenario) – for uranium requirements

## Notes:

67,517 tU = 79,619 t U<sub>3</sub>O<sub>8</sub>

Operable = Connected to the grid.

Under Construction = First concrete for reactor poured, keel laying for floating plants.

Planned = Approvals, funding or commitment in place, mostly expected to be in operation within the next 15 years.

Proposed = Specific programme or site proposals; timing very uncertain.

\* World figures include Taiwan, which generated a total of 17.2 TWh from nuclear in 2023 (accounting for 6.9% of Taiwan's total electricity generation). As of January 2025 the island has one operable reactor with a net capacity of 938 MWe.

† Under Construction figures include a number of units where construction is currently suspended: Angra 3 (Brazil); Ohma 1 and Shimane 3 (Japan); Khmel'nitski 3&4 (Ukraine).

‡ Ukraine 2023 electricity generation estimated.

New plants coming online are largely balanced by old plants being retired. Over the past 20 years (2005-2024), 106 reactors were retired as 102 started operation. However, the reactors grid connected during this period were larger, on average, than those shutdown, so capacity increased by about 21 GW. The Reference Scenario in the 2023 edition of *The Nuclear Fuel Report* (Table 2.5) has 66 reactors closing by 2040, and 308 new ones coming online (figures include 31 Japanese reactors online by 2040).

TWh = terawatt hour (billion kilowatt hours); kWh = kilowatt hour; MWe = megawatt (electrical as distinct from thermal).

Note: This table is routinely updated approximately every two months, and more frequently as required.

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