

World Nuclear Power Reactors & Uranium Requirements

1 July 2013

This table includes only those future reactors envisaged in specific plans and proposals and expected to be operating by 2030.

The WNA country profiles linked to this table cover both areas: near-term developments and the prospective long-term role for nuclear power in national energy policies. They also provide more detail of what is tabulated here.

COUNTRY (Click name for Country Profile)	NUCLEAR ELECTRICITY GENERATION 2012		REACTORS OPERABLE July 2013		REACTORS UNDER CONSTRUCTION July 2013		REACTORS PLANNED July 2013		REACTORS PROPOSED July 2013		URANIUM REQUIRED 2013
	billion kWh	% e	No.	MWe net	No.	MWe gross	No.	MWe gross	No.	MWe gross	tonnes U
Argentina	5.9	4.7	2	935	1	745	1	33	2	1400	213
Armenia	2.1	26.6	1	376	0	0	1	1060			64
Bangladesh	0	0	0	0	0	0	2	2000	0	0	0
Belarus	0	0	0	0	0	0	2	2400	2	2400	0
Belgium	38.5	51.0	7	5943	0	0	0	0	0	0	995
Brazil	15.2	3.1	2	1901	1	1405	0	0	4	4000	325
Bulgaria	14.9	31.6	2	1906	0	0	1	950	0	0	317
Canada	89.1	15.3	19	13553	0	0	2	1500	3	3800	1906
Chile	0	0	0	0	0	0	0	0	4	4400	0
China	92.7	2.0	17	13842	28	30550	53	66160	118	122000	5999
Czech Republic	28.6	35.3	6	3766	0	0	2	2400	1	1200	577
Egypt	0	0	0	0	0	0	1	1000	1	1000	0
Finland	22.1	32.6	4	2741	1	1700	0	0	2	3000	728
France	407.4	74.8	58	63130	1	1720	1	1720	1	1100	9254
Germany	94.1	16.1	9	12003	0	0	0	0	0	0	1934
Hungary	14.8	45.9	4	1880	0	0	0	0	2	2200	331
India	29.7	3.6	20	4385	7	5300	18	15100	39	45000	1261

Indonesia	0	0	0	0	0	0	2	2000	4	4000	0
Iran	1.3	0.6	1	915	0	0	1	1000	1	300	172
Israel	0	0	0	0	0	0	0	0	1	1200	0
Italy	0	0	0	0	0	0	0	0	10	17000	0
Japan	17.2	2.1	50	44396	3	3036	9	12947	3	4145	4425
Jordan	0	0	0	0	0	0	1	1000			0
Kazakhstan	0	0	0	0	0	0	2	600	2	600	0
Korea DPR (North)	0	0	0	0	0	0	0	0	1	950	0
Korea RO (South)	143.5	30.4	23	20787	5	6870	5	7275	0	0	3769
Lithuania	0	0	0	0	0	0	1	1350	0	0	0
Malaysia	0	0	0	0	0	0	0	0	2	2000	0
Mexico	8.4	4.7	2	1600	0	0	0	0	2	2000	279
Netherlands	3.7	4.4	1	485	0	0	0	0	1	1000	102
Pakistan	5.3	5.3	3	725	2	680	0	0	2	2000	117
Poland	0	0	0	0	0	0	6	6000	0	0	0
Romania	10.6	19.4	2	1310	0	0	2	1310	1	655	177
Russia	166.3	17.8	33	24253	10	9160	24	24180	20	20000	5073
Saudi Arabia	0	0	0	0	0	0	0	0	16	17000	0
Slovakia	14.4	53.8	4	1816	2	942	0	0	1	1200	305
Slovenia	5.2	53.8	1	696	0	0	0	0	1	1000	137
South Africa	12.4	5.1	2	1800	0	0	0	0	6	9600	304
Spain	58.7	20.5	7	7002	0	0	0	0	0	0	1355
Sweden	61.5	38.1	10	9388	0	0	0	0	0	0	1469
Switzerland	24.4	35.9	5	3252	0	0	0	0	3	4000	527
Thailand	0	0	0	0	0	0	0	0	5	5000	0
Turkey	0	0	0	0	0	0	4	4800	4	4500	0
Ukraine	84.9	46.2	15	13168	0	0	2	1900	11	12000	2356
UAE	0	0	0	0	2	2800	2	2800	10	14400	0
United Kingdom	64.0	18.1	16	10038	0	0	4	6680	9	12000	1775
USA	770.7	19.0	100	98951	3	3618	9	10860	15	24000	18983
Vietnam	0	0	0	0	0	0	4	4000	6	6700	0
WORLD**	2346	11	432	371,870	68	71,226	162	183,025	316	358,750	66,512
	billion kWh	% e	No.	MWe	No.	MWe	No.	MWe	No.	MWe	tonnes U
	NUCLEAR ELECTRICITY GENERATION		REACTORS OPERABLE		REACTORS UNDER CONSTRUCTION		ON ORDER or PLANNED		PROPOSED		URANIUM REQUIRED

Sources:

Reactor data: WNA to 1/7/13 (excluding 8 shut-down German units and 2 shut-down US units)

IAEA- for nuclear electricity production & percentage of electricity (% e) 13/4/12.
WNA: Global Nuclear Fuel Market report Sept 2011 (reference scenario) - for U.

Operable = Connected to the grid;

Under Construction = first concrete for reactor poured, or major refurbishment under way;

Planned = Approvals, funding or major commitment in place, mostly expected in operation within 8-10 years;

Proposed = Specific program or site proposals, expected operation mostly within 15 years.

New plants coming on line are largely balanced by old plants being retired. Over 1996-2009, 43 reactors were retired as 49 started operation. There are no firm projections for retirements over the period covered by this Table, but WNA estimates that at least 60 of those now operating will close by 2030, most being small plants. The 2011 WNA Market Report reference case has 156 reactors closing by 2030, and 298 new ones coming on line.

TWh = Terawatt-hours (billion kilowatt-hours), MWe = Megawatt (electrical as distinct from thermal), kWh = kilowatt-hour.

66,512 tU = 78,438 t U³O₈

** The world total includes 6 reactors operating on [Taiwan](#) with a combined capacity of 4927 MWe, which generated a total of 38.7 billion kWh in 2012 (accounting for 18.4% of Taiwan's total electricity generation). Taiwan has two reactors under construction with a combined capacity of 2700 MWe. It is expected to require 1283 tU in 2013.

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

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