

# Nuclear power in NEA member countries

## Situation and projections as of 31 December 2009

At the end of 2009, the total nuclear generating capacity of the 340 reactors connected to the grid in NEA member countries was 308.8 gigawatts (GWe). Another 14 reactors totalling 14.6 GWe were under construction and 24 reactors totalling 31.2 GWe were

firmly committed. These preliminary data and other statistics on fuel cycle capacities and requirements are provided in the latest edition of *Nuclear Energy Data*, as well as short country reports on important trends and issues.

**Nuclear generating capacity (net GWe) and percentage of total electricity generating capacity (a)**

Country	2009		2010		2020		2030	
	Nuclear	%	Nuclear	%	Nuclear	%	Nuclear	%
Belgium (c)	5.9	36.9	5.9	34.3 - 33.7	5.9 - 6.0	26.8 - 22.2	0.0 - 5.9	0.0 - 19.7
Canada	12.1	10.3 (b)	11.4 - 13.6	9.6 - N/A	11.4 - 15.3	8.7 - N/A	N/A	N/A
Czech Republic	3.6	19.7	3.7 - 3.8	19.8 - 20.4	3.8 - 5.9	20.8 - 30.7	7.4	37.6 - 36.5
Finland	2.7	21.4	2.7	21.4	4.3	29.9	3.8	29.0
France	63.1	52.5	63.1	52.1 - 51.7	66.3	N/A	N/A	N/A
Germany	20.4	13.8 (b)	20.4	15.8 - 15.2	3.5	2.6 - 2.4	0.0	0.0 - 0.0
Hungary	1.9	21.7	1.9	23.0 - 21.9	1.9	21.5 - 17.2	1.9	21.0 - 17.4
Japan (d, e)	47.0	19.7 (b)	N/A	N/A	N/A	N/A	N/A	N/A
Korea	17.7	24.1	18.7	24.6	30.9	30.9	42.7	40.6
Mexico	1.4	2.7	1.4 - 1.6	N/A	N/A - 1.6	N/A	N/A - 1.6	N/A
Netherlands	0.5	1.9	0.5	1.8	0.5	1.4	0.5	1.4 - 1.2
Slovak Republic	1.7	25.4	1.8	25.0	2.8 - 4.3	35.0 - 40.6	2.9 - 4.3	30.2 - 35.0
Spain	7.4	7.6	7.4	7.5	6.9	5.4	N/A	N/A
Sweden	9.3	26.7	10.1 - N/A	N/A	10.1 - N/A	N/A	10.1 - N/A	N/A
Switzerland (b)	3.2	18.7	3.2 - N/A	18.7 - N/A	3.2 - N/A	17.7 - N/A	3.9 - N/A	20.7 - N/A
United Kingdom (b)	10.1	12.6	10.5	11.9 - 11.8	4.4 - 5.8	5.0 - 6.5	N/A	N/A
United States	100.8	10.0	101.6	9.7	110.9 - 112.6	10.7 - 10.4	110.9 - 126.7	10.2 - 10.9
<b>Total/average</b>	<b>308.8</b>	<b>12.9</b>	-	-	-	-	-	-

(a) Including electricity generated by the user (autoproduction) unless stated otherwise.  
 (b) Provisional data.  
 (c) By law, Belgium's nuclear power plants must be retired from service after 40 years of operation, with the exception of the three

oldest in the fleet (Doel 1 and 2 and Tihange 1) which received a one-time, ten-year extension.  
 (d) For fiscal year.  
 (e) Gross data converted to net by the Secretariat.  
 N/A Not available.

**Status of nuclear power plants and corresponding capacity (net GWe)**

Country	Connected to the grid		Under construction		Firmly committed*		Planned shutdown**	
	Units	Capacity	Units	Capacity	Units	Capacity	Units	Capacity
Belgium	7	5.9	-	-	-	-	-	-
Canada	17 (a)	12.1	-	-	-	-	-	-
Czech Republic	6	3.6	-	-	-	-	-	-
Finland	4	2.7	1	1.6	-	-	-	-
France	58	63.1	1	1.6	1	1.6	-	-
Germany	17	20.4	-	-	-	-	6	6.1
Hungary	4	1.9	-	-	-	-	-	-
Japan (e)	54	47.0	3	2.9	12	15.9	-	-
Korea	20	17.7	6	6.5	2	2.7	-	-
Mexico	2	1.4	-	-	-	-	-	-
Netherlands	1	0.5	-	-	-	-	-	-
Slovak Republic	4	1.7	2 (d)	0.8	-	-	-	-
Spain	8	7.4	-	-	-	-	-	-
Sweden	10	9.3	-	-	-	-	-	-
Switzerland	5	3.2	-	-	-	-	-	-
United Kingdom (c)	19	10.1	-	-	-	-	4	1.4
United States	104	100.8	1 (b)	1.2	9	11.0	-	-
<b>Total</b>	<b>340</b>	<b>308.8</b>	<b>14</b>	<b>14.6</b>	<b>24</b>	<b>31.2</b>	<b>12</b>	<b>8.0</b>

(a) Does not include three units currently under refurbishment (Point Lepreau and Bruce A units 1 and 2).  
 (b) Watts Bar 2 construction resumed.  
 (c) Provisional data.

(d) Mochovce 3 and 4 construction resumed.  
 (e) Gross data converted to net by the Secretariat.  
 \* Plants for which sites have been secured and main contracts placed.  
 \*\* Plants expected to be retired from service by the end of 2013.