Nuclear Power Status 2024

In operation

377 GW(e) total net capacity

417 reactors

2 617.3 TWh electricity produced

In suspended operation

19.7 GW(e) total net capacity

23 reactors

Under construction

64.5 GW(e) total net capacity

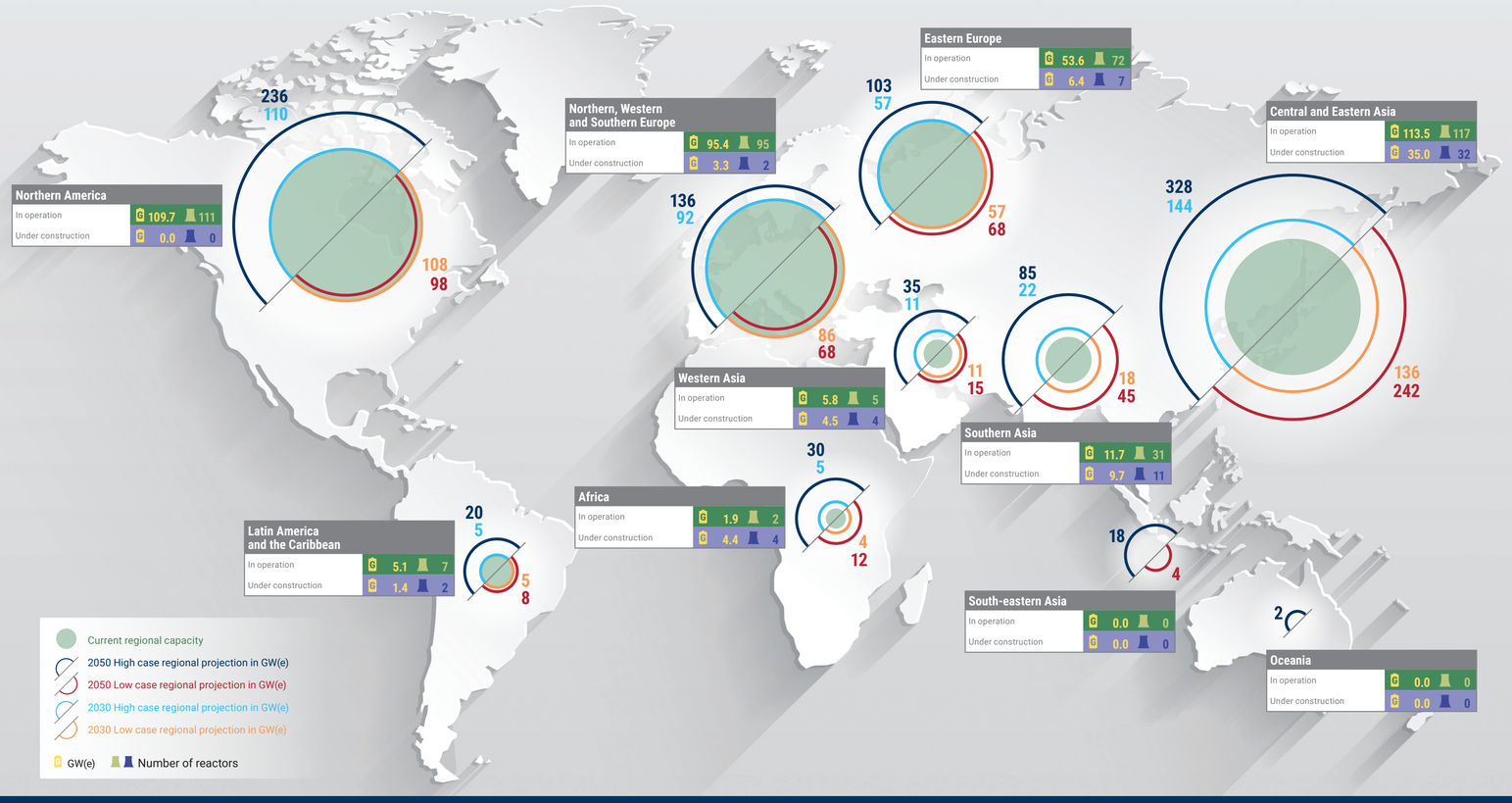
62 reactors

IAEA Power Reactor Information System PRIS

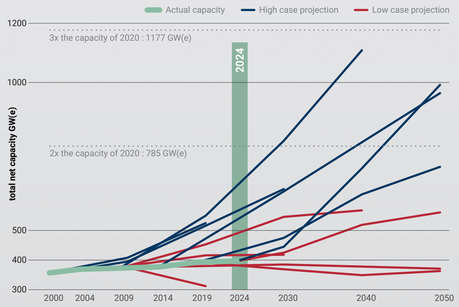
Status changes

Construction starts	LIANJIANG-2	1224 MW(e), PWR, CHINA	NINGDE-5	1200 MW(e), PWR, CHINA	SHIDAOWAN-1	1134 MW(e), PWR, CHINA	XUDAPU-2	1000 MW(e), PWR, CHINA
	ZHANGZHOU-3	1129 MW(e), PWR, CHINA	ZHANGZHOU-4	1129 MW(e), PWR, CHINA	EL DABAA-4	1100 MW(e), PWR, EGYPT	CHASNUPP-5	1117 MW(e), PWR, PAKISTAN
	LENINGRAD 2-3	1150 MW(e), PWR, RUSSIA						
New connections to the grid	BARAKAH-4	1310 MW(e), PWR, UAE	FANGCHENGGANG-4	1000 MW(e), PWR, CHINA	ZHANGZHOU-1	1126 MW(e), PWR, CHINA	FLAMANVILLE-3	1630 MW(e), PWR, FRANCE
	KAKRAPAR-4	630 MW(e), PHWR, INDIA	VOGTLE-4	1117 MW(e), PWR, USA				
Permanent shutdowns	PICKERING-1	515 MW(e), PHWR, CANADA	PICKERING-4	515 MW(e), PHWR, CANADA	KURSK-2	925 MW(e), LWGR, RUSSIA	MAANSHAN-1	936 MW(e), PWR, TAIWAN, CHINA
Restart after suspended operation	ONAGAWA-2	796 MW(e), BWR, JAPAN	SHIMANE-2	789 MW(e), BWR, JAPAN				

Regional statistics: nuclear power capacity now and projections to 2050

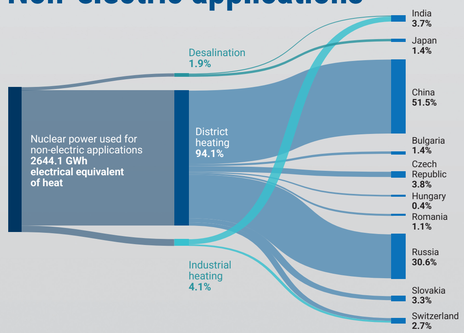


Low and high case nuclear power capacity projections



Capacity projections from the IAEA Reference Data Series No. 1: *Energy, Electricity and Nuclear Power Estimates* to 2050, 2025 Edition.

Non-electric applications



Country statistics

Reactors in operation | Reactors under construction | Net capacity (MW(e)) | Electricity produced (TWh) | Nuclear electricity share

Argentina 3 1641 / 1 25 — 7.4% — 10.4	Armenia 1 416 / 0 0 — 30.8% — 2.6	Bangladesh 0 0 / 2 2160 — NA — NA	Belarus 2 2220 / 0 0 — 36.3% — 14.7	Belgium 5 3908 / 0 0 — 42.2% — 29.7	Brazil 2 1884 / 1 1340 — 2.3% — 14.9	Bulgaria 2 2006 / 0 0 — 41.6% — 15.1	Canada 17 12714 / 0 0 — 13.4% — 81.2	China 57 55320 / 28 29638 — 4.5% — 417.5
Czech Republic 6 3963 / 0 0 — 40.2% — 28.0	Egypt 0 0 / 4 4400 — NA — NA	Finland 5 4369 / 0 0 — 39.1% — 31.1	France 57 63000 / 0 0 — 67.3% — 364.4	Hungary 4 1916 / 0 0 — 47.1% — 15.2	India 20 6920 / 7 5398 — 3.3% — 49.9	Islamic Republic of Iran 1 915 / 1 974 — 1.7% — 6.4	Japan 14 12631 / 2 2653 — * — 84.9	Republic of Korea 26 25609 / 2 2680 — 31.7% — 179.4
Mexico 2 1552 / 0 0 — 4.8% — 12.0	Kingdom of the Netherlands 1 482 / 0 0 — 2.8% — 3.4	Pakistan 6 3262 / 1 1117 — 16.7% — 22.8	Romania 2 1300 / 0 0 — 19.8% — 10.0	Russia 36 26802 / 4 3850 — 17.8% — 202.1	Slovakia 5 2302 / 1 440 — 60.6% — 17.0	Slovenia 1 696 / 0 0 — 35.0% — 5.6	South Africa 2 1854 / 0 0 — 3.9% — 7.8	Spain 7 7123 / 0 0 — 19.9% — 52.1
Sweden 6 7008 / 0 0 — 29.1% — 48.7	Switzerland 4 2973 / 0 0 — 27.0% — 23.0	Türkiye 0 0 / 4 4456 — NA — NA	United Arab Emirates 4 5348 / 0 0 — 21.8% — 36.5	United Kingdom 9 5883 / 2 3260 — 12.3% — 37.3	Ukraine 15 13107 / 2 2070 — * — !	United States of America 94 96952 / 0 0 — 18.2% — 781.9		

Taiwan, China: 1 reactor in operation, 938 MW(e), 0 reactors under construction; 11.7 TWh electricity supplied, 4.6% nuclear share.

MW(e) – Megawatt electric **GW(e)** – Gigawatt electric **GWh** – Gigawatt hour **TWh** – Terawatt hour

* Data were not submitted for 2024 by the time of publication.
NA Not Applicable

www.iaea.org/pris

25-01155E