

STATE ENERGY PROFILE

Sources of electricity in North Carolina



2,500

High-paying, reliable jobs provided by North Carolina's nuclear plants

70.8%

Nuclear's share of North Carolina's carbon-free electricity, complementing wind and solar

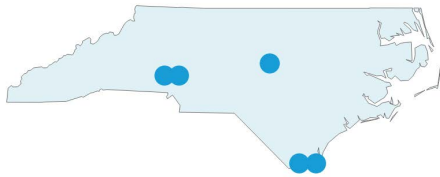
State Carbon Goals

100% carbon-neutral electricity by 2050

Utility Carbon Goals

- Dominion Energy
- Duke Energy
- North Carolina EMC
- Tennessee Valley Authority

NUCLEAR PLANTS



94.7%

Capacity factor of nuclear plants in North Carolina from 2021 to 2023

24.5 million

Metric tons of carbon emissions avoided by nuclear energy in North Carolina

3.3 million

Number of homes powered by nuclear energy in North Carolina

Nuclear News

In 2021, the North Carolina legislature passed a bill requiring a 70% emission reduction by 2030 that was inclusive of nuclear energy.

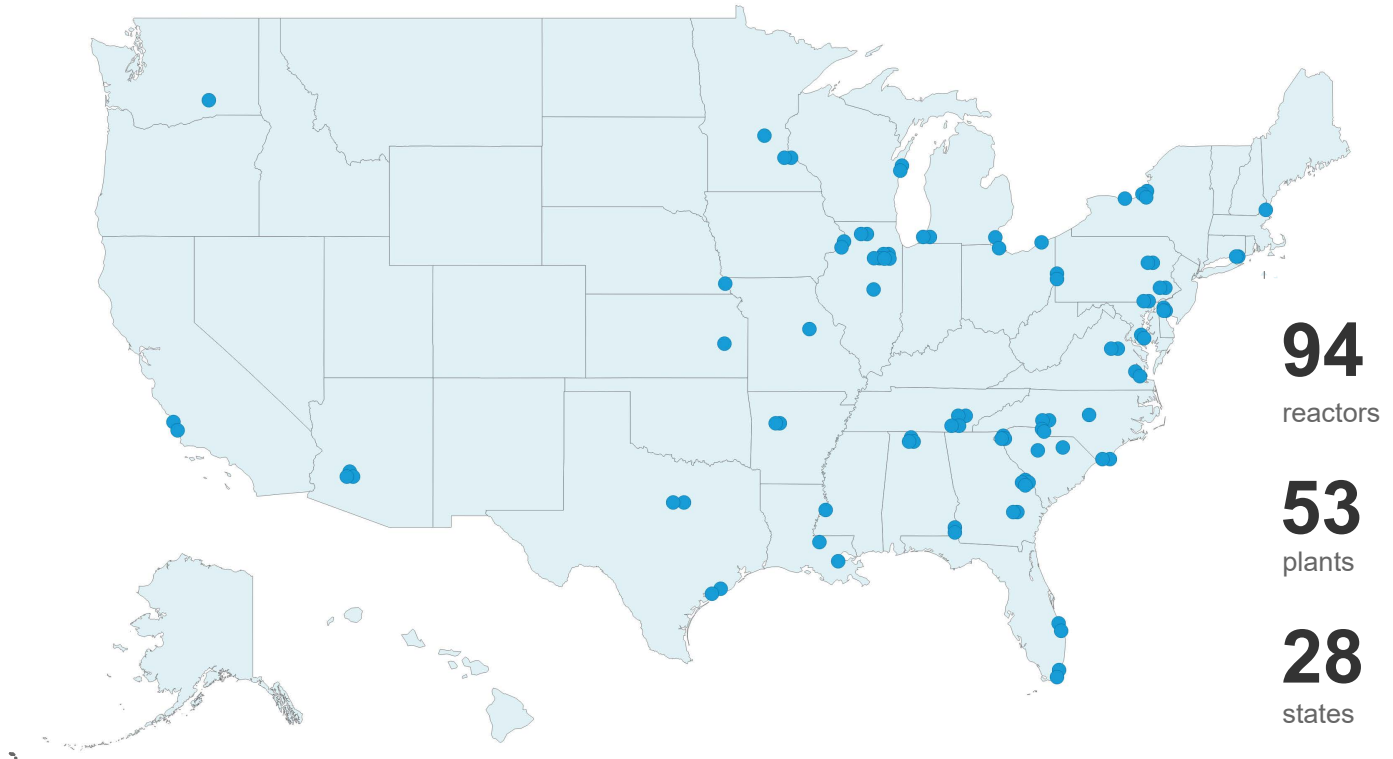
In 2023, North Carolina passed legislation to define nuclear, fusion and renewables as clean energy.

The NC Utilities Commission released its first carbon plan in 2022, supporting license renewal and allowing some development costs for new nuclear.

REACTOR DETAILS

Reactor Name	County	Majority Owner(s)	Capacity (MW)	Capacity Factor (%)	License End Year
Brunswick 1	Brunswick	Duke Energy	938	96.6%	2036
Brunswick 2	Brunswick	Duke Energy	932	92.7%	2034
Harris 1	Wake	Duke Energy	964	96.3%	2046
McGuire 1	Mecklenburg	Duke Energy	1,158	94.6%	2041
McGuire 2	Mecklenburg	Duke Energy	1,158	93.3%	2043

NUCLEAR POWER ACROSS THE U.S.



94
reactors

53
plants

28
states

45.5%

share of carbon-free electricity generated by nuclear energy

437M

metric tons of carbon emissions avoided in 2023

250,000

well-paying, sustainable direct and indirect jobs in the nuclear industry

93.0%

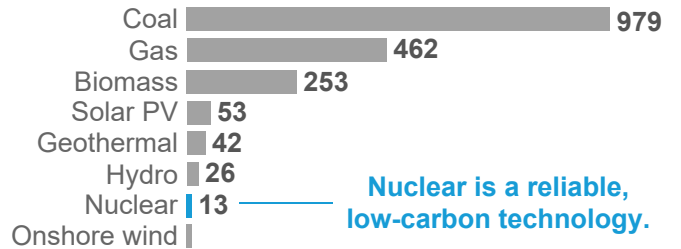
capacity factor of U.S. nuclear plants in 2023 as a reliable electricity source

U.S. GENERATION BY FUEL SOURCE 2023



COMPARISON OF LIFECYCLE EMISSIONS

Tons of Carbon Dioxide Equivalent per Gigawatt-Hour



Nuclear is a reliable, low-carbon technology.

5

uranium pellets generate a household's annual electricity, compared to 5 tons of coal

