

**STATE ENERGY PROFILE**

Sources of electricity in Kentucky



**Legend**  
 Hydro  
 Other

**300**

High-paying, permanent jobs created at a new small modular reactor plant

**394**

Operating and retired coal plant sites that could be converted to nuclear plants

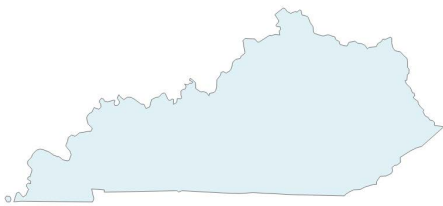
**State Carbon Goals**

None

**Utility Carbon Goals**

American Electric Power  
 Duke Energy  
 East Kentucky Power  
 PPL Corporation  
 Tennessee Valley Authority

**NUCLEAR PLANTS**



**25%**

Share of nuclear workers that are veterans

**5**

Multiple unit small modular reactor plants planned for operation by 2035

**66**

Number of jobs created in the community for each 100 nuclear jobs

**Nuclear News**

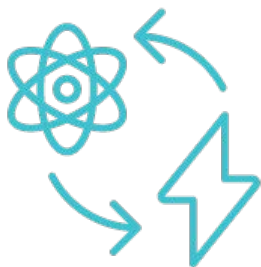
A 2024 bill requires the state Public Service Commission adopt new regulations for advanced reactors.

Kentucky legislature established a Nuclear Energy Development Working Group in 2023.

Kentucky legislature established the Nuclear Authority in 2024 with a \$20 million state budget for nuclear energy.

U.S. Congress supports nuclear & other clean energy in the 2021 Bipartisan Infrastructure Law and 2022 Inflation Reduction Act.

**WHY NUCLEAR?**



Nuclear powers America's cities and towns with reliable, 24/7 clean energy.

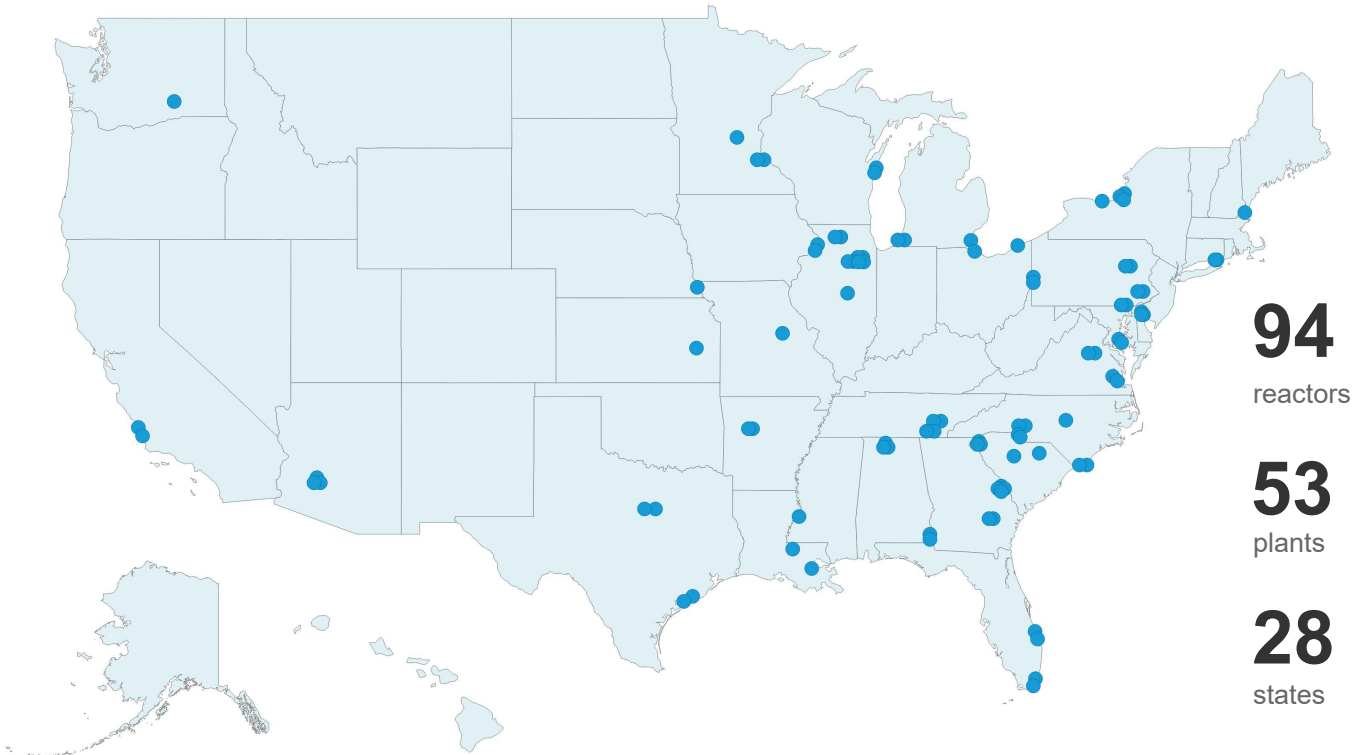


Nuclear energy creates jobs and supports local communities, with each of today's large operating reactors providing 500 to 800 jobs.



Nuclear energy is the largest source of emissions-free energy in the United States.

**NUCLEAR POWER ACROSS THE U.S.**



**45.5%**

share of carbon-free electricity generated by nuclear energy

**437M**

metric tons of carbon emissions avoided in 2023

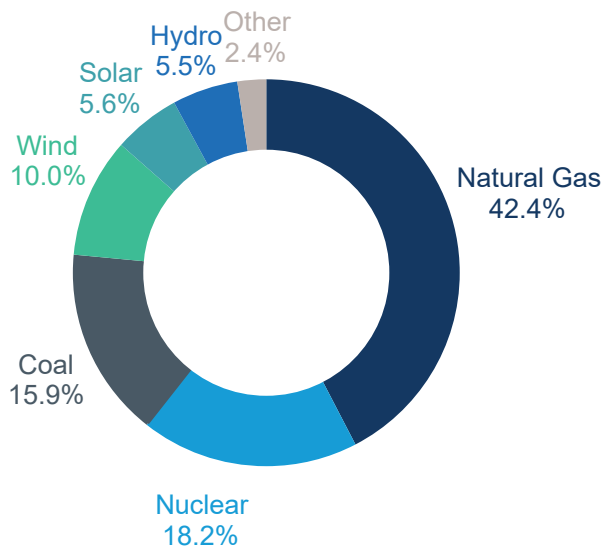
**475,000**

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

**93.0%**

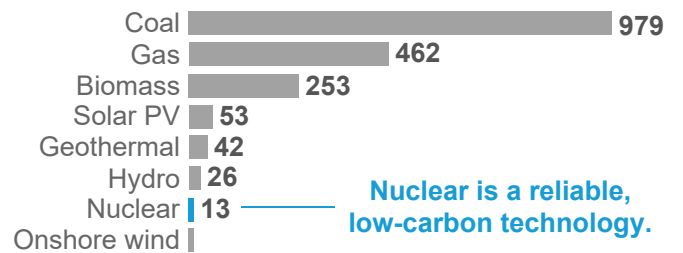
capacity factor of U.S. nuclear plants in 2023 as a reliable electricity source

**U.S. GENERATION BY FUEL SOURCE 2023**



**COMPARISON OF LIFECYCLE EMISSIONS**

Tons of Carbon Dioxide Equivalent per Gigawatt-Hour



**5**

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

