

NUCLEAR ENERGY

NUCLEAR ENERGY IN THE UNITED STATES

The United States has used nuclear power for more than 60 years to produce reliable, low-carbon energy, as well as to support national defense and research and development needs.

In the United States, we use nuclear science and technology to:

- generate nearly 20 percent of our electricity
- support national defense activities and power Naval ships, including submarines and aircraft carriers
- support medical diagnosis and treatment
- provide safely preserved food through irradiation
- power missions to space, including those to study Jupiter, Saturn, Mars, and Pluto

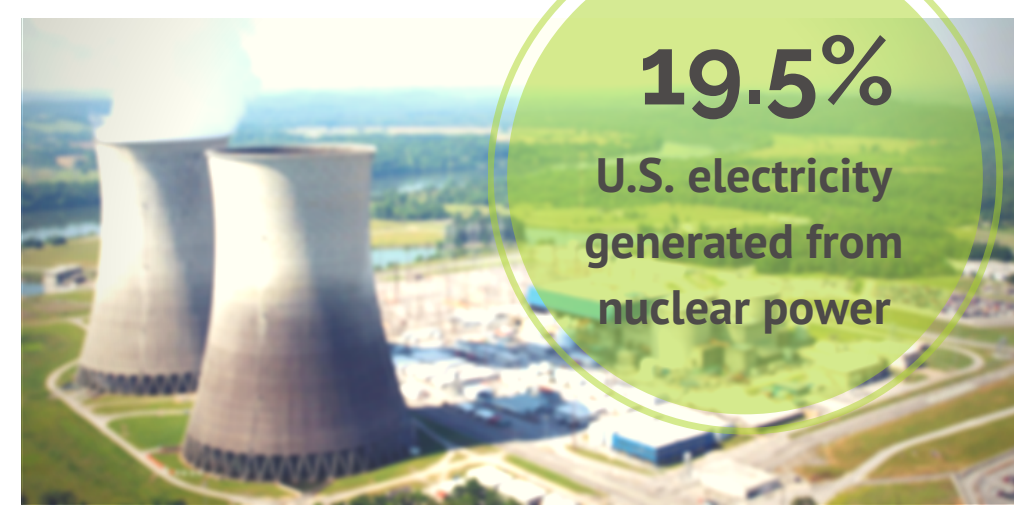
In the U.S., 99 nuclear reactors in 30 states produce ~797 billion kilowatt-hours of electricity a year, resulting in ~2,000 metric tons of spent fuel each year.

60

years of electricity from nuclear power

1942 The world's first nuclear reactor operates in Chicago

1955 Arco, Idaho becomes first city in the world to be powered by nuclear energy



NUCLEAR ENERGY AND CLIMATE GOALS

Nuclear energy provides more than 60 percent of our non-greenhouse-gas emitting power, making it our nation's single largest contributor of low-carbon electricity. Nuclear power remains an important part of our nation's energy portfolio, as we strive to reduce carbon emissions and address the threat of global climate change.

As we continue to use nuclear power to meet our climate goals and energy needs, we have a responsibility to find solutions for managing nuclear waste today. Solutions to siting, transporting, and disposing of nuclear waste will take decades to implement. Therefore, we need to act now to avoid foreclosing options for future generations.

OFFICE OF NUCLEAR ENERGY

The primary mission of the Office of Nuclear Energy is to advance nuclear power as a resource capable of meeting the Nation's energy, environmental, and national security needs by resolving technical, cost, safety, proliferation resistance, and security barriers. In keeping with this mission, the Office of Nuclear Energy is committed to finding sustainable solutions for managing our nation's spent nuclear fuel and high-level radioactive waste.



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