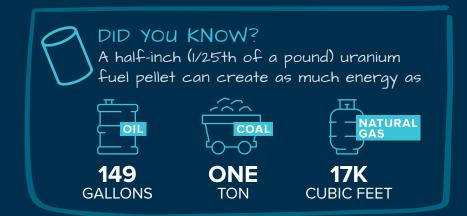


WHAT IS NUCLEAR ENERGY?

A reliable, clean power source that can play a vital role in decarbonizing the U.S. economy.

Uranium in a nuclear reactor produces heat when it splits, or fissions, which is what happens when a fragile uranium-235 (U-235) atomic nucleus is hit by a neutron. At the same time, fission produces several neutrons

that can go on to cause yet more fissions, providing a smooth, stable supply of heat that is used to produce electricity. Huge amounts of heat—and, in turn, electricity—are produced using extremely tiny amounts of fuel.



FISSION

Nuclear energy comes from the energy stored in the center of an atom that binds it together. The atom has to be split into smaller atoms to release the energy. This process is called fission.



1 Neutrons strike

U-235 atoms.

② The atoms split into two or more smaller nuclei, and extra energy is released as heat and radiation.

This chain reaction continues and generates a massive amount of energy heating the water in a reactor vessel.

REACTOR

