

U.S. DEPARTMENT of **ENERGY**

Office of Energy Efficiency and Renewable Energy

What is Geothermal Energy?

Fast Facts

Renewable: Geothermal power plants around the world are still running after 50+ years. And geothermal heat has been used throughout human history!

Reliable: Geothermal is always available, regardless of weather conditions.

Domestic: Subsurface geothermal resources are "homegrown," offering a domestic source of secure, reliable energy.

GEOTHERMAL "Earth" "Heat"

Literally "**heat from the earth**," geothermal energy is a renewable energy heat source found under the surface of the earth.

> Geothermal energy from deep wells is converted to power. The cooled water is reinjected into the reservoir.

Geothermal energy is visible on the surface as volcanoes, geysers, or hot springs.

> Reinjected water can replenish the geothermal reservoir.

A geothermal heat pump circulates water through pipes buried in the ground, or submerged in a water body, to heat and cool a building's HVAC system.

Heat from the Earth is brought up to the surface in the form of hot ground water and steam.