

# Geothermal Energy

By Angel Ruiz



Can we bring energy into our lives without hurting our Earth? Yes, we can. In fact, scientists are continuing to develop a way of doing this by using the heat from the inside of the Earth, called **geothermal energy**. Geothermal energy is one of the most plentiful sources of renewable energy known and is used all over the world. In fact, many places in the United States, such as Georgia, Hawaii,

Montana, California, Virginia and Colorado use this type of renewable energy. Areas that have high underground temperatures, such as areas with volcanic activity, often times use geothermal energy to heat their homes and to produce electricity.

There are many ways to use energy from the Earth. One way is build wells that draw out the heated water, or steam, from underground reserves through pipes. Once it gets to the surface it can be used either to directly heat buildings, or to create electricity. You may be wondering how hot water can be used to create electricity. Geothermal energy uses the same process that **hydropower** and **wind power** use to generate electricity. The hot water is run through a turbine that powers a generator. The generator converts the energy from the hot water to electricity. The best part of this process is that once the water has cooled down it can be sent back into the Earth to be heated up again and reused. This is an example of renewable energy.

Geothermal energy heats homes and produces electricity without causing any harm to the environment. By using geothermal energy we can lower our usage of harmful fossil fuels. What other cool ways is geothermal energy used? Some people bathe in above ground hot water springs at spas, and the hot water is even used to deice roads!

Through everything we have done with technology to gain energy the answer was under our feet the whole time. Geothermal energy can do anything from powering generators, heating buildings, and reducing the amount fossil fuels we burn while still keeping our planet Earth safe.