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## Geothermal Energy Persuasive Essay

Geothermal is an amazing renewable energy source, better than wind and solar. Geothermal energy is efficient, it doesn't pollute and it's always available. Geothermal energy is the best because it's efficient, with unlimited supply, clean and always available.

Heated liquid or steam from underground reservoirs is used to heat homes, or heat water, so the water becomes steam that spins a turbine which spins a generator that makes energy. Geothermal power has heated hot springs that we have used for a long time, but the first geothermal power plant wasn't created until 1904 at the Larderello Fields in Italy. Now the US can generate 16.9 million megawatt hours in a year using geothermal power plants.

Geothermal power is always available because the system is always running. The system uses the heat of the earth so it can always run because the earth is always hot, while the sun isn't always shining down on solar panels, and the wind isn't always blowing at wind turbines.

While geothermal power is always working, it isn't polluting, because when newer closed loop technology is used, the system has minimal

byproducts. The closed loop system only creates minimal byproducts because gasses from the underground reservoirs are injected back down to the reservoirs.

On top of not polluting, geothermal power is efficient because the system is cost effective in making power. Compared to coal, the difference in cost per kilowatt hour is 1.9 cents; the process of making geothermal power uses less money than the process of making coal power. With the average American home using 911 kilowatt hours a month, that would save over 200 dollars a year per household.

Some argue you can't make a cost effective geothermal power plant anywhere. This is true but there are definitely ways to get a lot of geothermal power in more places cheaper because there hasn't been that much research done on that subject. Some may say that it costs **2 - 7 million dollars** to make a **1** megawatt geothermal power plant but that initial cost is made up for in the long run because it costs very little to make power. Some may think that power is usually made in places that are a danger to human life because it's easier to access the earth's heat near a volcano or something similar and that power plants can cause earthquakes, however the earthquakes have always been small and not even noticed by people. The power plants can actually be useful to the safety of the people

who live near the power plant because they will monitor the dangerous things that may be occurring, like if a volcano erupted.

Geothermal is a really good source of energy that is efficient, always available and doesn't pollute. Some say that you can't make a power plant anywhere, power plants cost a lot, and power plants can be in dangerous places. However, those problems can be mostly overcome with time and research. We need some good renewable energy sources in the world and they have to be even better than fossil fuels like oil. Geothermal is that kind of energy source.