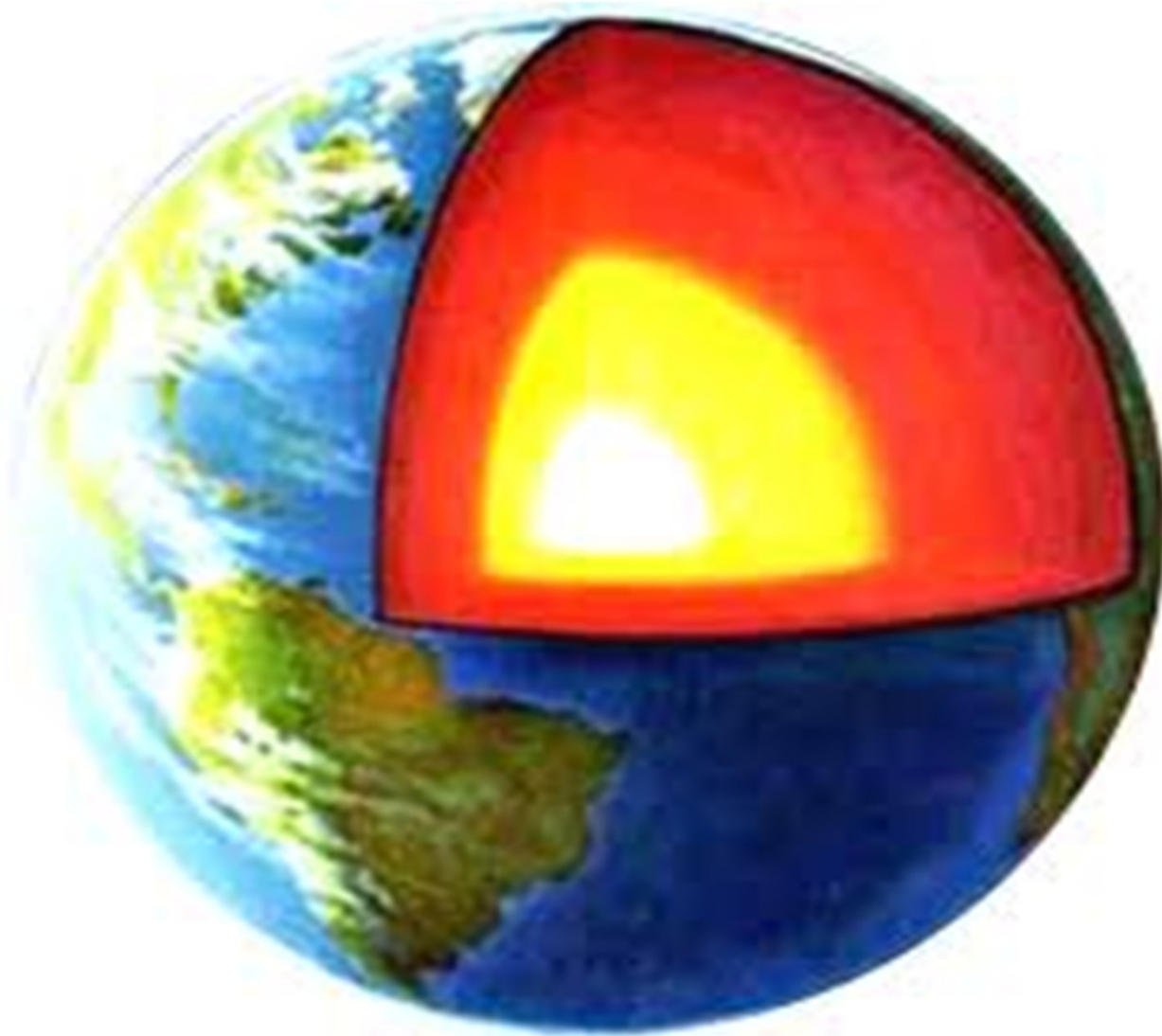


“Geothermal power”

is a way of generating heat and electricity from hot underground rocks.



The centre of the Earth is around 6000 degrees Celsius - easily hot enough to melt rock.



the temperature rises one degree Celsius for every 30 - 50 metres you go down, but this does vary depending on location



In volcanic areas, molten rock can be very close to the surface.



Geothermal energy has been used for thousands of years in some countries for cooking and heating.



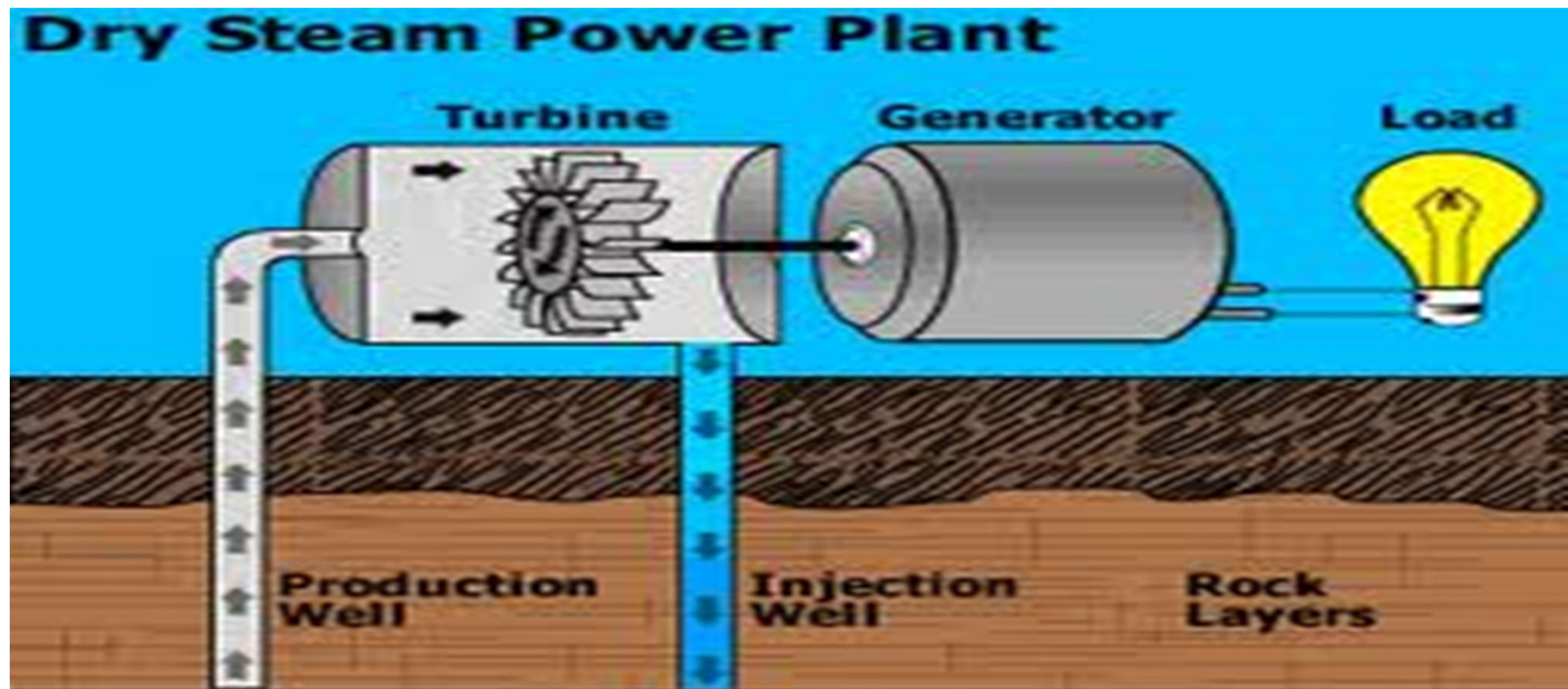
The name "geothermal" comes from two Greek words: "geo" means "Earth" and "thermal" means "heat".



How it works

Hot rocks underground heat water to produce steam.

We drill holes down to the hot region, steam comes up, is purified and used to drive turbines, which drive electric generators.



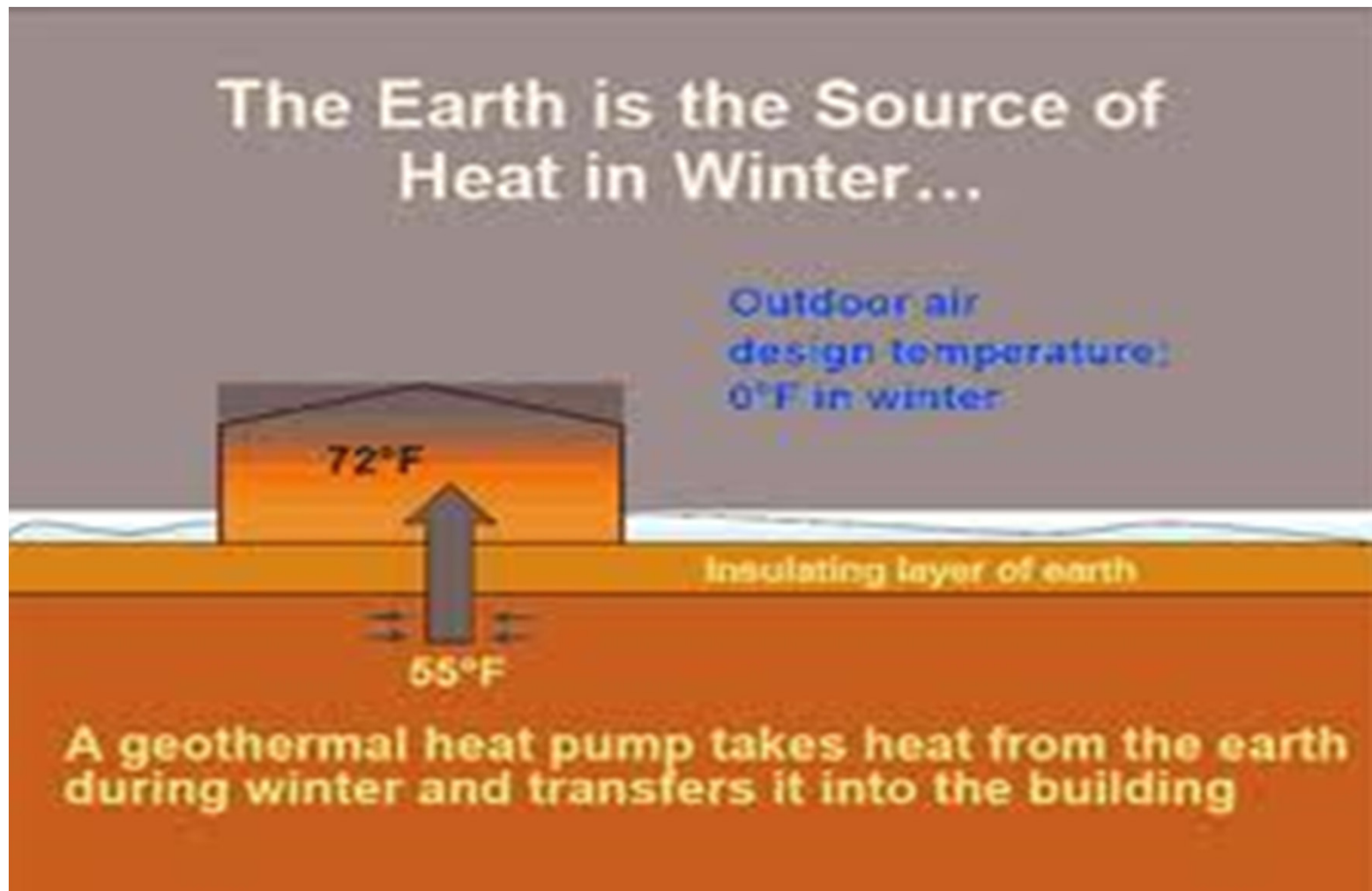
The first geothermal power station was built at Larderello, in Italy,

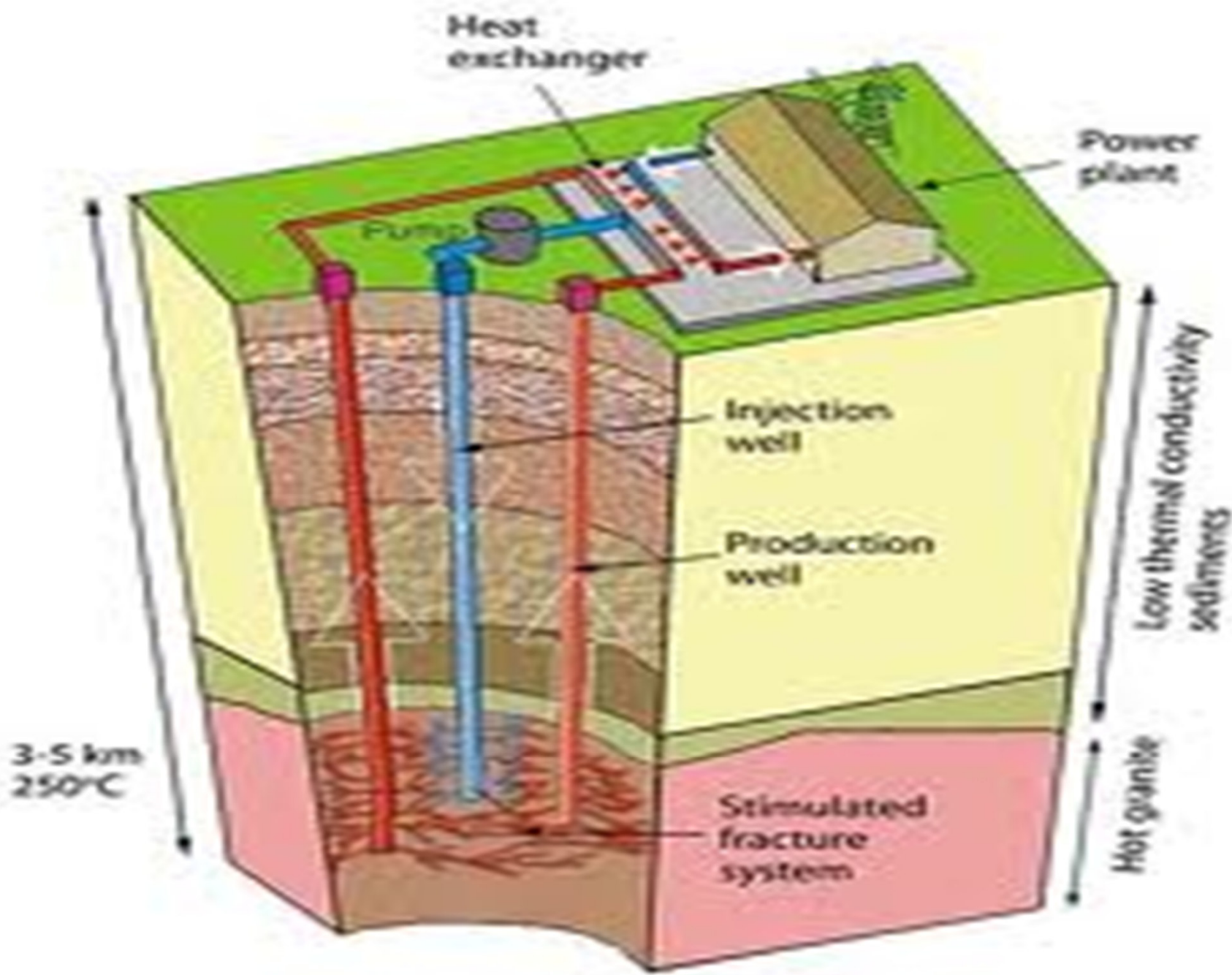
Larderello,
Tuscany



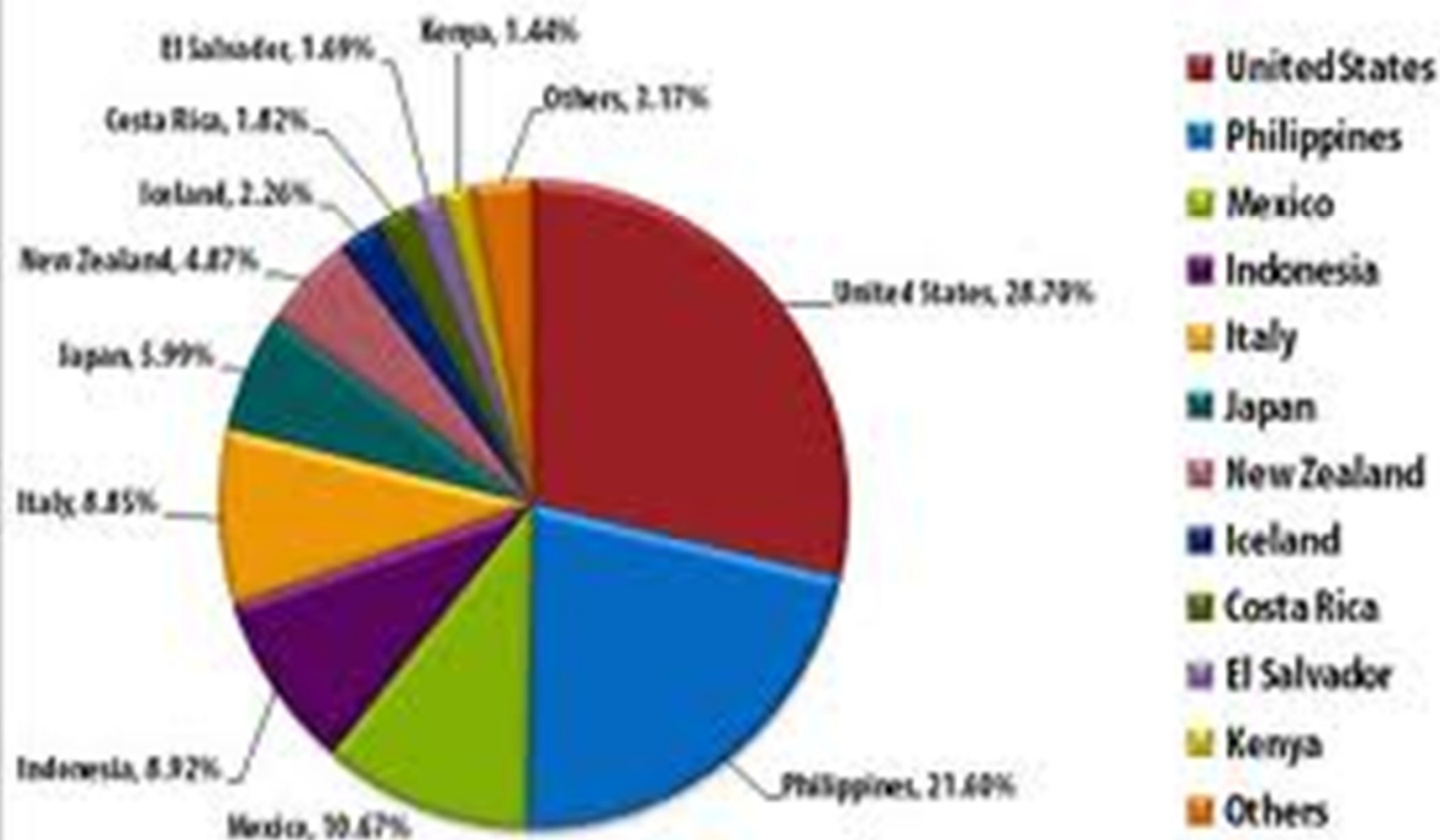
Others are in New Zealand, Iceland, Japan, the Philippines and the United States.

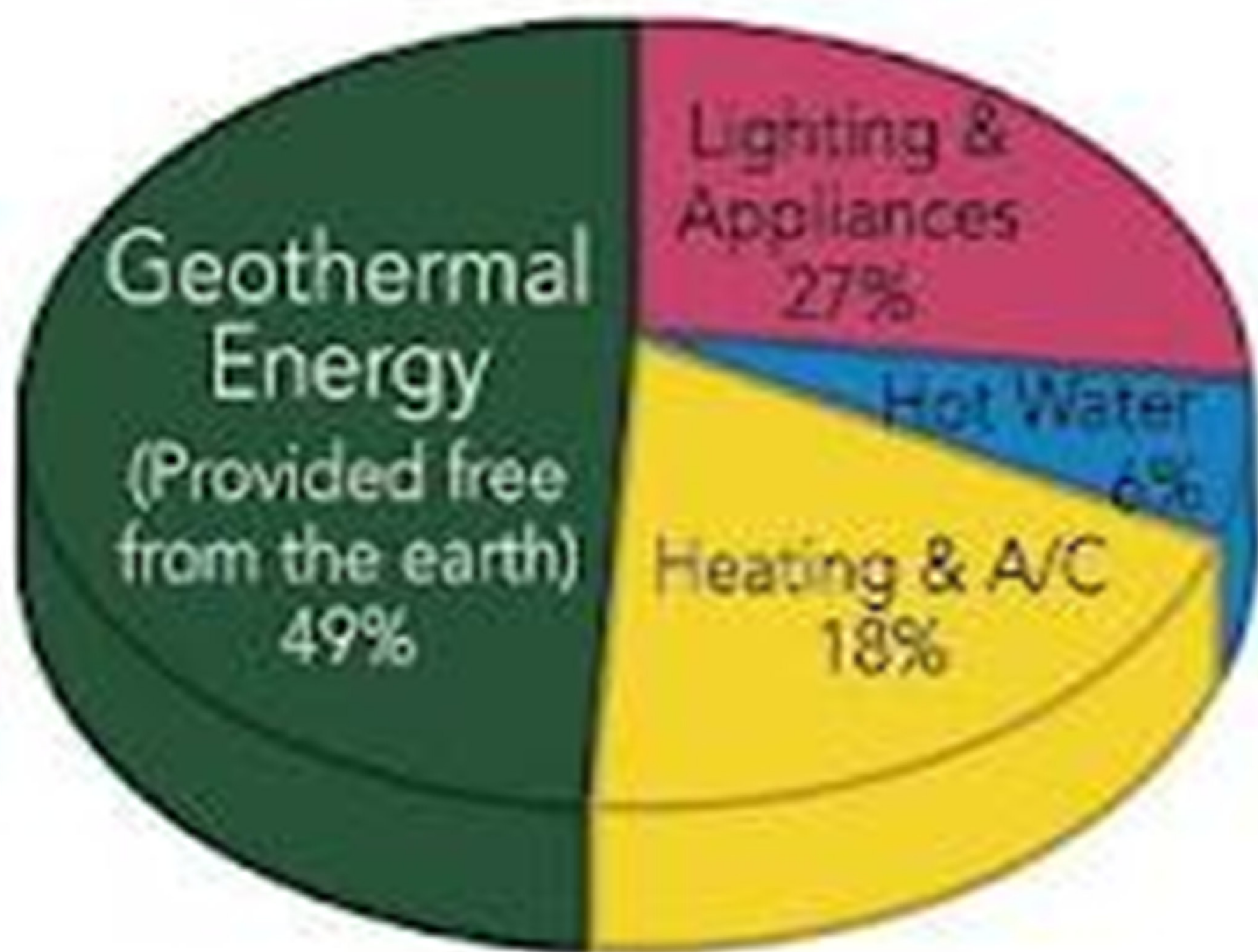
The steam may be used to drive a **turbogenerator**, or passed through a **heat exchanger to heat water to warm houses.**





Breakdown of Geothermal Electricity Production





Geothermal energy
is renewable



Advantages

- **Geothermal energy does not produce any pollution**
- **The power stations do not take up much room, so there is not much impact on the environment.**
 - No fuel is needed.
 - Once you've built a geothermal power station, the energy is almost free.**



Disadvantages

- **The big problem is that there are not many places where you can build a geothermal power station.**
 - You need hot rocks of a suitable type, at a depth where we can drill down to them.**
 - The type of rock above is also important.**

The End

Enjoy **Geothermal power!!!!**



