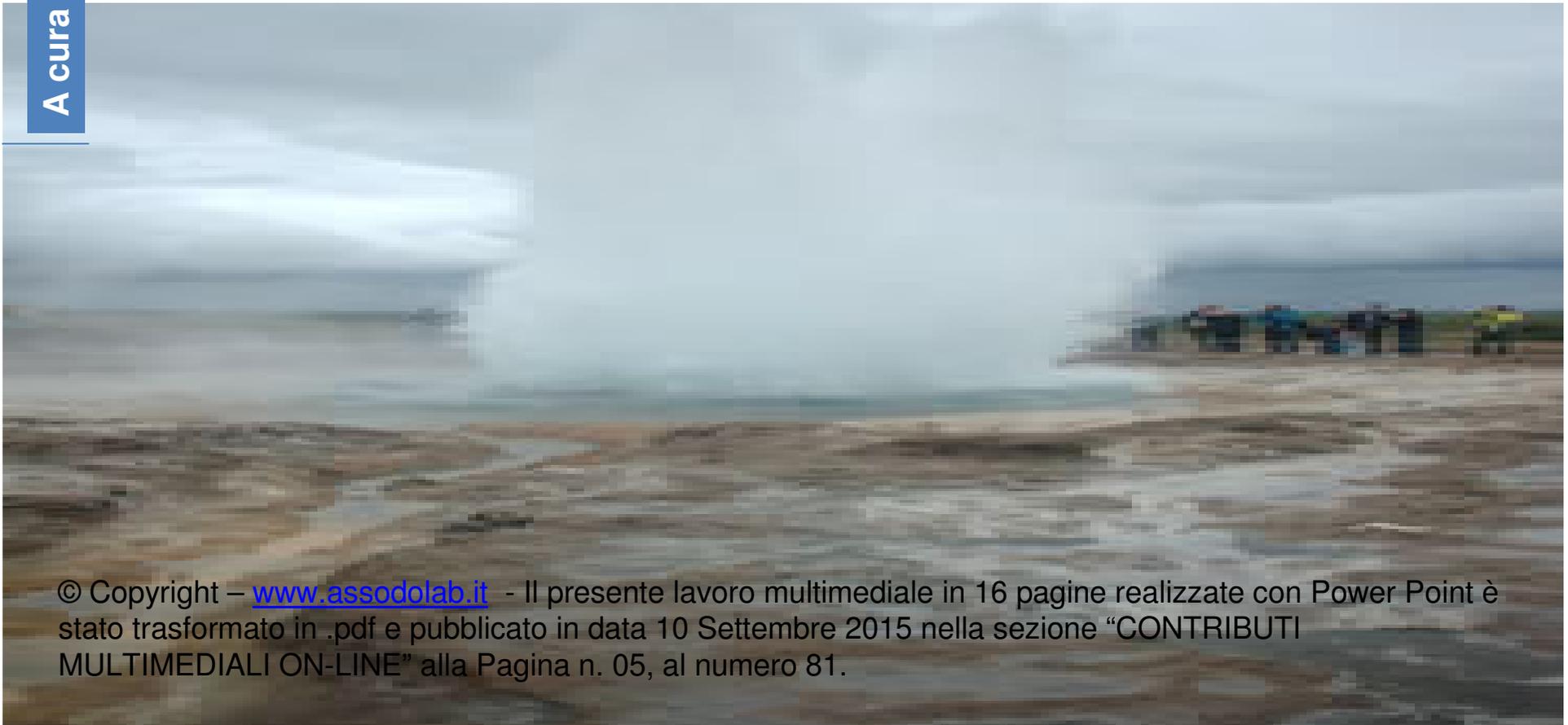
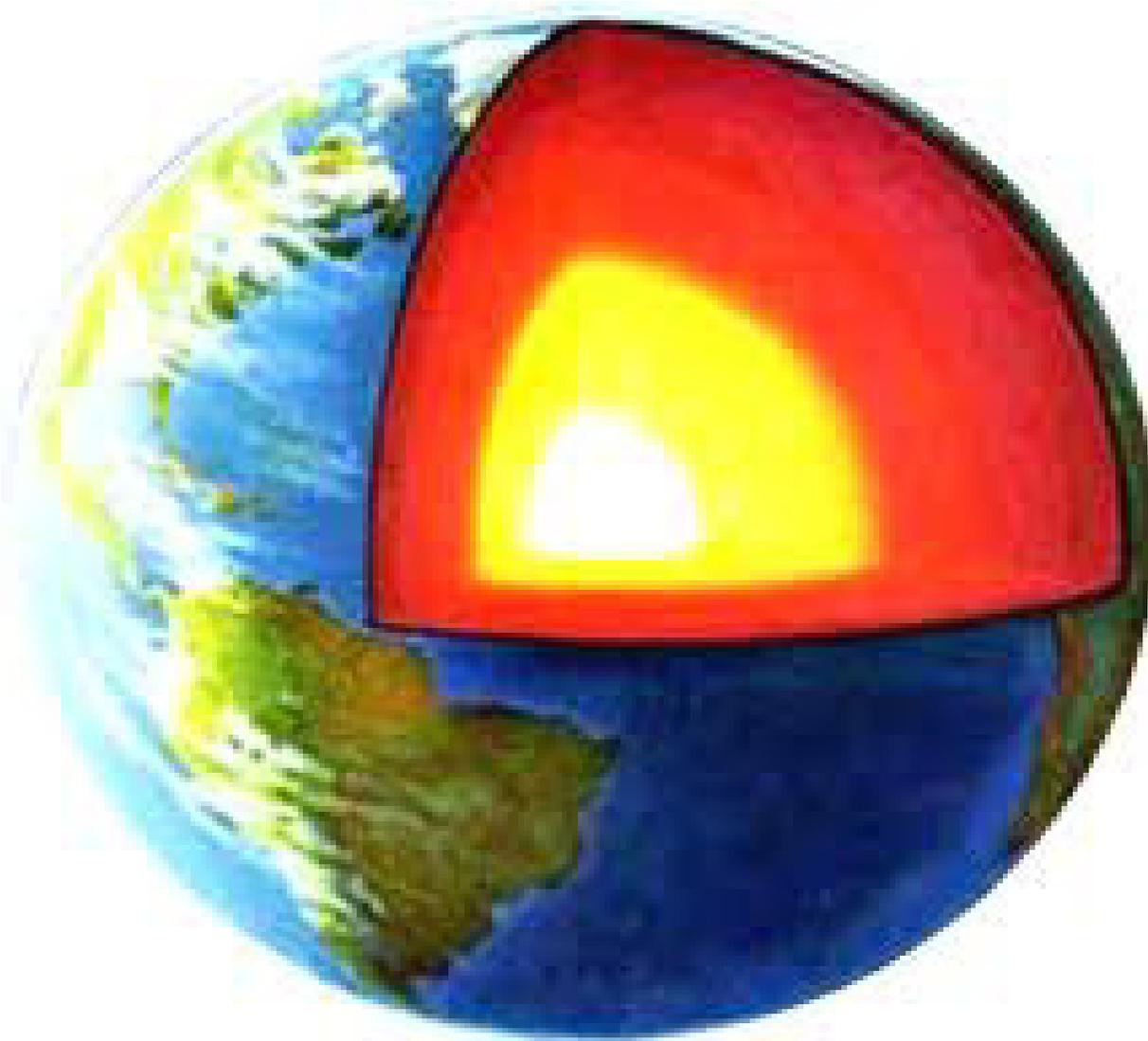


# “Geothermal power”

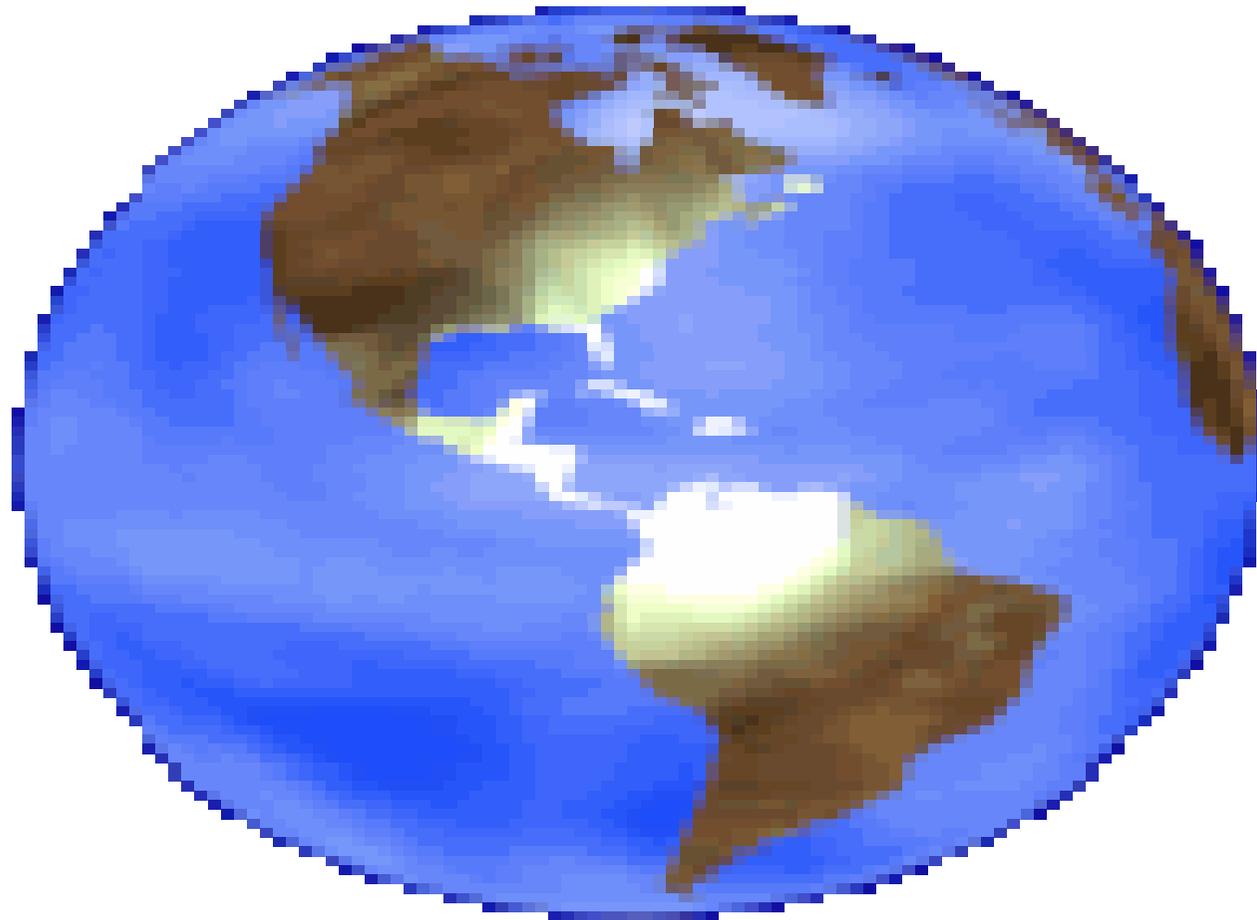
is a way of generating heat and electricity from hot underground rocks.



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



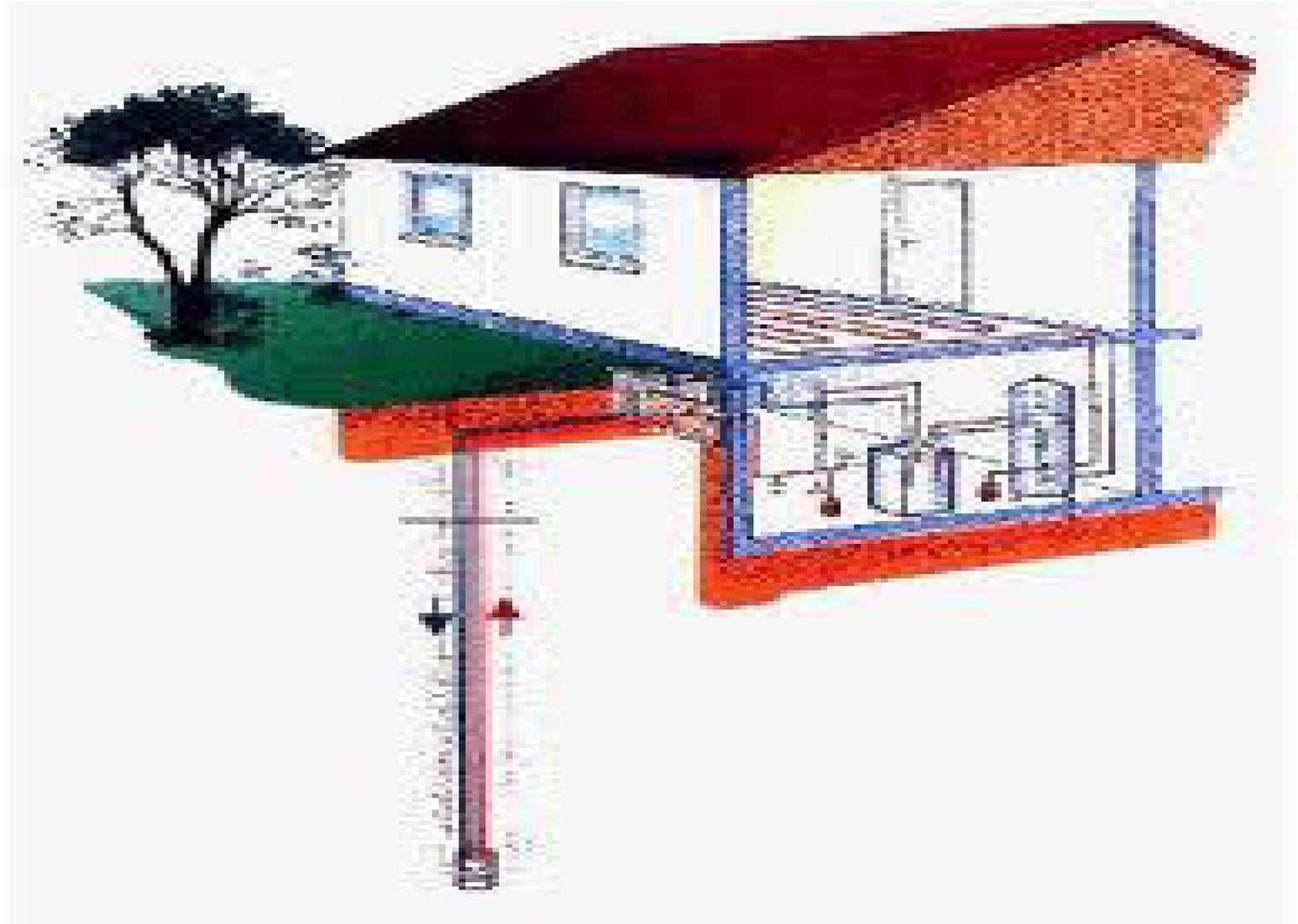
**the temperature rises one degree Celsius for every 30 - 50 metres you go down, but this does vary depending on location**



**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.



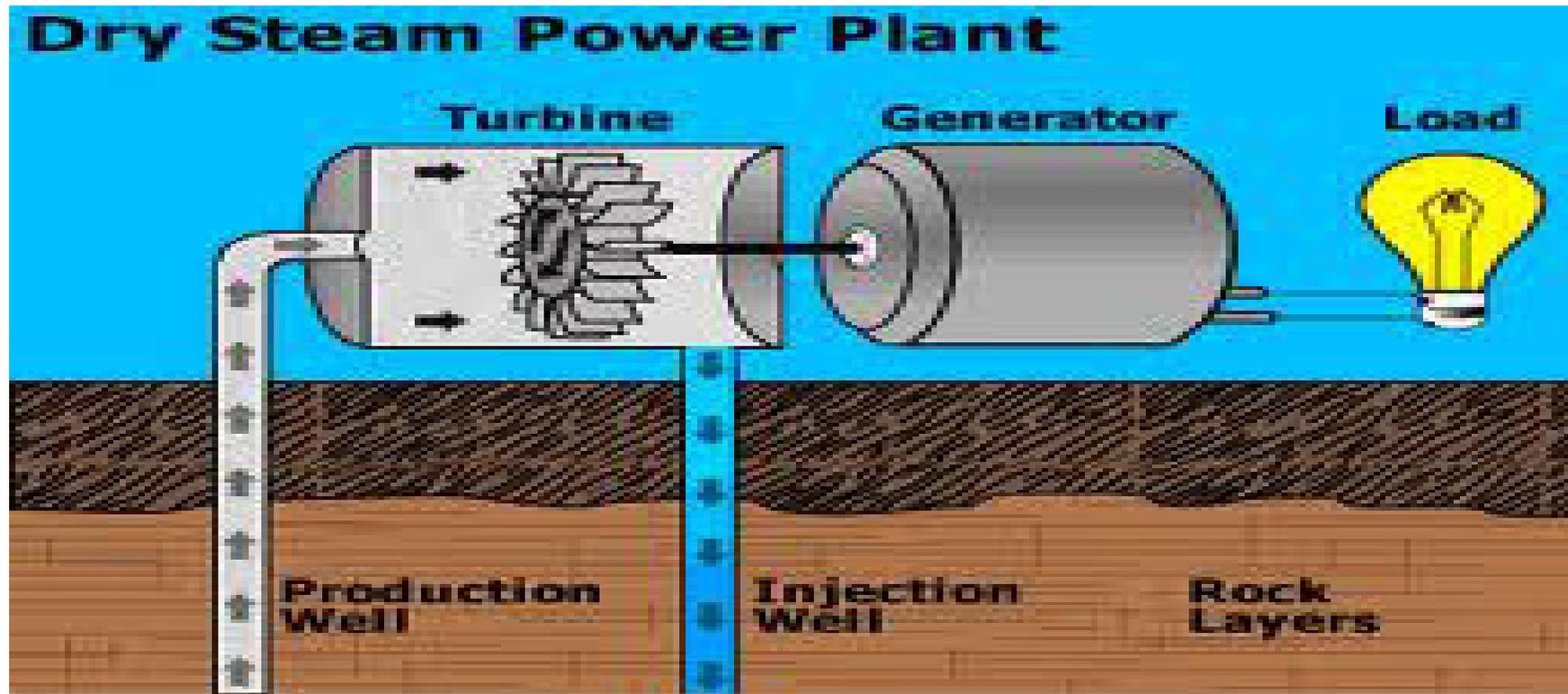
**The name "geothermal" comes from two Greek words: "geo" means "Earth" and "thermal" means "heat".**



# How it works

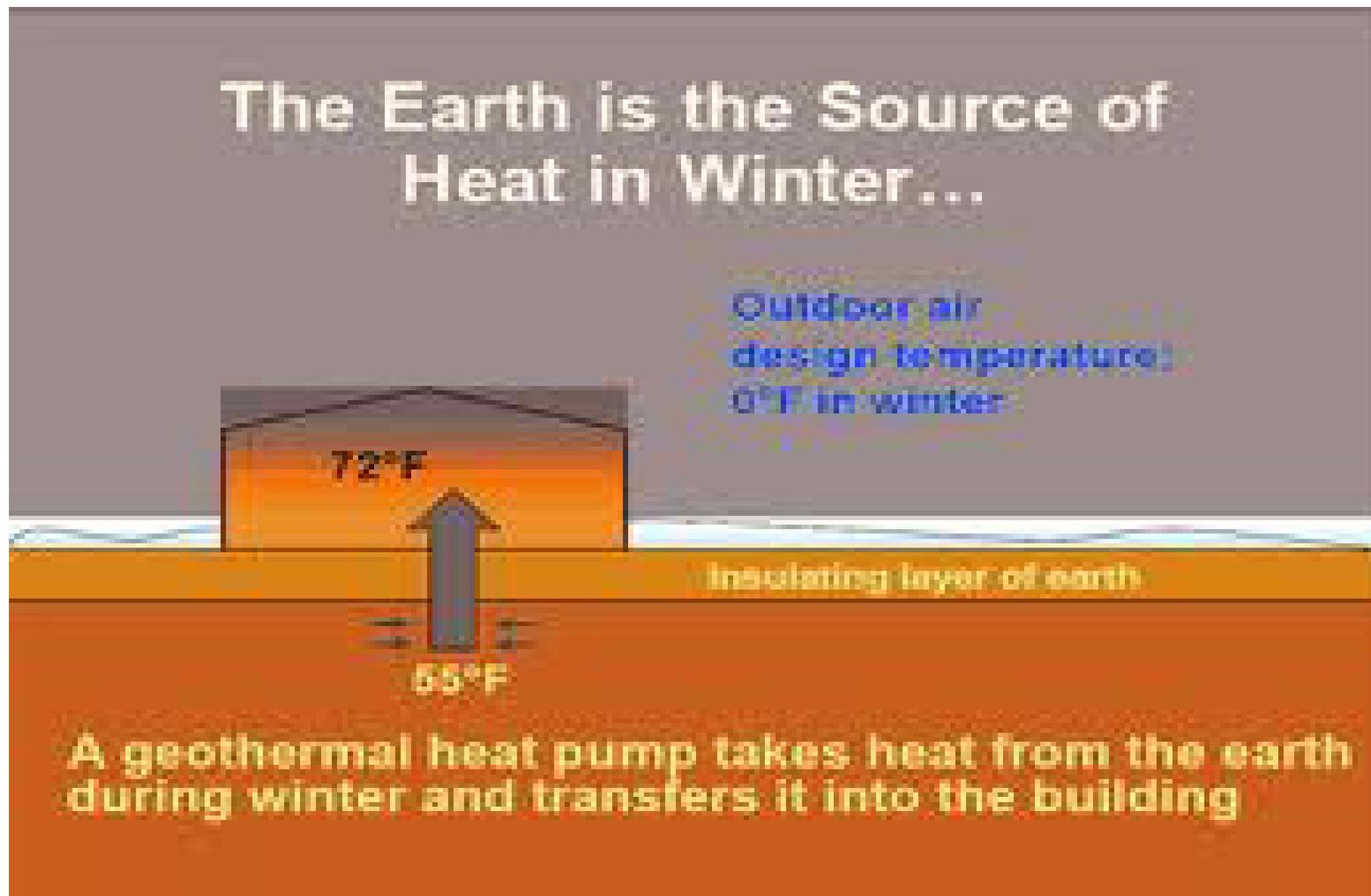
**Hot rocks underground heat water to produce steam.**

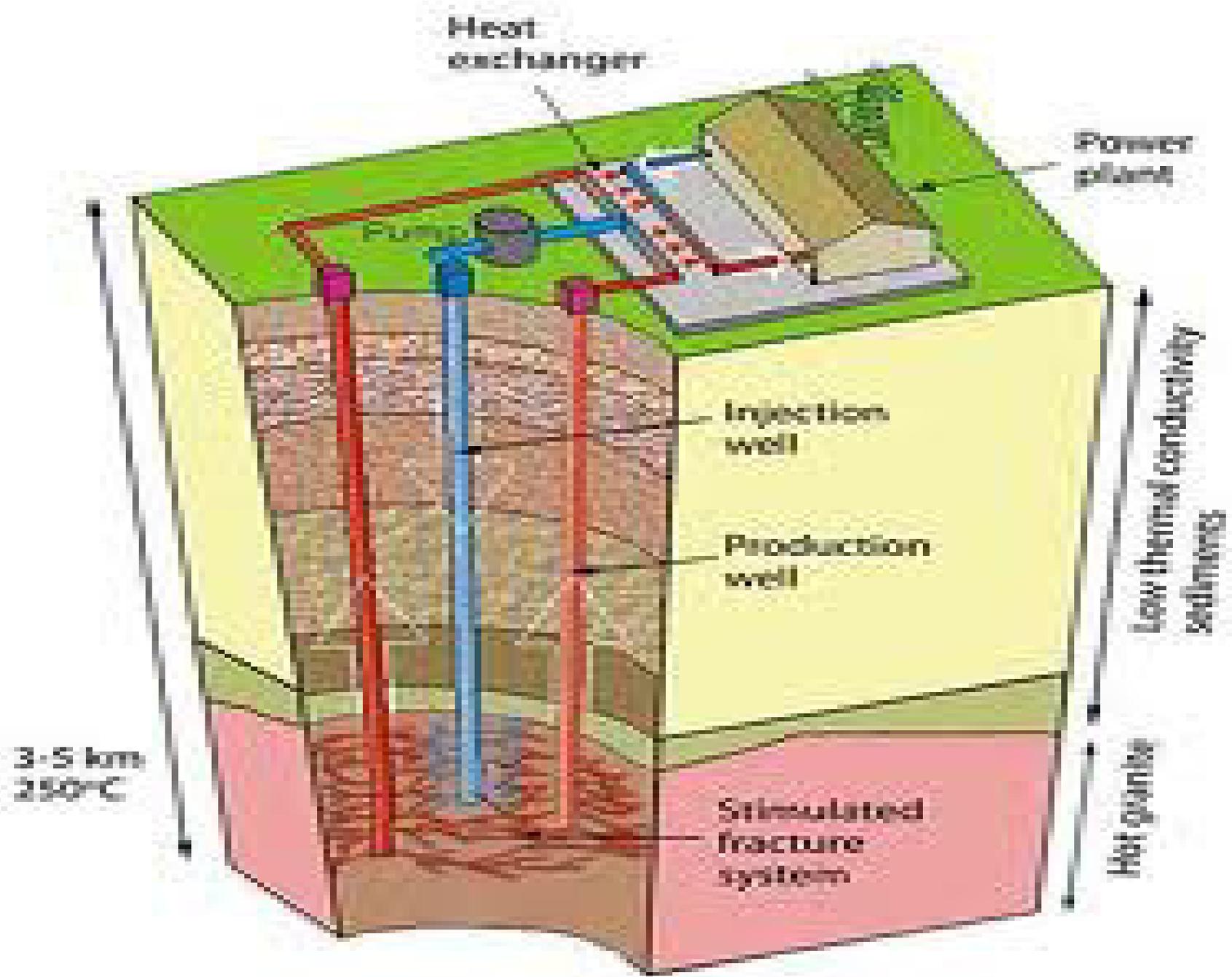
**We drill holes down to the hot region, steam comes up, is purified and used to drive turbines, which drive electric generators.**



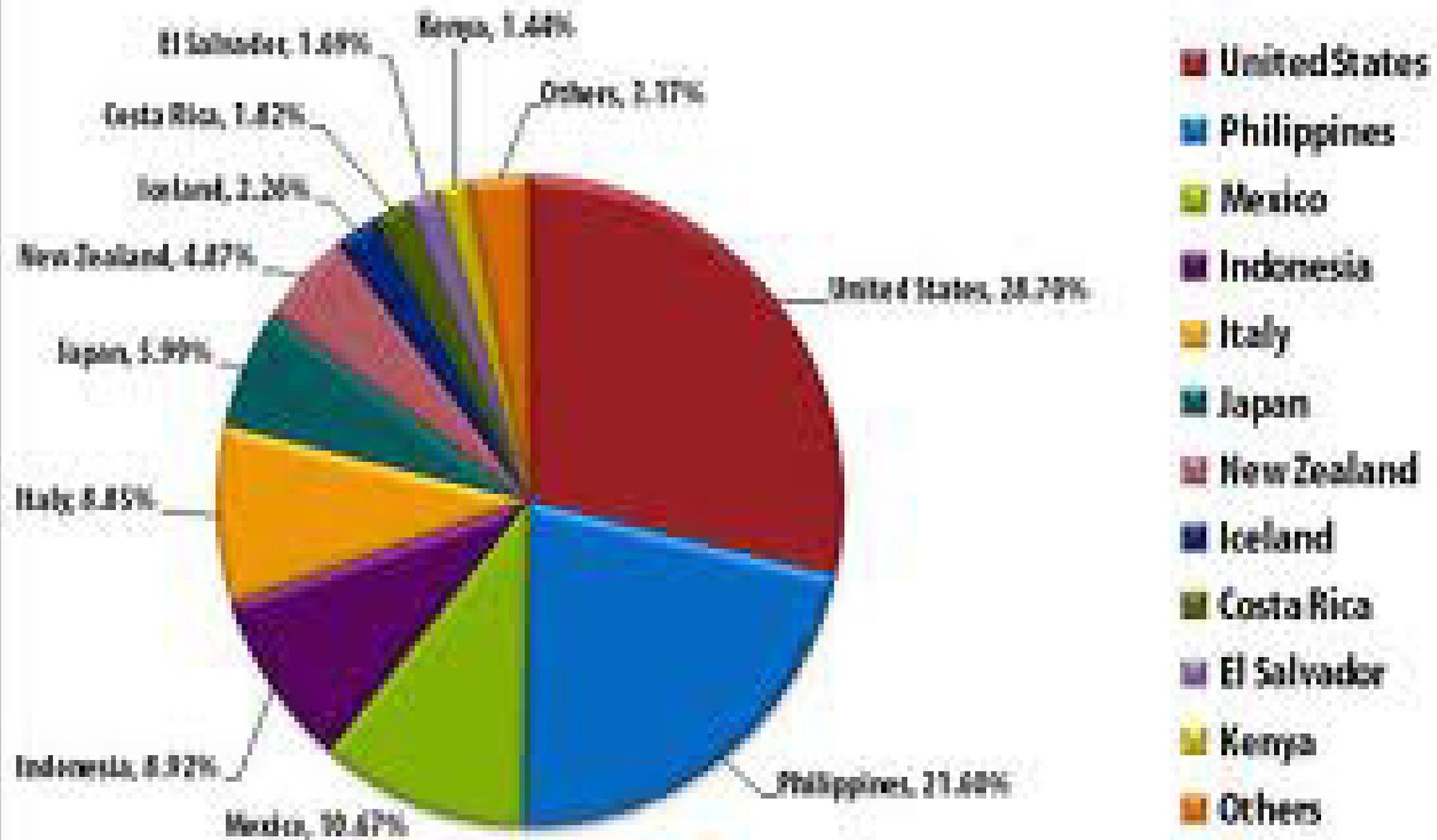


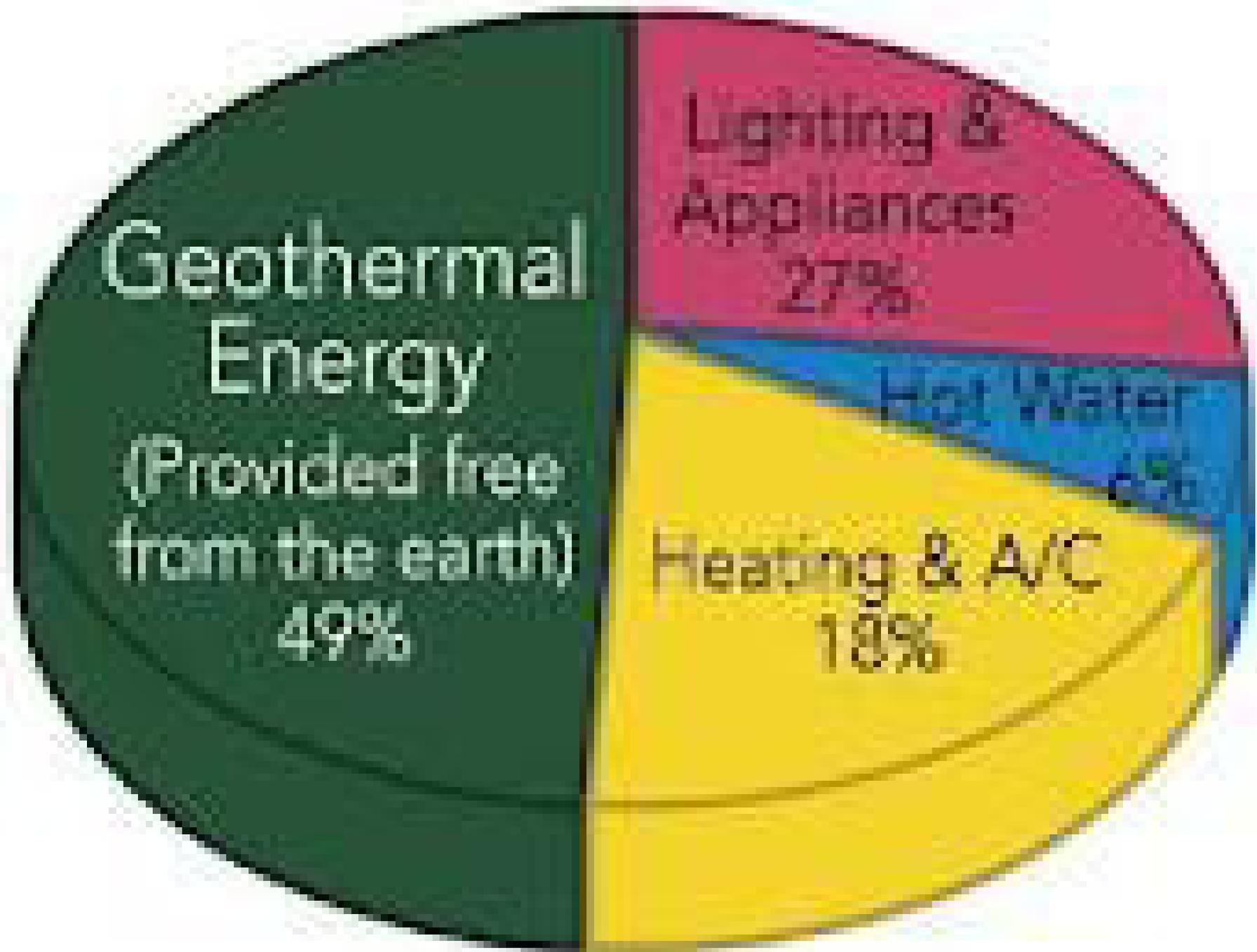
**The steam** may be used to drive a **turbogenerator**, or passed through a **heat exchanger to heat water to warm houses.**





# Breakdown of Geothermal Electricity Production





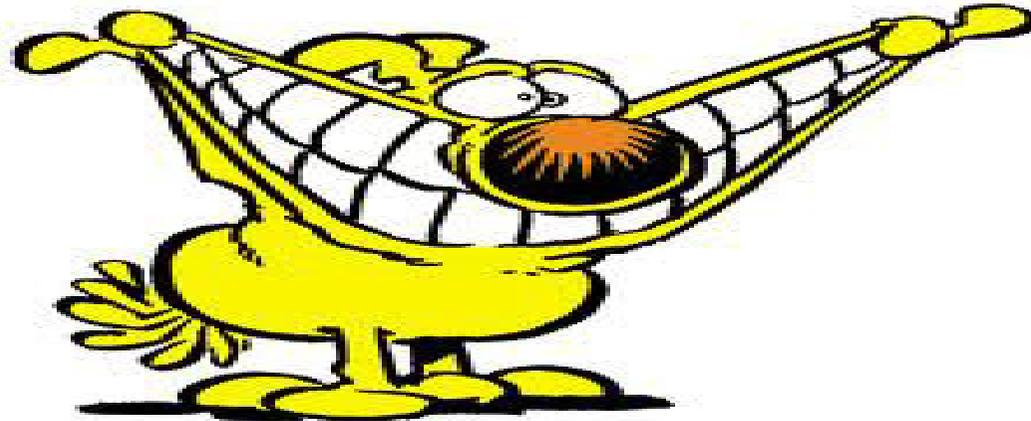
Geothermal Energy  
(Provided free from the earth)  
49%

Lighting & Appliances  
27%

Hot Water  
8%

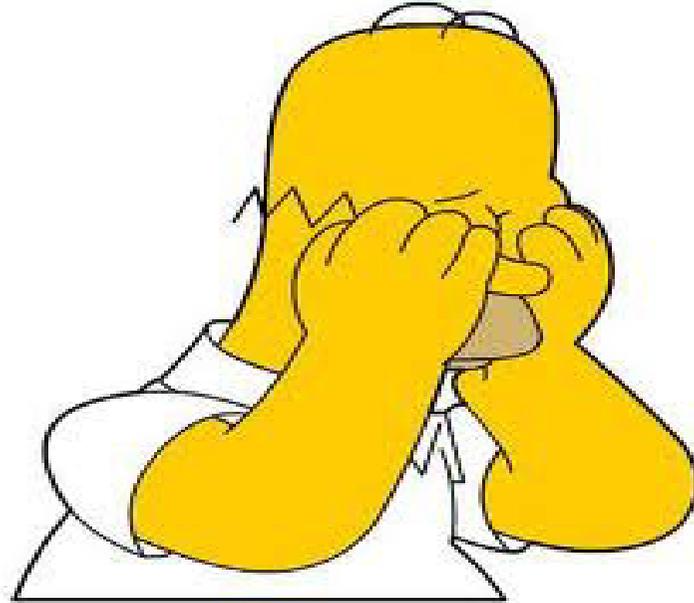
Heating & A/C  
18%

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!!!!**



