

Geothermal Activity



Study*ladder*

Geothermal Activity:

Geysers, hot springs and bubbling pools of mud are all examples of geothermal activity that occur in volcanic regions.



Geysers:

When groundwater seeps to a depth that is heated by underlying magma chambers it begins to move due to convection. Pressure builds up and the hot water is forced out through a crack in the ground. Some geysers force water high into the sky.



Hot springs:

A hot spring forms when heated groundwater bubbles up into a pool of water, like jets in a spa bath. Some hot springs are warm enough to bathe in. The hot springs, in the mountains near Nagano in Japan, are famous for their regular visitors, the Japanese Macaque.



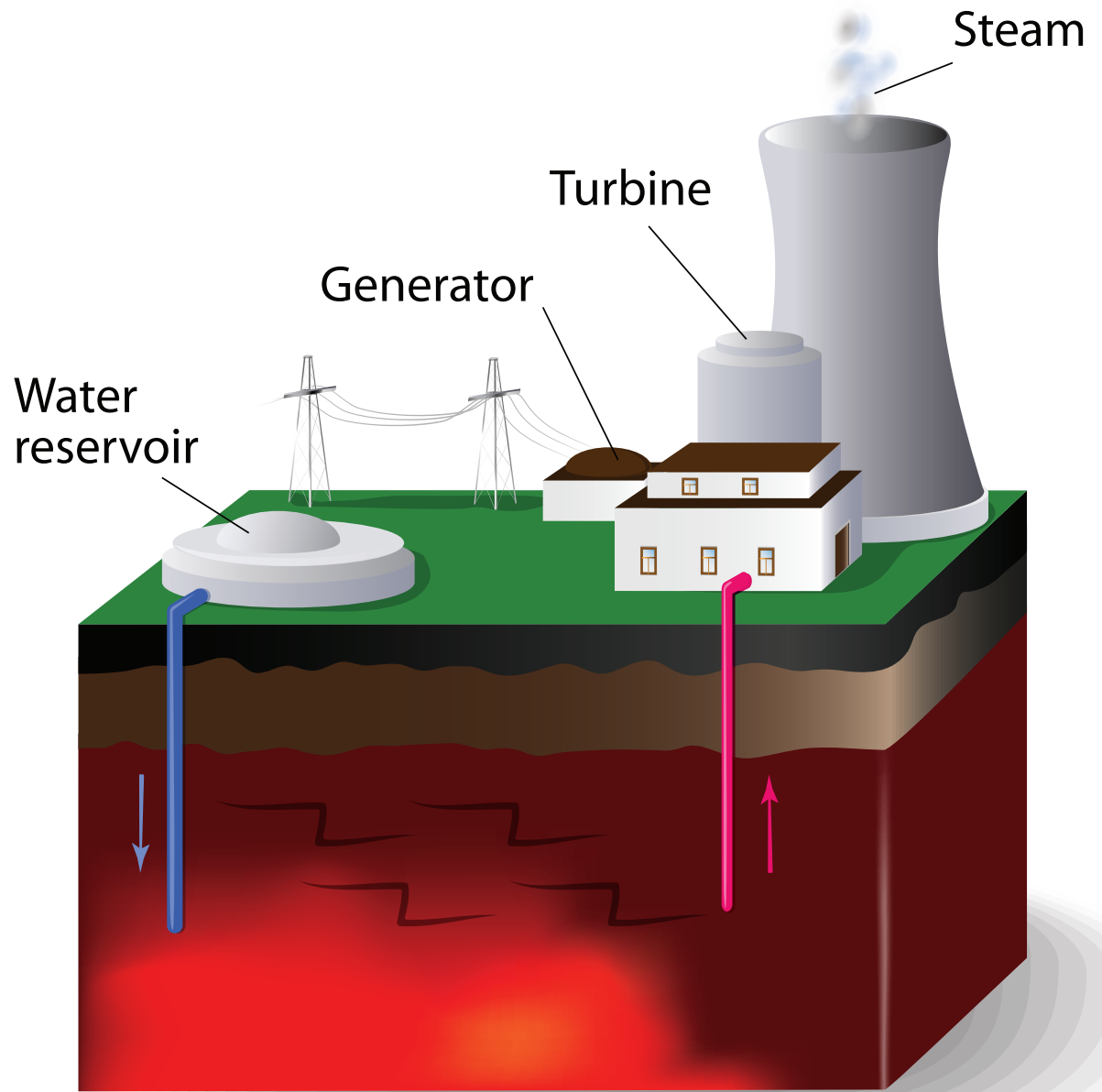
Mud Pools:

Mud pools form in a similar way to a hot spring but occur when water is in short supply. The water rises to the surface and mixes with fine ash or clay at the surface. The mud bubbles like porridge as heat rises from below.

Geothermal Electricity

Geothermic activity can be harnessed to produce energy. Geothermal power stations work in the same way as a natural hot spring. Groundwater is heated by hot magma reservoirs under the ground. The steam produced by this hot water can be used to turn turbines that can produce electricity.

There is no need to burn non-renewable resources such as coal. There are no dangerous gases that enter the atmosphere as a result of generating this type of energy. It is a 'clean' way of producing energy.





Wairakei Power Station in New Zealand's north island.