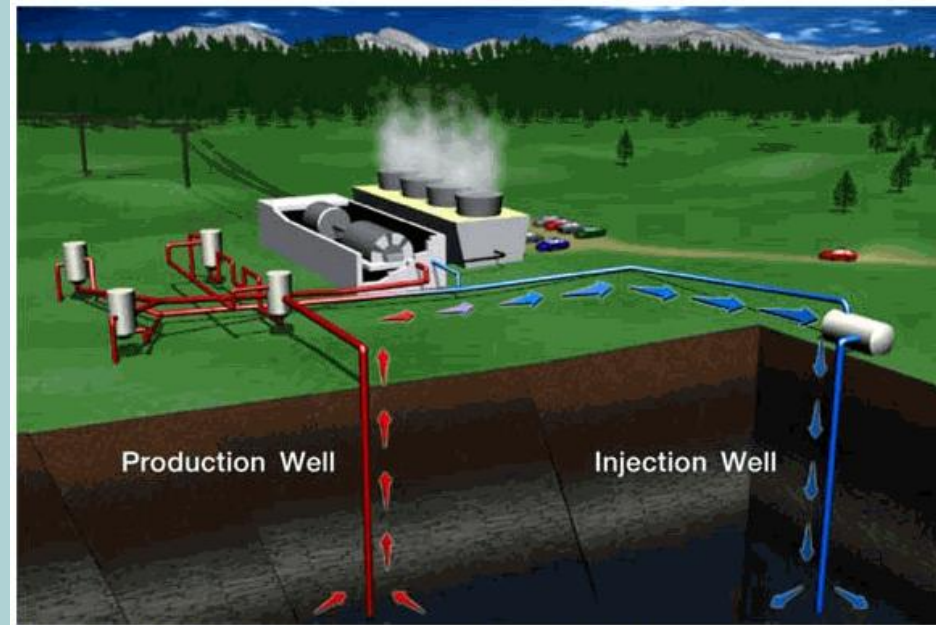


Zentral geotermikoak

Tenperatura nahiko altua denean, energia geotermikoa energia elektrikoa sortzeko erabil daiteke.

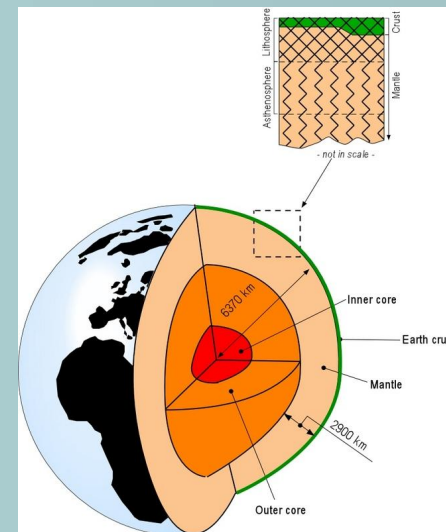
Lur azpiko tenperaturaren gradientea, batzaz beste, gradu bat igotzen da 30 metro jeistean.



Natural steam from the production wells power the turbine generator. The steam is condensed by evaporation in the cooling tower and pumped down an injection well to sustain production.



If a reservoir is discovered, characteristics of the well and the reservoir are tested by flowing the well.

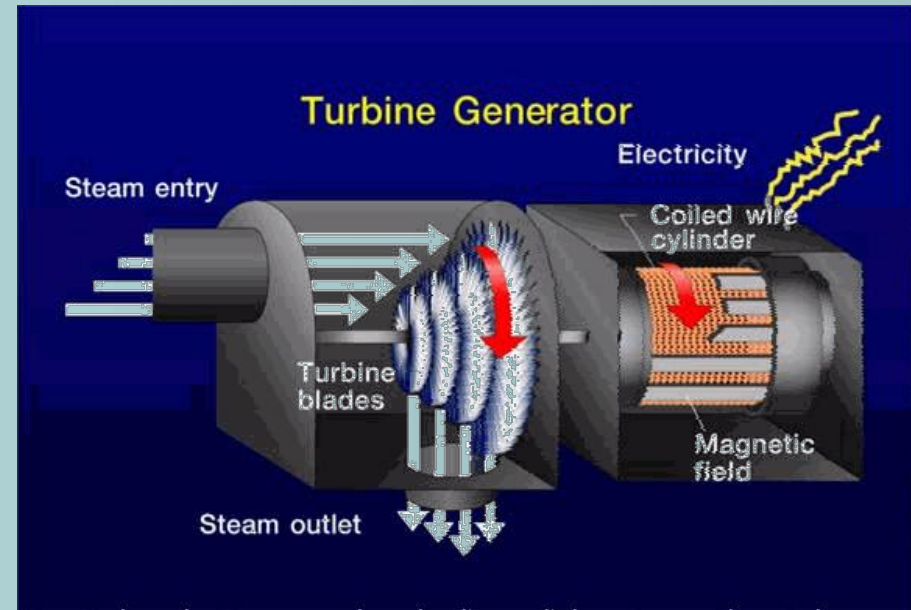


Zentral geotermikoak

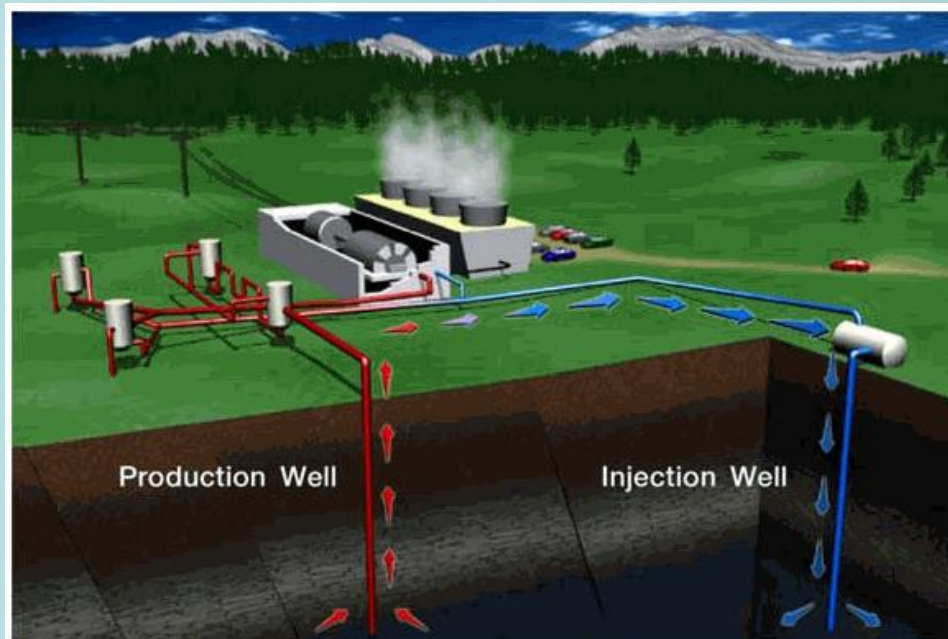
Tenperatura altuan dagoen ur lurruna turbinak mugitzeko erabiltzen dira.

Turbina horiek generatorera konektaturik daude eta korrante elektrikoa sortzen da.

Hoztutako ura, berriro injektatzen da lur azpira.



Like all steam turbine generators, the force of steam is used to spin the turbine blades which spin the generator, producing electricity. But with geothermal energy, no fuels are burned.

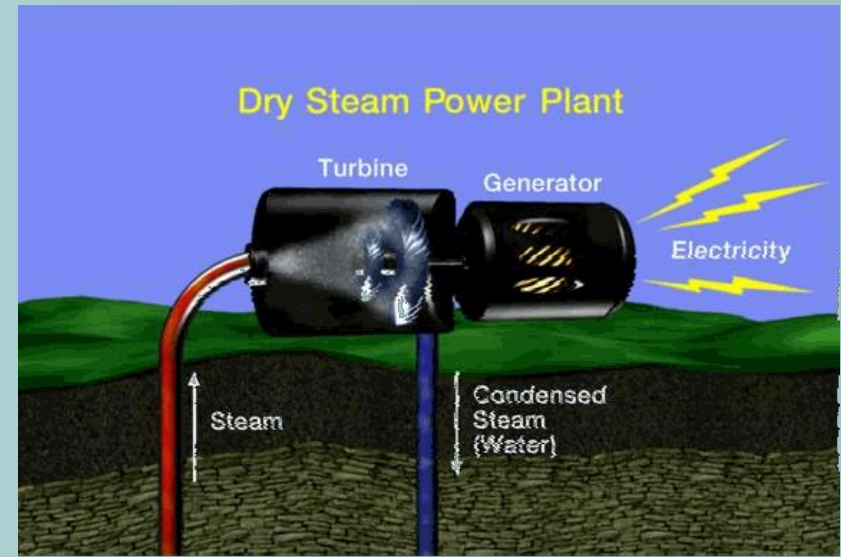


Natural steam from the production wells power the turbine generator. The steam is condensed by evaporation in the cooling tower and pumped down an injection well to sustain production.

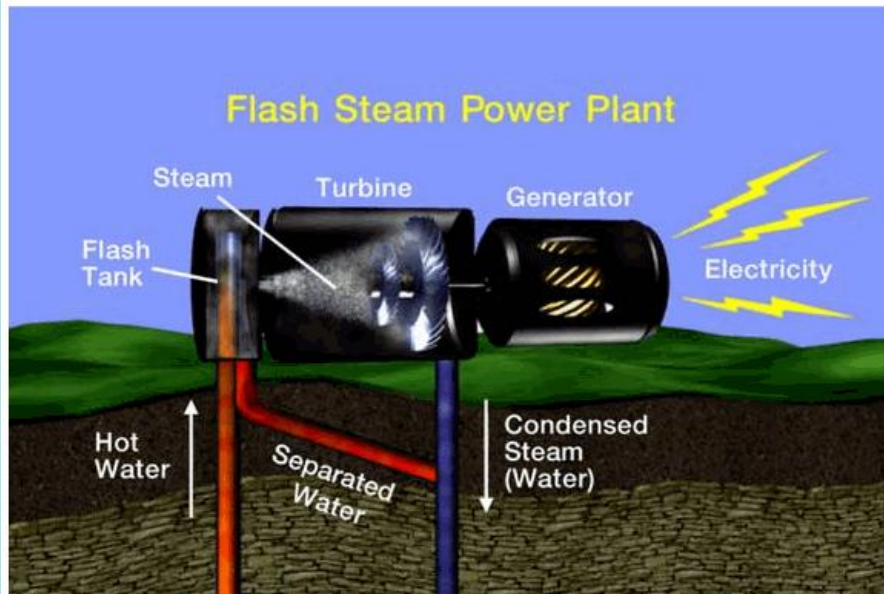
Zentral geotermiko motak

Zentral geotermiko motak hauek dira:

1. Lurrun lehorrekoak (Dry Steam Power Plant). Lurruna erabiltzen da, urarik gabe
2. Lurrun-isurketa (Flash Steam). Ur beroa, presiopean, tankera iristen da eta lurruna injektatzen da.



In dry steam power plants, the steam (and no water) shoots up the wells and is passed through a rock catcher (not shown) and then directly into the turbine. Dry steam fields are rare.



Flash steam power plants use hot water reservoirs. In flash plants, as hot water is released from the pressure of the deep reservoir in a flash tank, some of it flashes to steam.

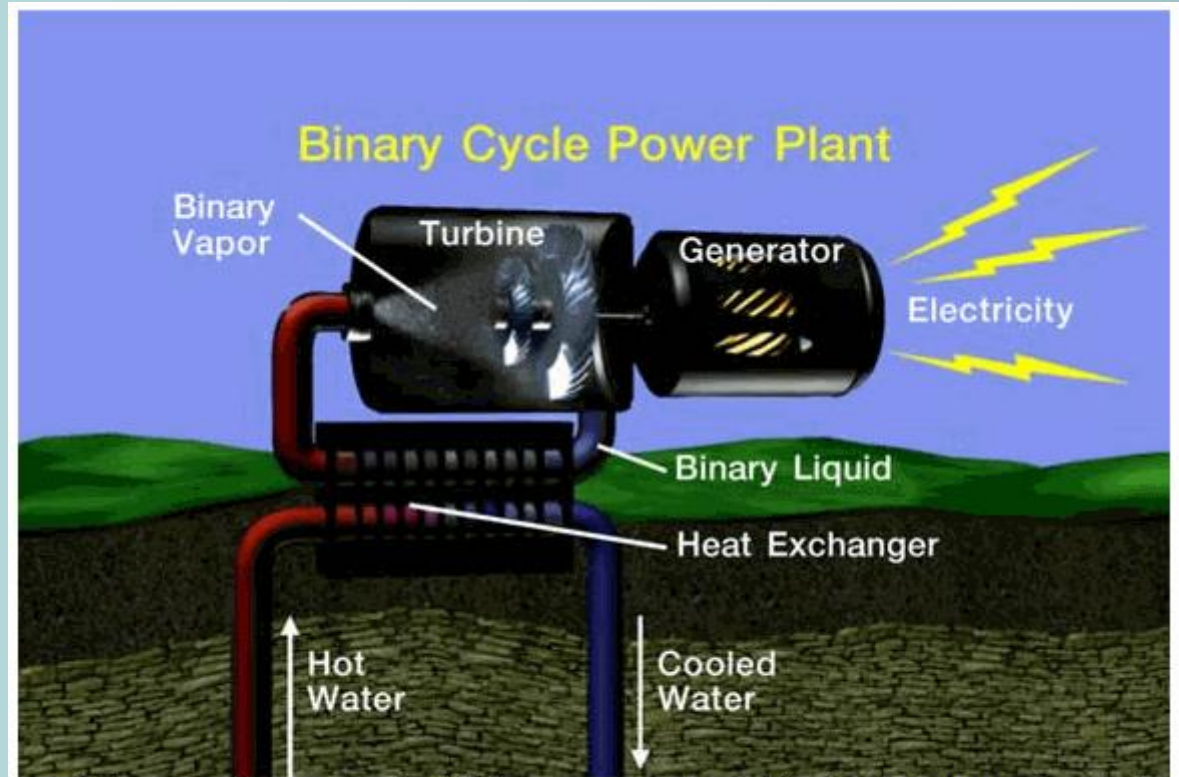


The first geothermal power plants in the U.S. were built in 1962 at The Geysers dry steam field, in northern California. It is still the largest producing geothermal field in the world.

Zentral geotermiko motak

Zentral geotermiko motak hauek dira:

3. Ziklo binarioa. Bero-trukaketa ematen da eta beste zirkuitua da turbina mugitzen duena.



In a binary cycle power plant (binary means two), the heat from geothermal water is used to vaporize a "working fluid" in separate adjacent pipes. The vapor, like steam, powers the turbine generator.