

GEOHERMAL ENERGY



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MAIN THEMES OF GEOTHERMAL ENERGY



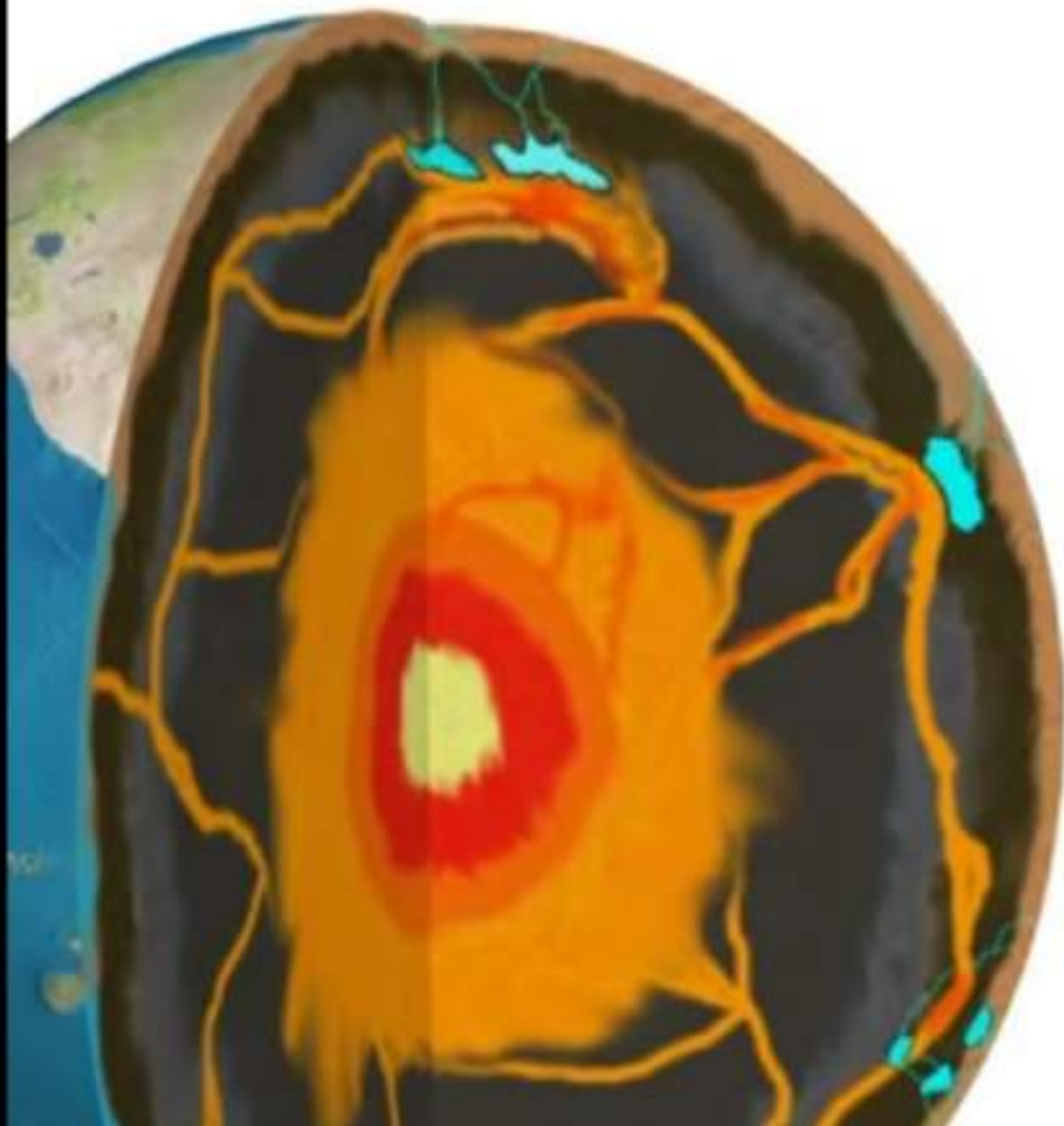
STUDY GEOTHERMAL ENERGY

REVIEW THE HISTORY OF GEOTHERMAL ENERGY

STUDY THE WORKING PRINCIPLE OF GEOTHERMAL
POWER PLANT

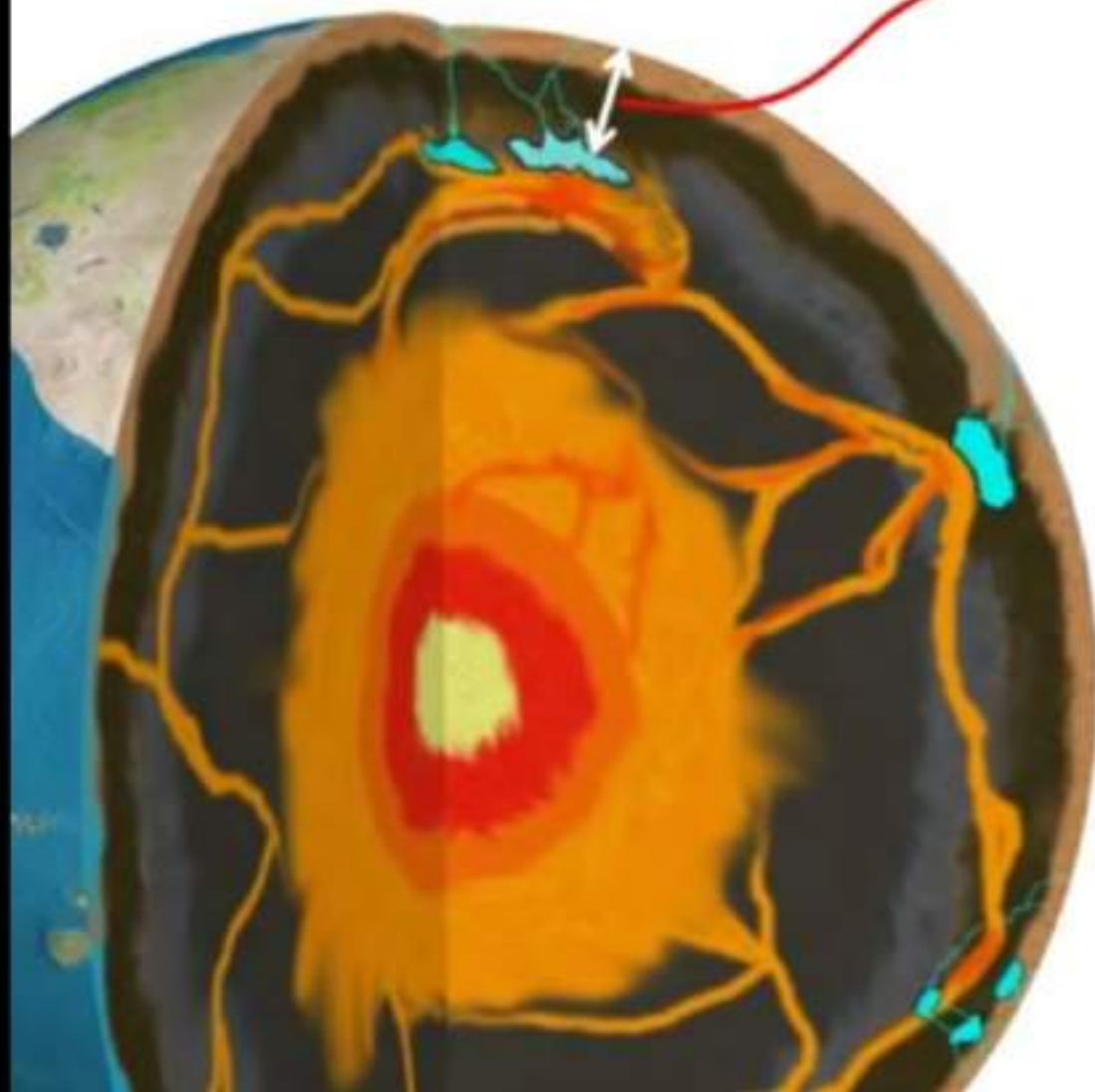
SPECIFY THE ADVANTAGES AND DISADVANTAGES OF
GEOTHERMAL POWER PLANT

Geothermal Energy

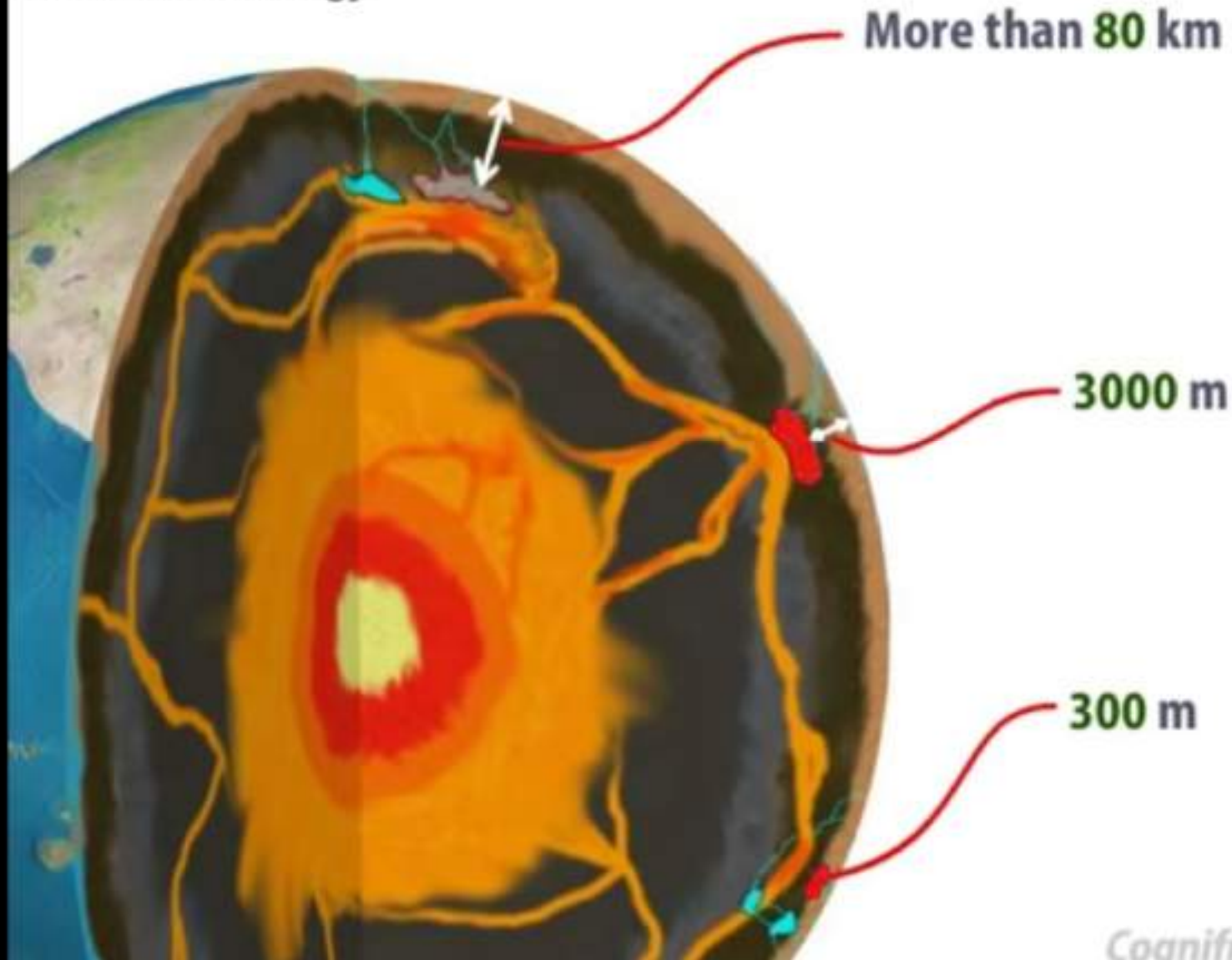


Geothermal Energy

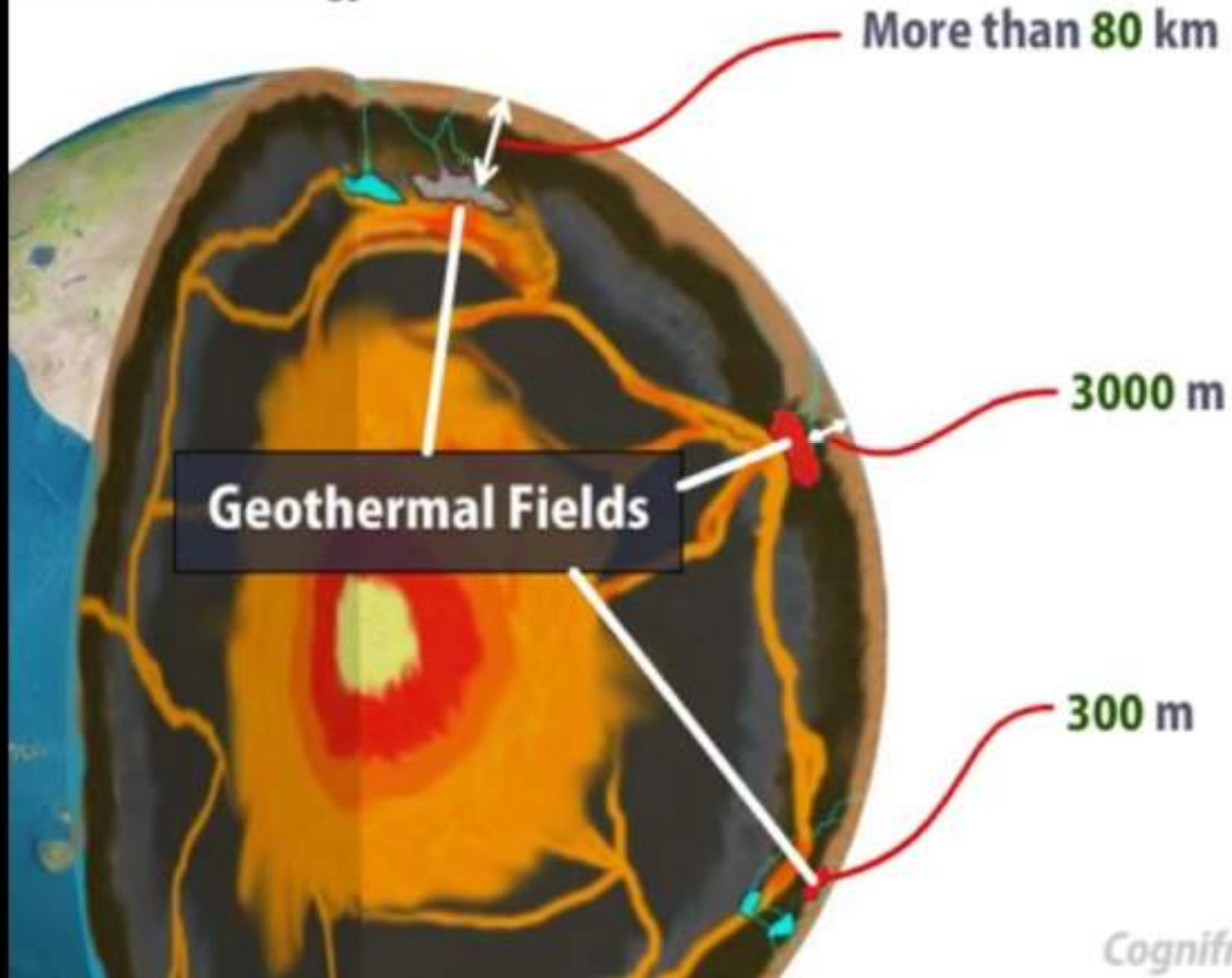
More than 80 km



Geothermal Energy



Geothermal Energy



Geothermal Energy

More than **80 km**

- Heating water
- Air conditioning
- Electricity generation
- Greenhouse heating

3000 m

300 m

Geothermal Fields

**First Geothermal power plant
(1911)**

Larderello (Italy)



Working principle of Geothermal power plant

Dry steam power plant

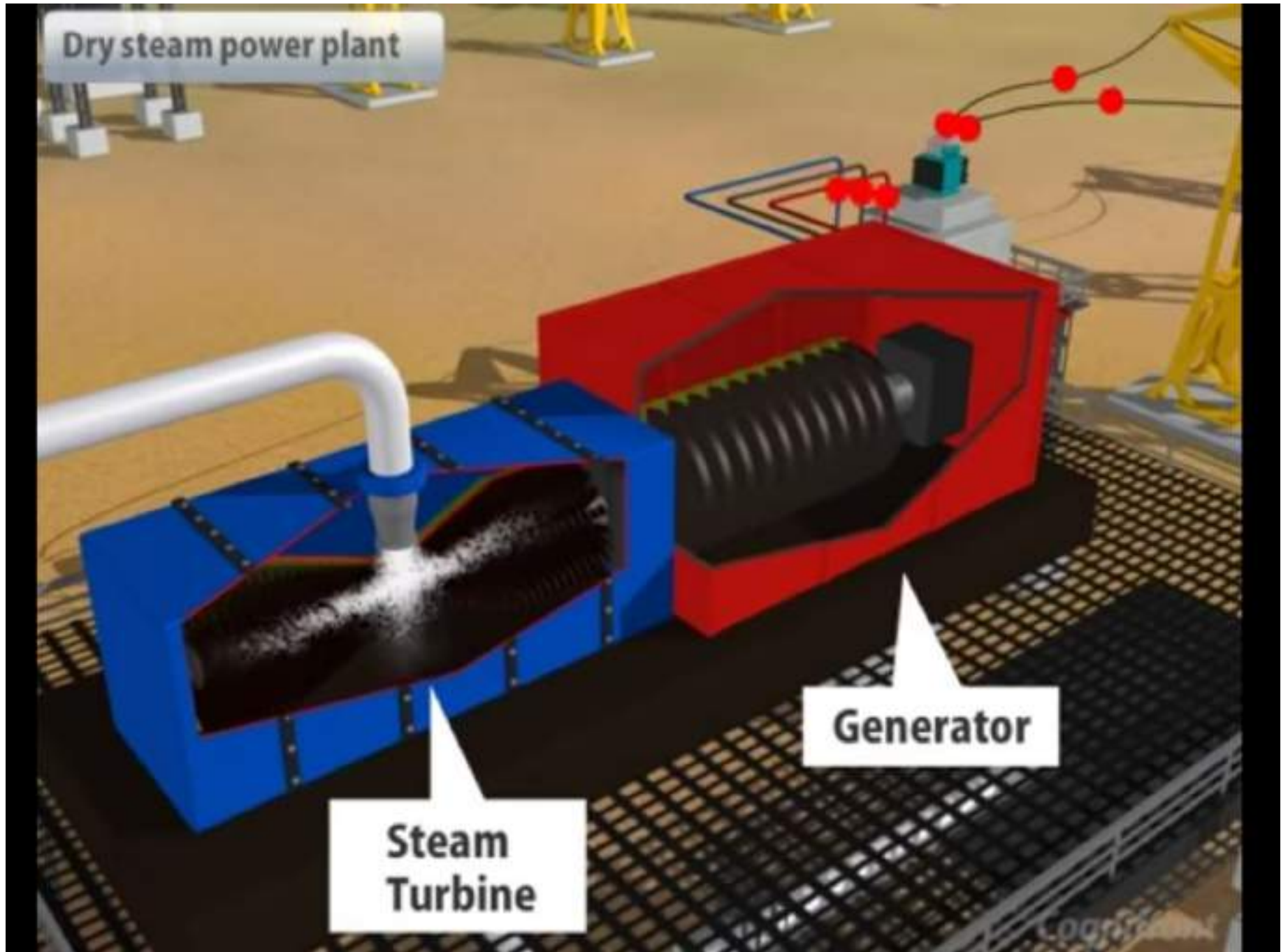
Flash steam power plant

Binary cycle power plant

Dry steam power plant



Dry steam power plant

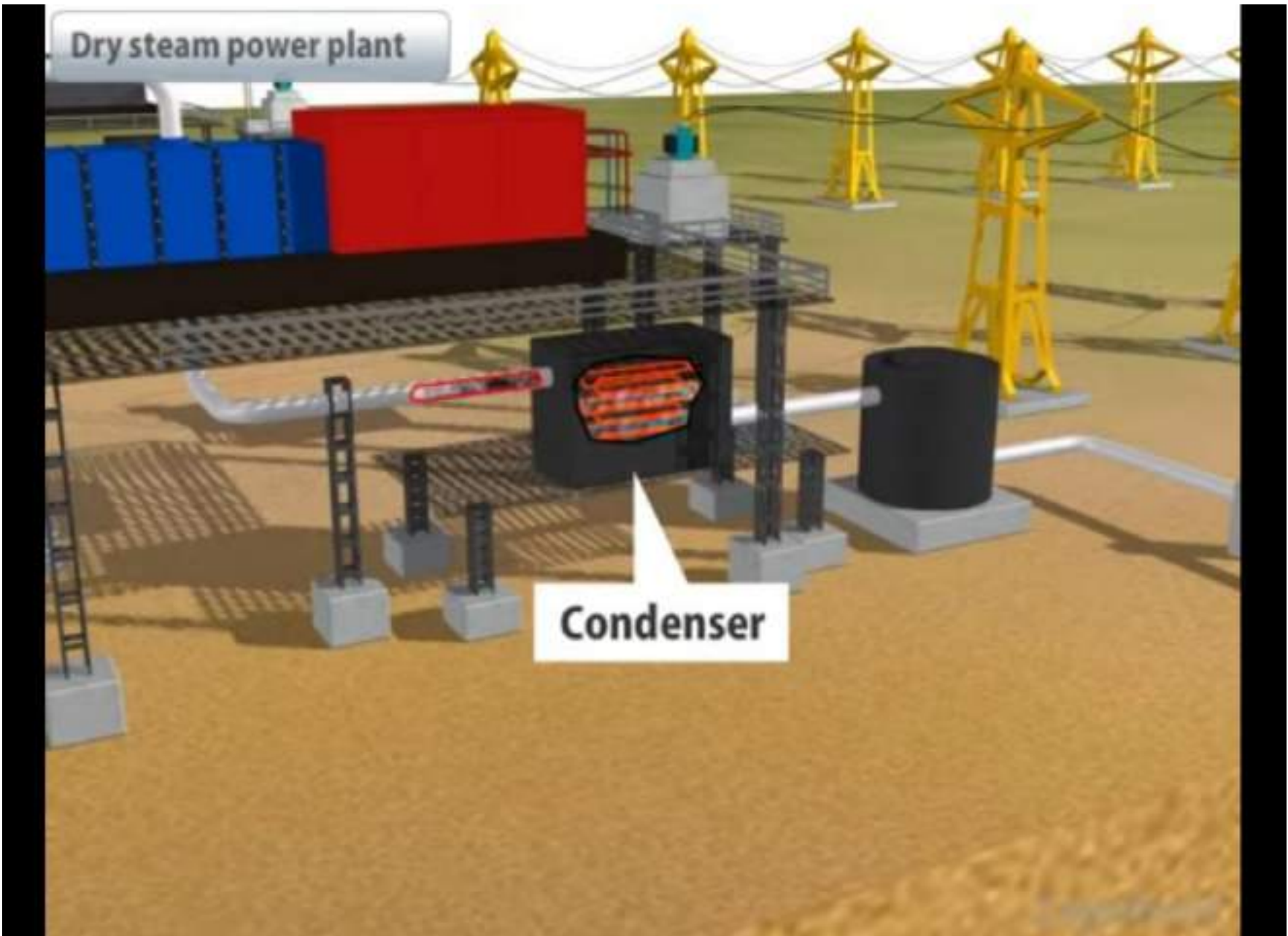


Steam
Turbine

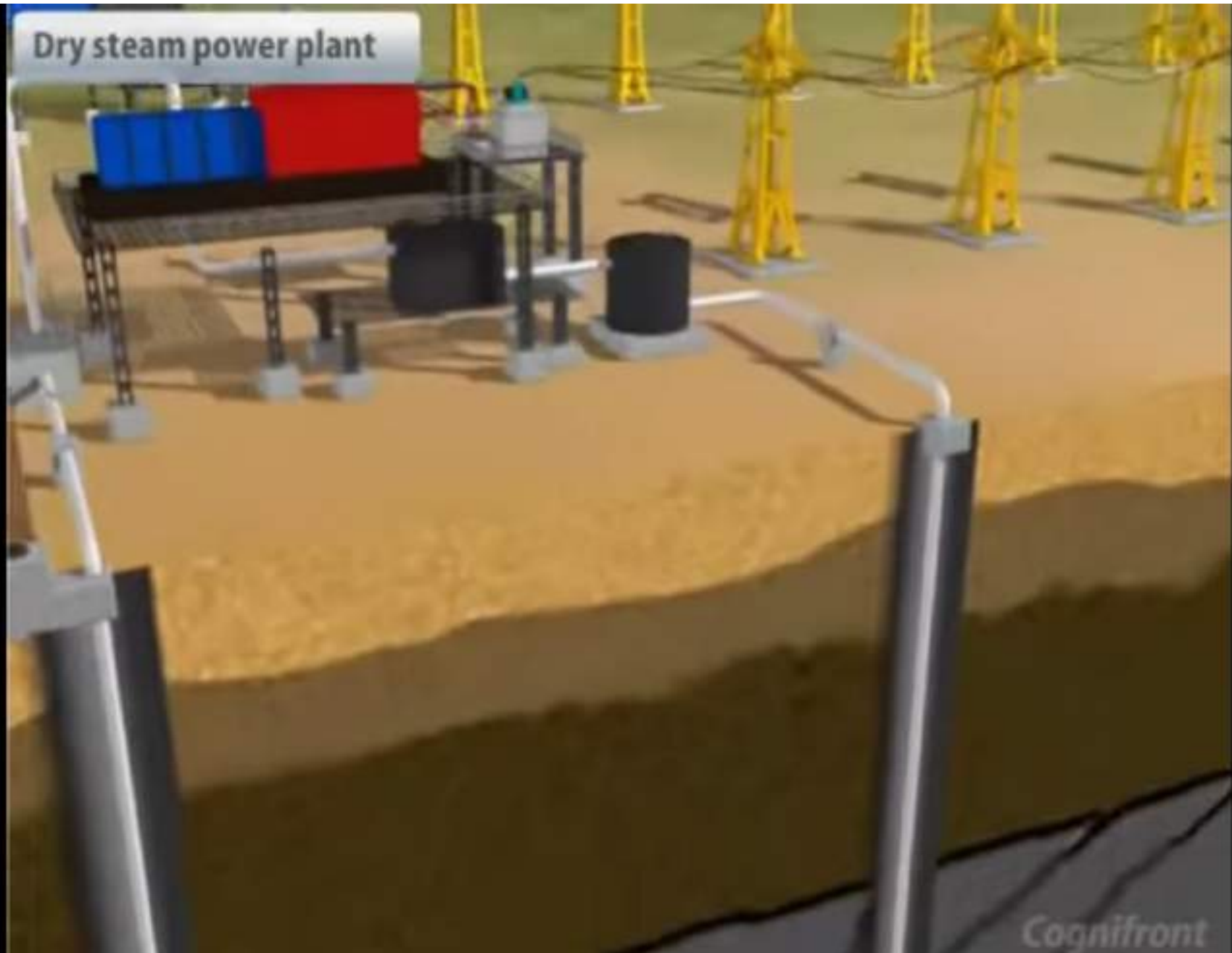
Generator

Dry steam power plant

Condenser

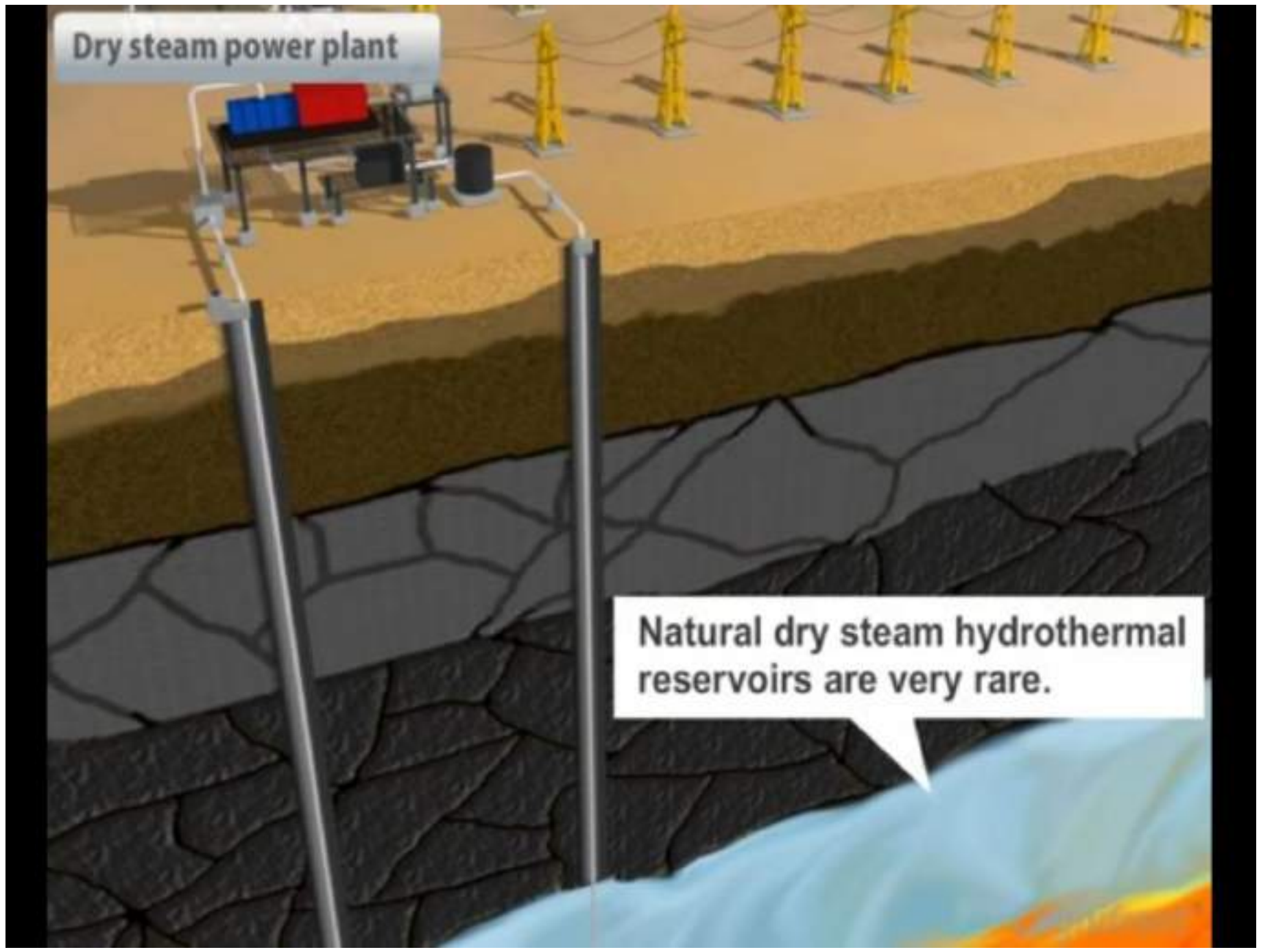


Dry steam power plant



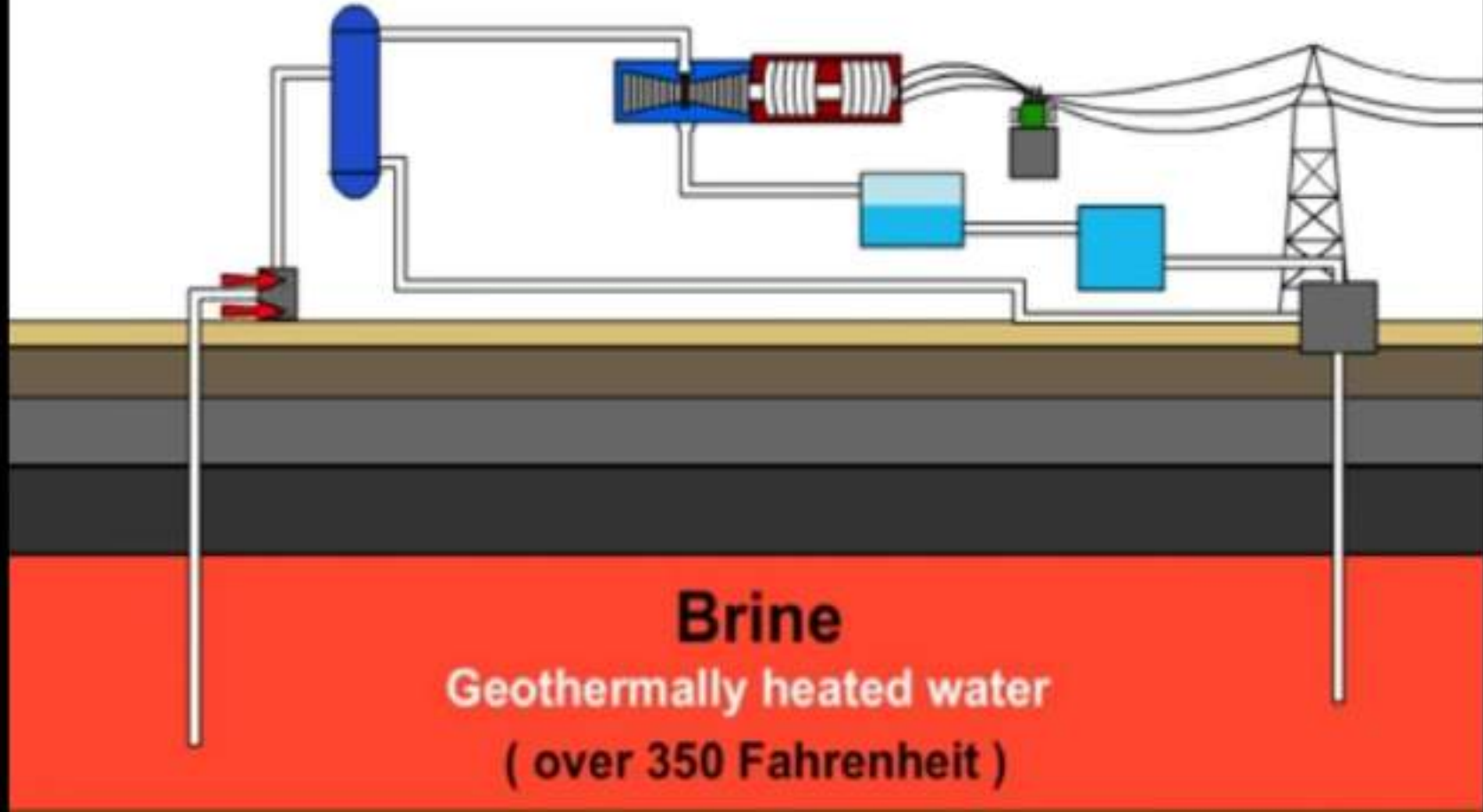
Cognifront

Dry steam power plant



Natural dry steam hydrothermal reservoirs are very rare.

Flash steam power plant



Flash steam power plant

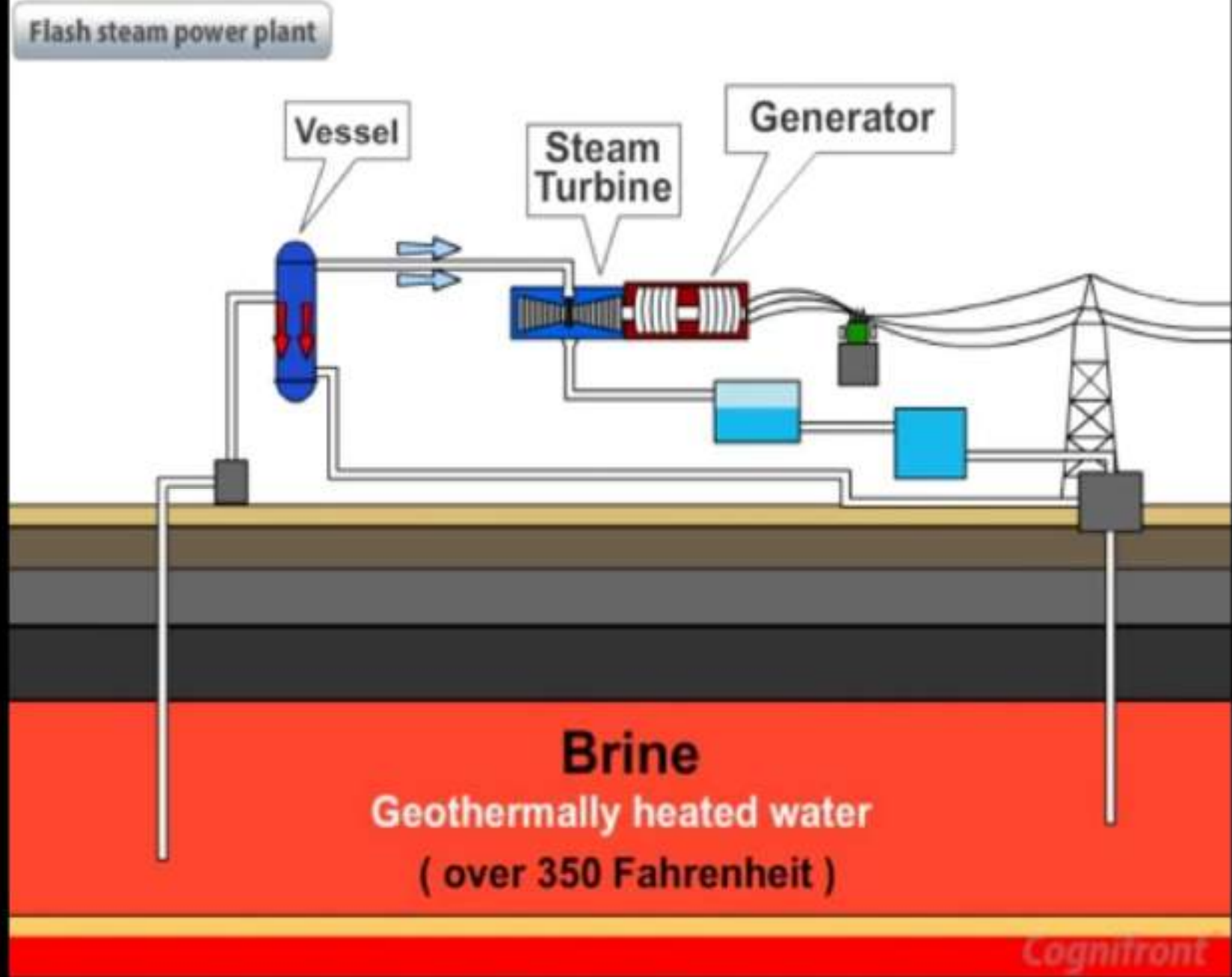
Vessel

Steam Turbine

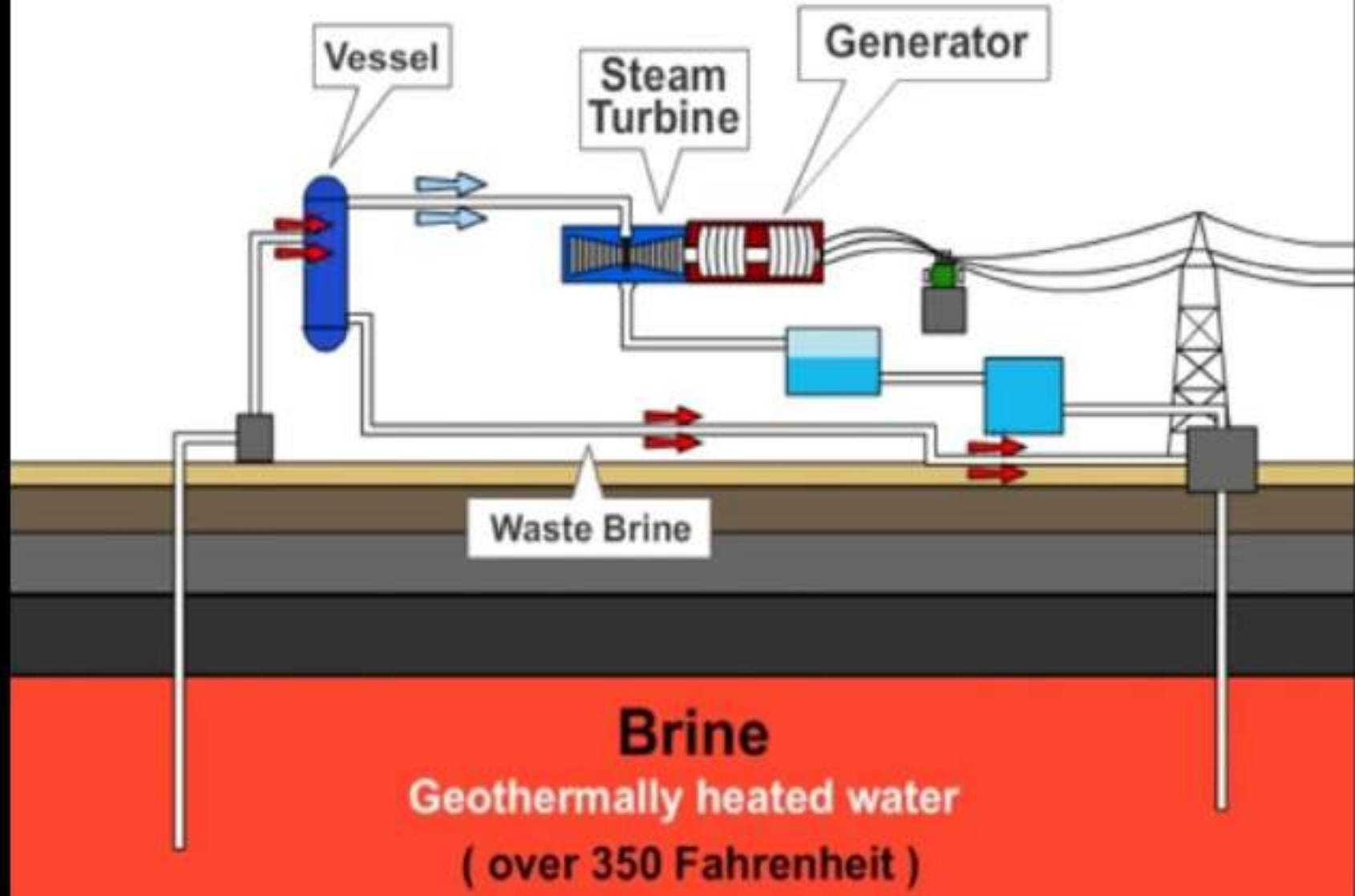
Generator

Brine
Geothermally heated water
(over 350 Fahrenheit)

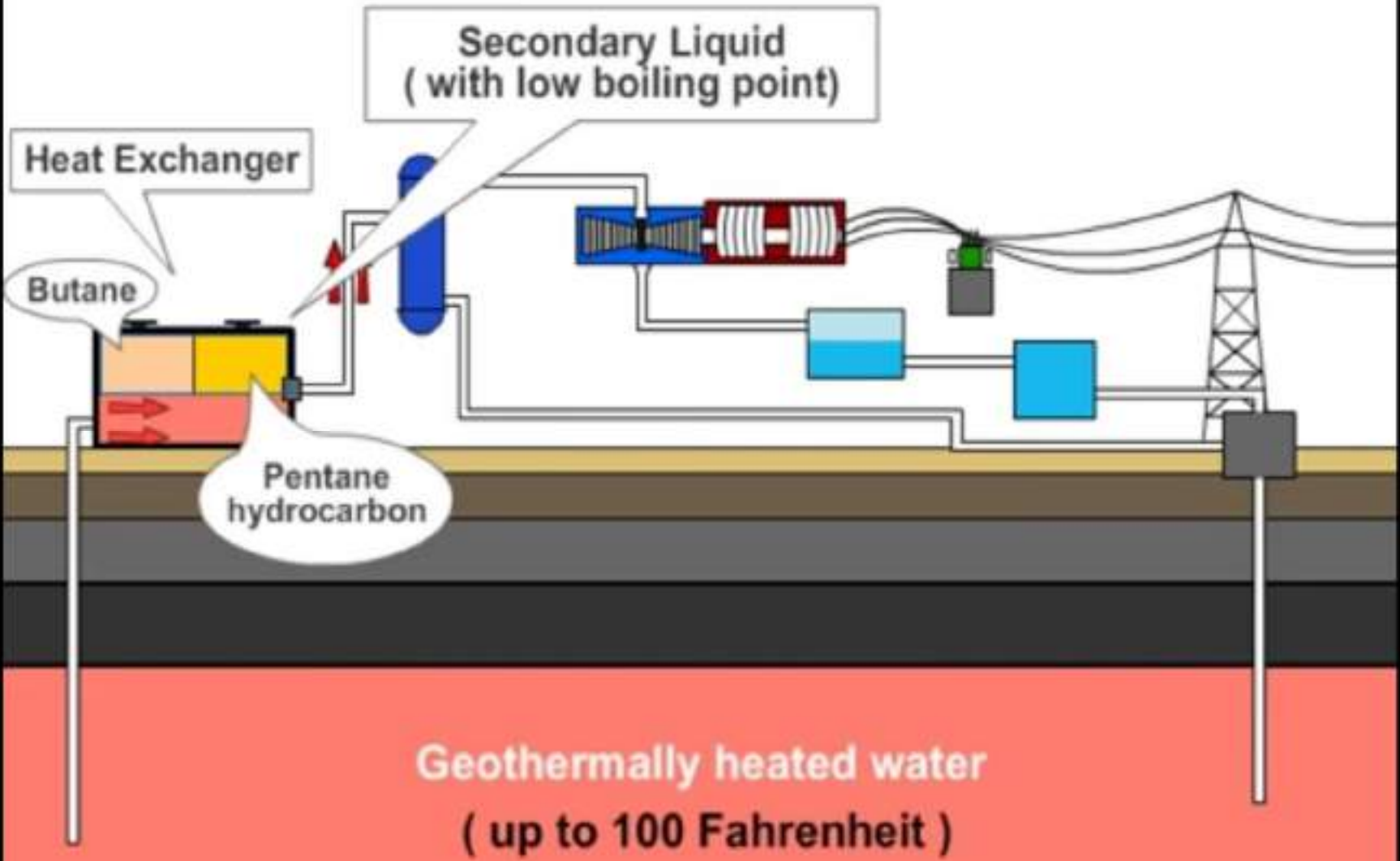
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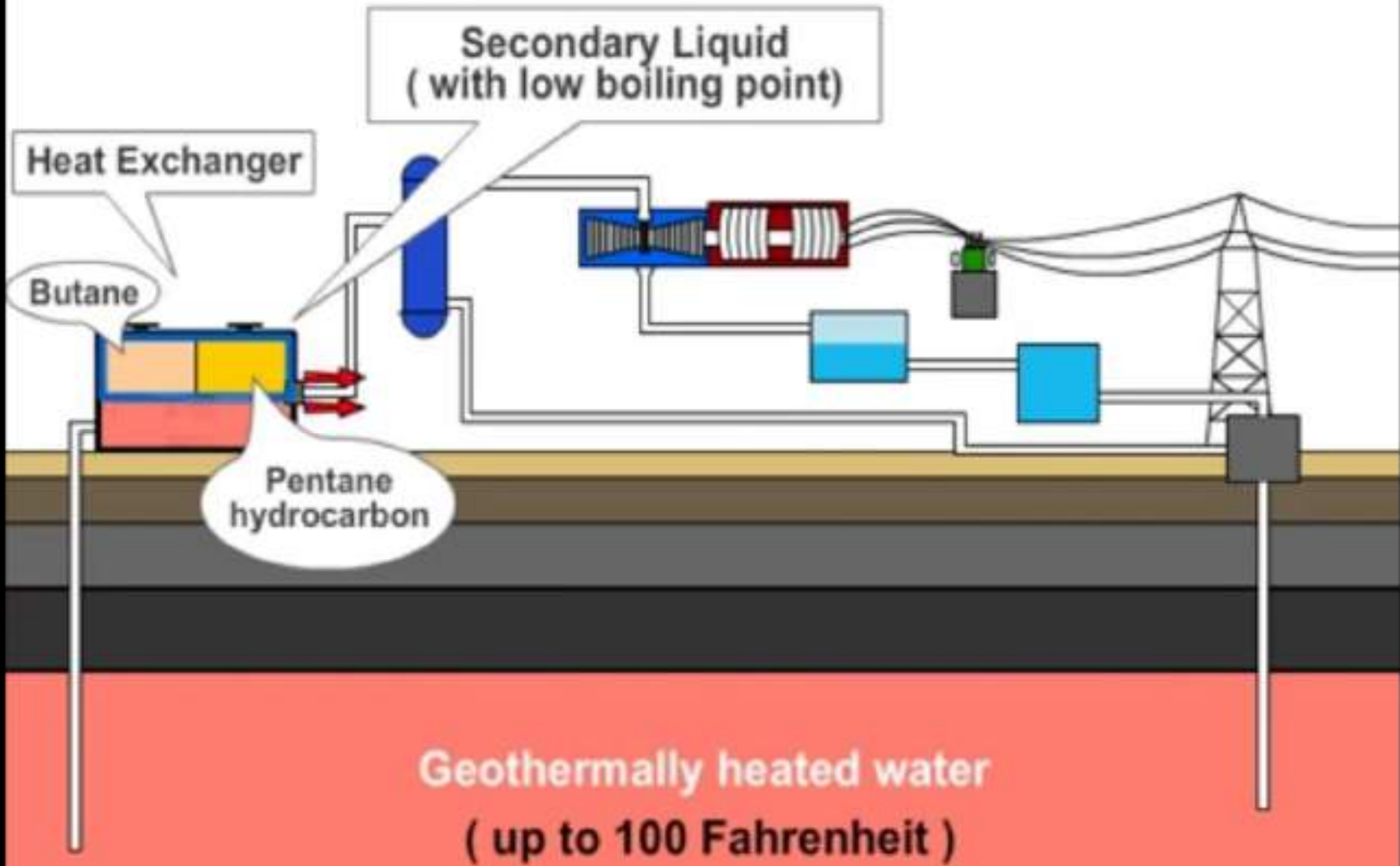
Flash steam power plant



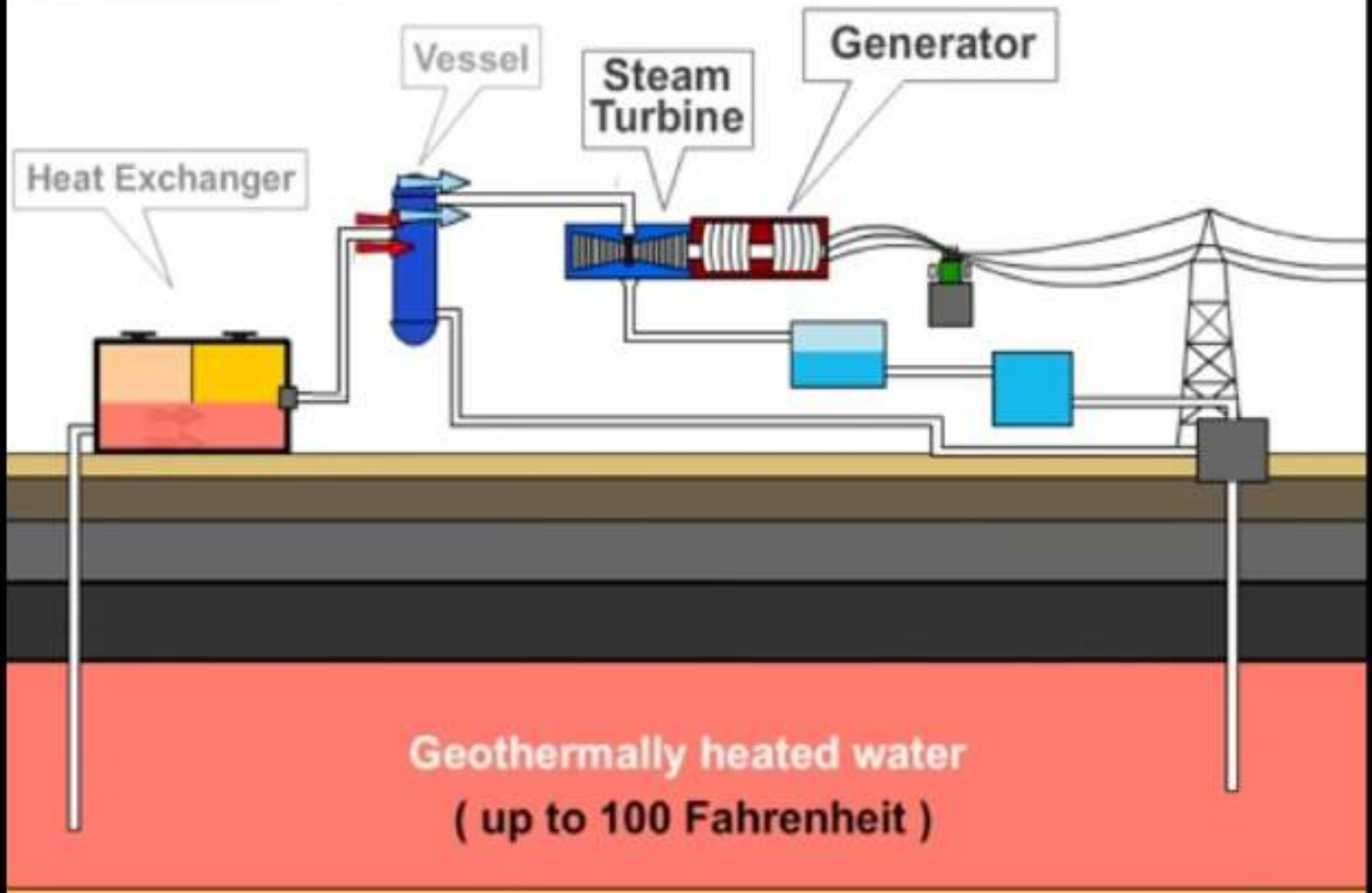
Binary cycle power plant



Binary cycle power plant



Binary cycle power plant

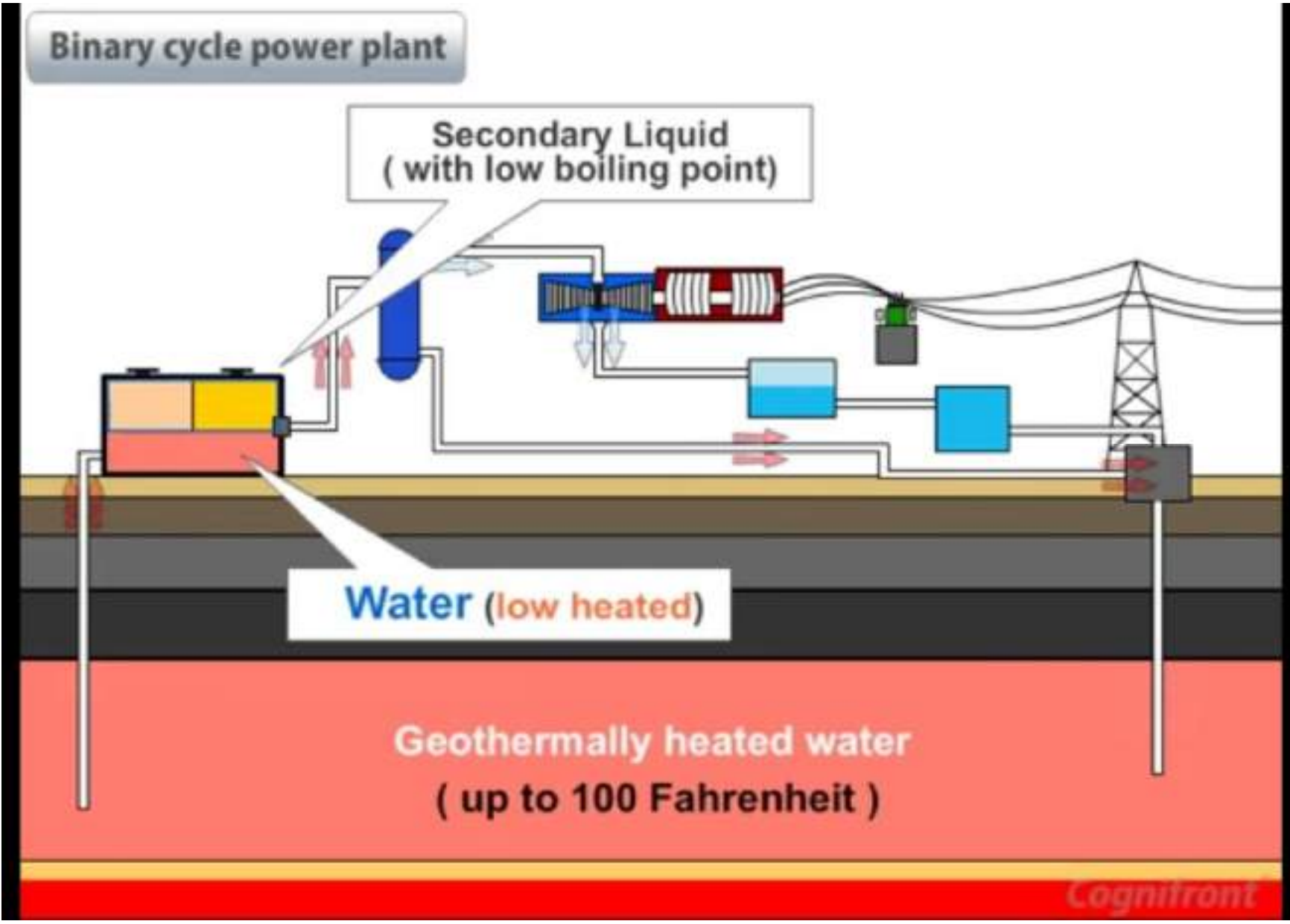


Binary cycle power plant

Secondary Liquid
(with low boiling point)

Water (low heated)

Geothermally heated water
(up to 100 Fahrenheit)

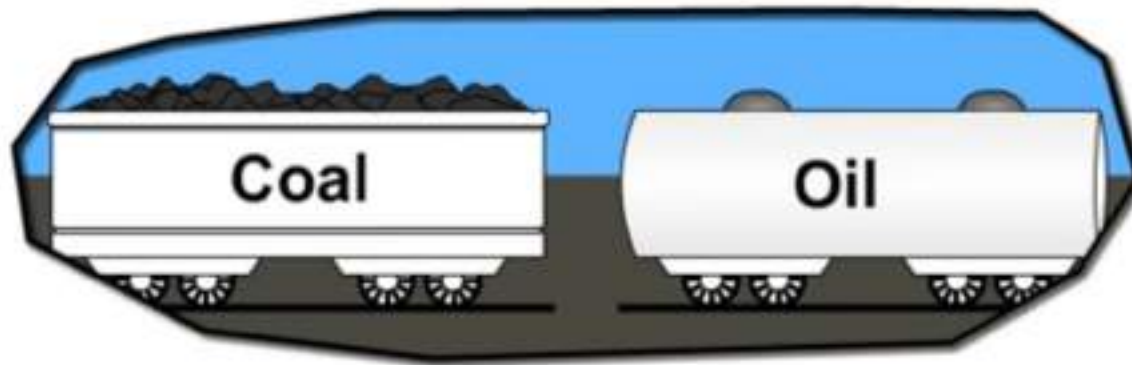


ADVANTAGES AND DISADVANTAGES OF GEOHERMAL POWER PLANT

ADVANTAGES AND DISADVANTAGES OF GEOTHERMAL POWER PLANT

Geothermal Power Plant (Advantages and Disdvantages)

The thermal and nuclear power plants need fuels to produce electricity.



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Geothermal Power Plant (Advantages and Disdvantages)

Advantages :

Does not need any fuel for production of electricity. This saves expenses on fuels.

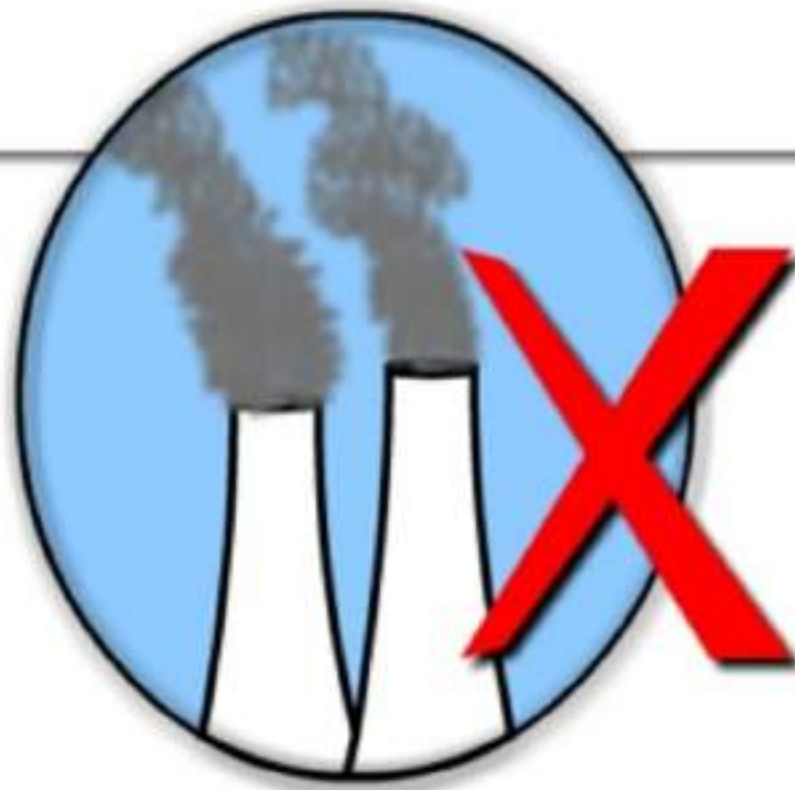


Geothermal Power Plant (Advantages and Disdvantages)

Advantages :

Does not need any fuel for production of electricity. This saves expenses on fuels.

Does not pollute the environment.



Geothermal Power Plant (Advantages and Disdvantages)

Advantages :

Does not need any fuel for production of electricity. This saves expenses on fuels.

Does not pollute the environment.

It requires minimum land space as compared to other plants.

Disadvantages :

As geothermal fields are not available universally, these power plants are found rarely.

The cost of infrastructure and drilling is also very high.

