

# What is geothermal power generation?

The heat conduction from a high temperature point to the ground surface geothermal power generation by means of spouting steam from underground.

## Binary system

The method to heat a material with a low boiling point using the geothermal flow when the temperature of the geothermal flow is low. This method is used when there is not enough steam provided to turn a system turbine.

## Dry steam system

Method in which a geothermal flow spout turns a direct turbine with the steam only and generates electricity this is the method that is adopted most in the Japanese geothermal power plant.

## Single flash steam power plant

Method to extract only steam with a steam separator. and to turn a turbine when water is heated and a mixture of steam spouts out from the entrance of the shaft.

## Double flash steam power plant

the method that lowers the pressure of separated heated water using a single flash bulb again and uses low pressure steam for generation.

Theme

Geothermal  
power  
generation

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# Purpose

How to make electricity efficiently?

# Hypothesis

To make a lot of steam, prepare a lot of water to heat, keep electricity energy from changing other energy.

# Method

Look up on the Internet and put together the information.

# Contents

~result · consideration~

Geothermal power generation has some merit. First, pollution doesn't happen. Second, it is renewable energy. Also underground heat is used to generate electricity. So it is less subject to seasonal change. Don't worry about exhaustion like fossil fuel. But, geothermal power generation has a disadvantage. It is that actually it takes a long time. There are volcanoes everywhere in Japan. Moreover Japan has many earthquakes, so Japan is suitable for geothermal power generation. But Japan has no place to build a geothermal power station. In order to make it is necessary to destroy nature. So it can produce electric generating capacity for some areas. If a generation system which can be built anywhere is developed at low cost, that will be beneficial to the country in the long run. So it establish in the national park, and maintain it as a sight seeing base, many people can visit there, we think the Dake area near Mount Iwaki in Aomori is suitable to do things like this.

# Conclusion

We researched about geothermal power generation, but couldn't verify our hypothesis. So, we will think about what are good ways and conditions to make electricity in Hirosaki. In addition, we'll think about where is suitable to install a power station in Hirosaki and try to simulate.