



Renewable Energy  
~Become close to our lives~

## 13th Norway Team

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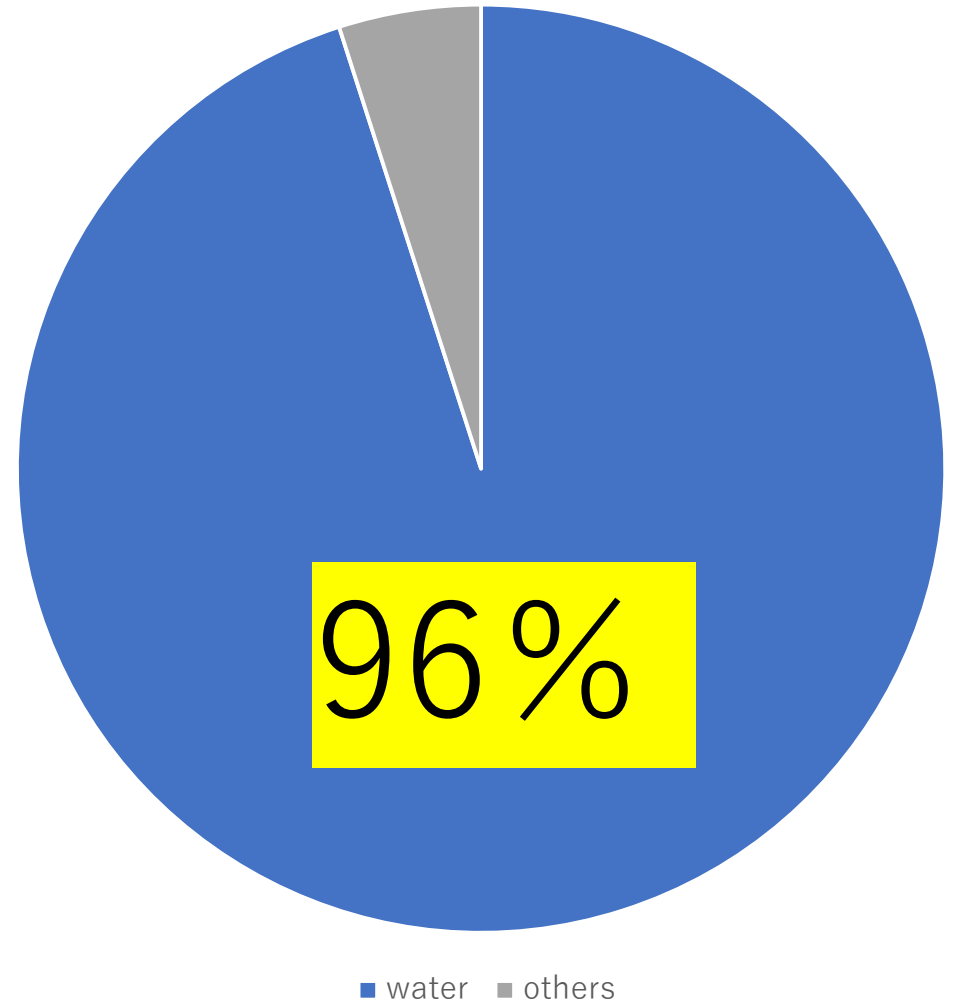
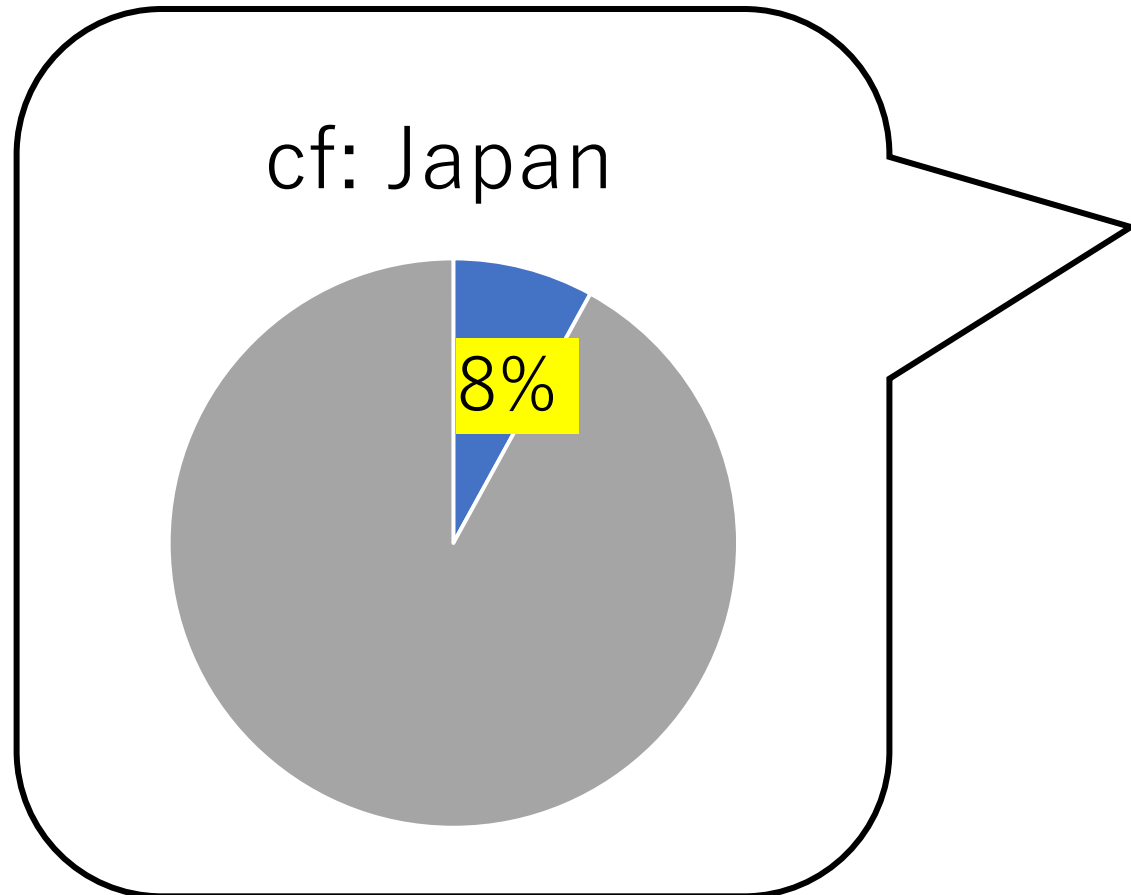
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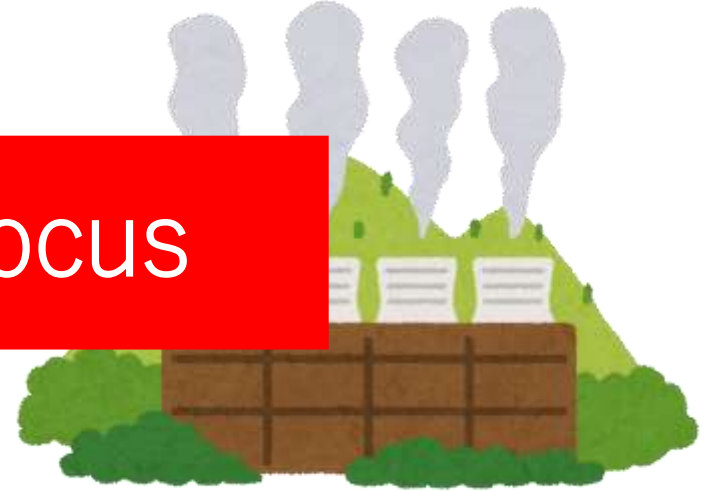
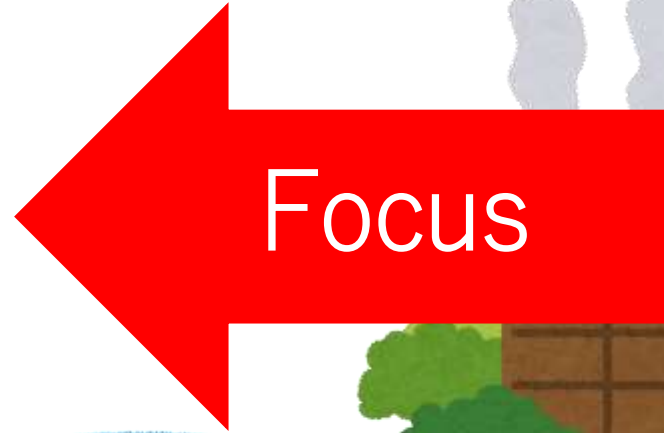
# Q.3) (Water) Power Plant



# The Ratio of Water Power in Norway



# Renewable Energy



# TOPICS

1. Water power generation in Norway & Japan
2. The trend of Japanese electronic company
3. The way of increasing water power generation in Japan

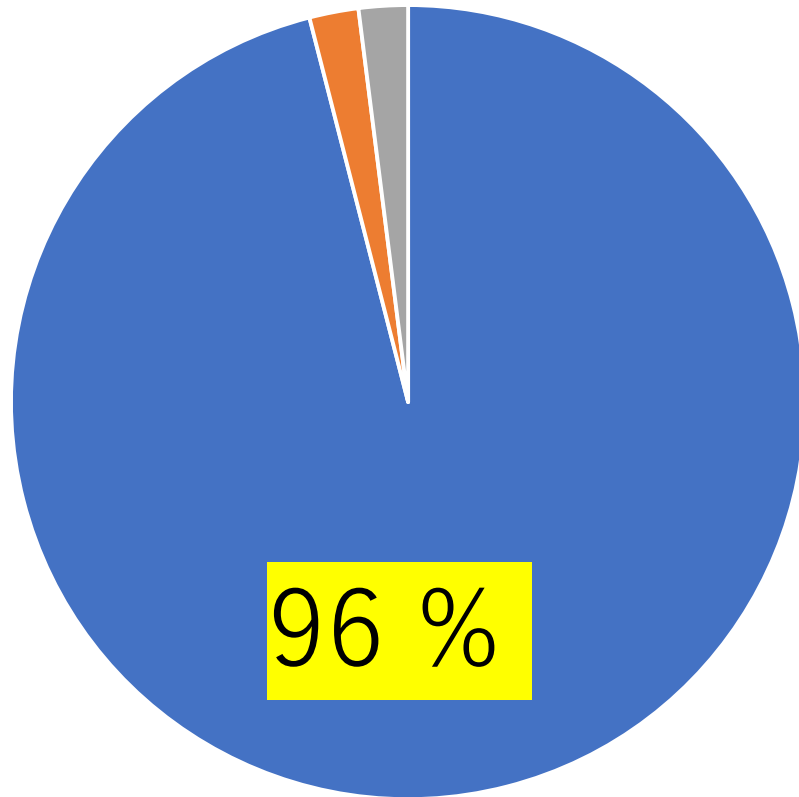


# TOPICS

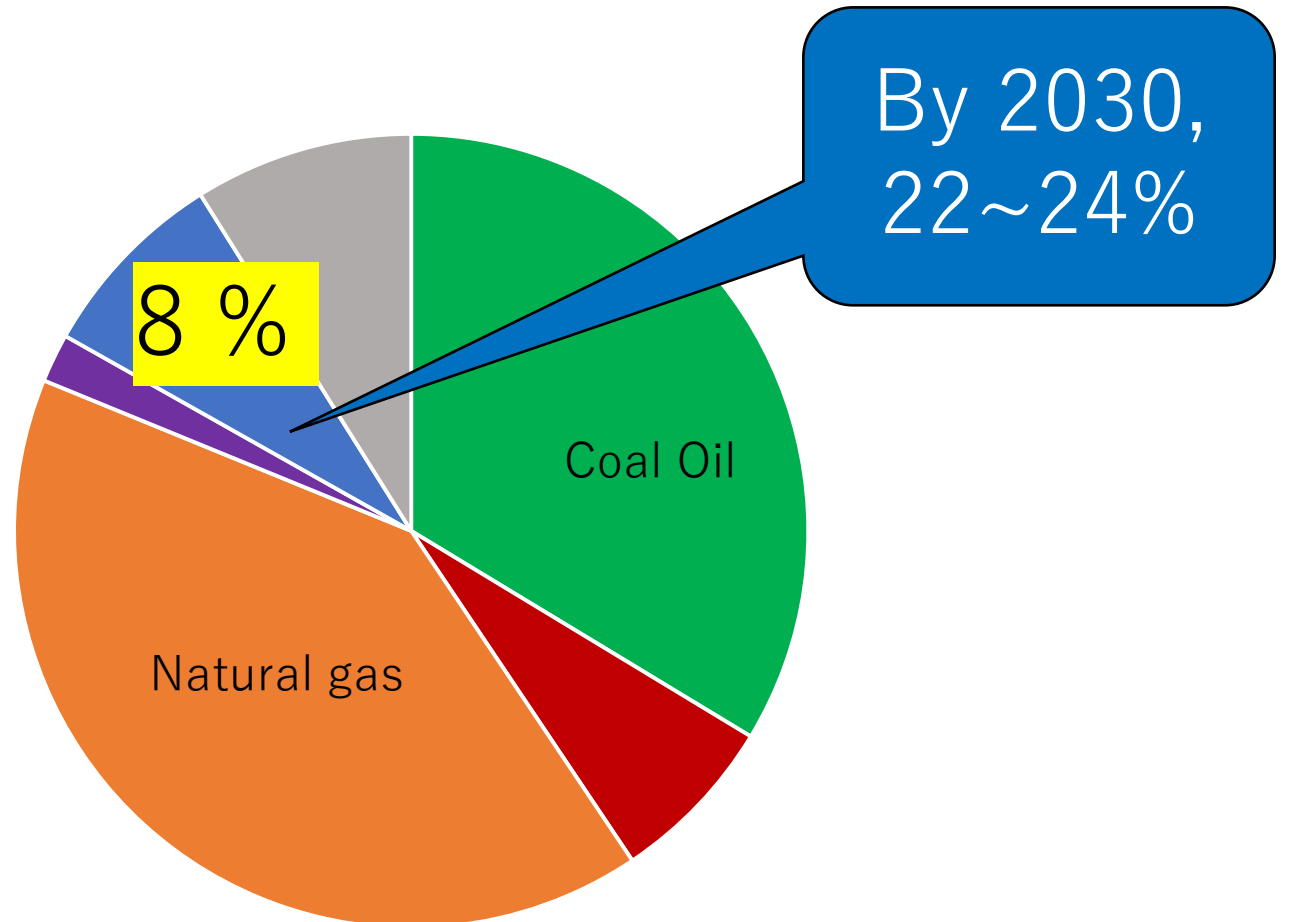
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# Power Sources



Norway



Japan

# Water Power Generation in Norway

① Full of ups and downs

② Many lakes

③ Rivers which can generate electricity





# Water Power Generation in Japan

Many power plants (Over 1000 locations)  
⇒ Already used up the right places for the location



Hard to expand anymore

**Difficult to introduce  
Norwegian system**

# TOPICS

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# Until now

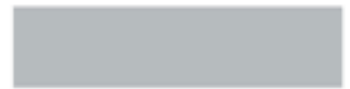


- Certain power companies
- Electric power reforms(5 times)

Trend of Japan

# Energy Liberalization

Money Forward ココカラ



SoftBank



cookpad

Rakuten

# What is the purpose?

Before

After

Reasonable Price  
&  
Many kind of new power system



# Many kind of new power system

## ① Stable power supply



⇒ The Great East Japan Earthquake of 2011

⇒ Power shortage

# Many kind of new power system

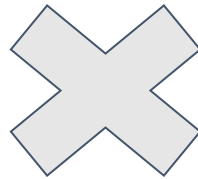
② Select a power supply sources



⇒ Corresponding to our life style

If we are a water company...

How to break into the market?





# TOPICS

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POOL



SPA



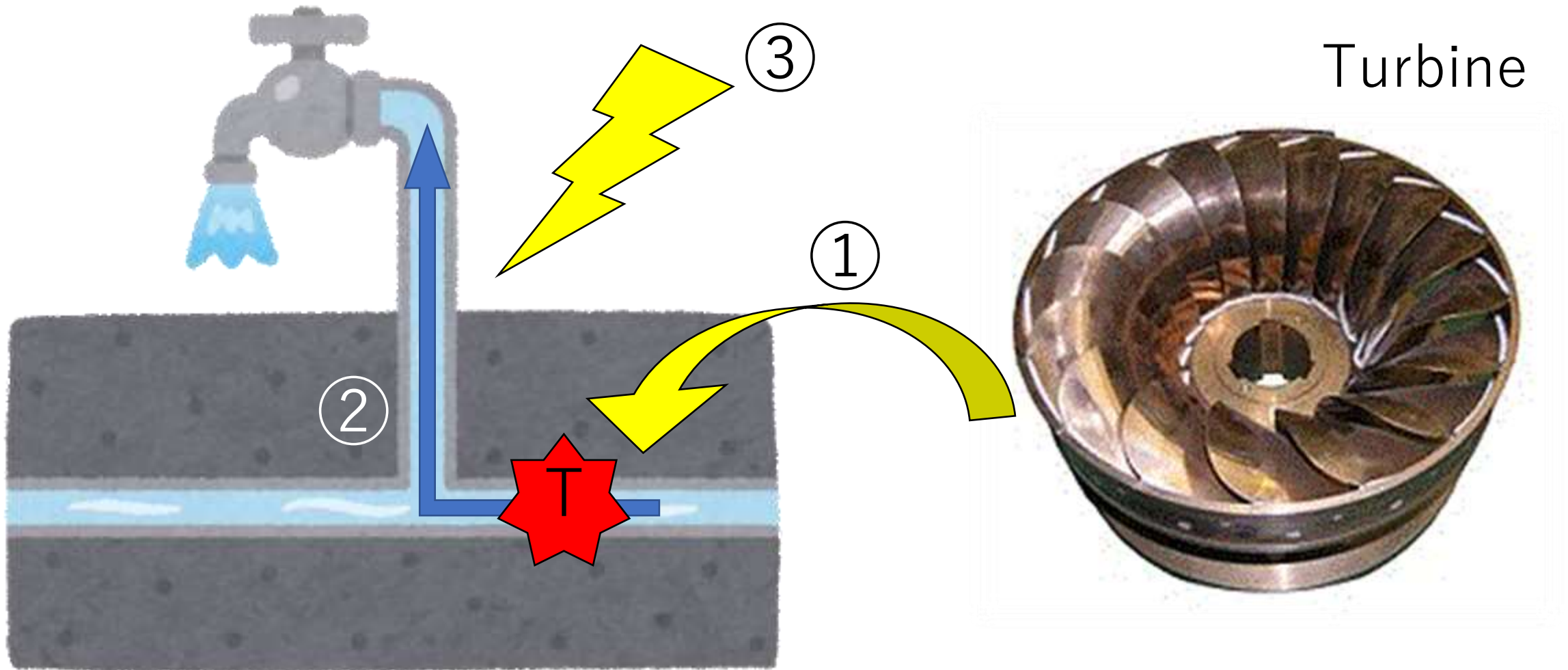
AQUARIUM

Our proposal

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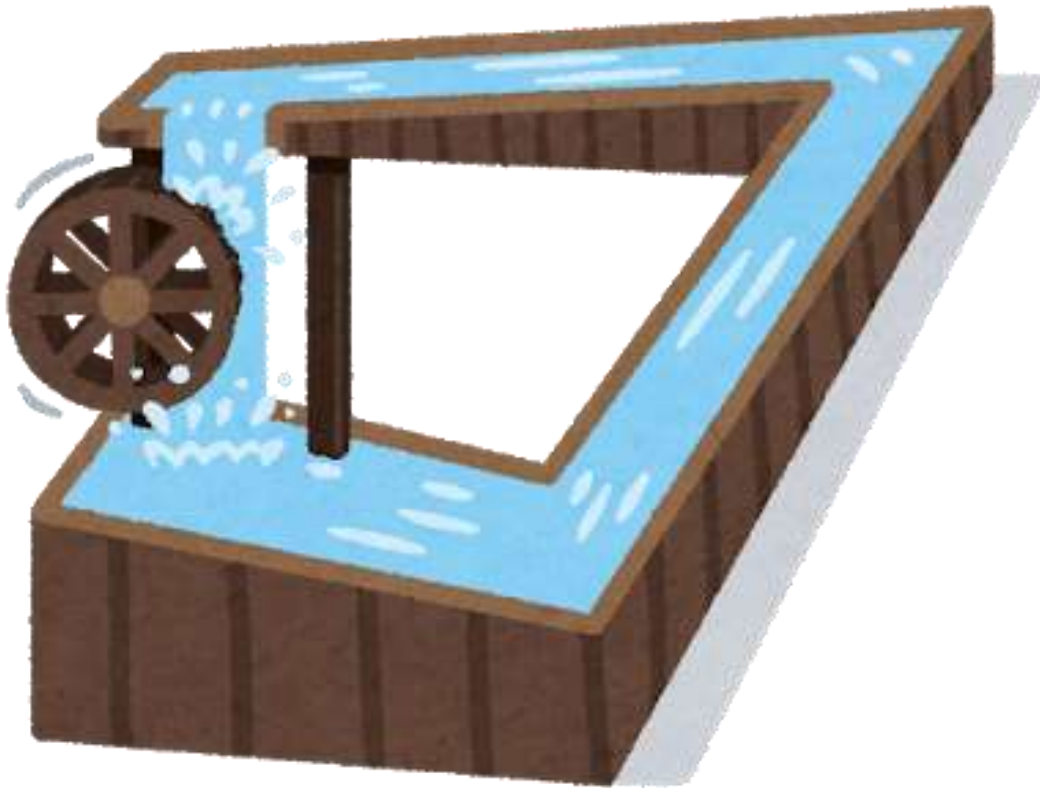
Use these facilities

# How to Generate Energy?

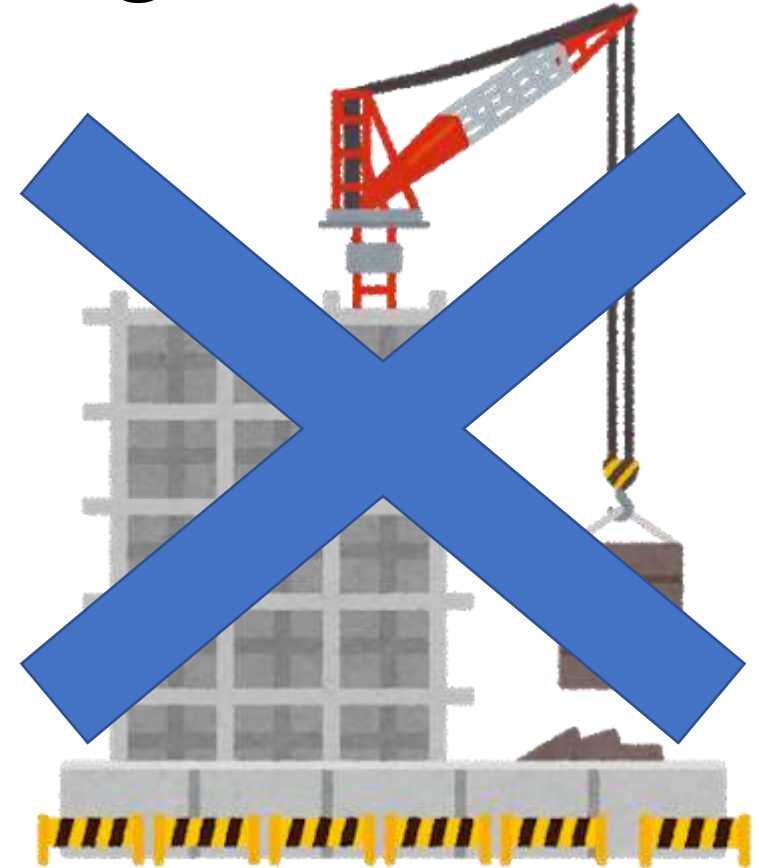


# Merits

① Have water current



② No big construction

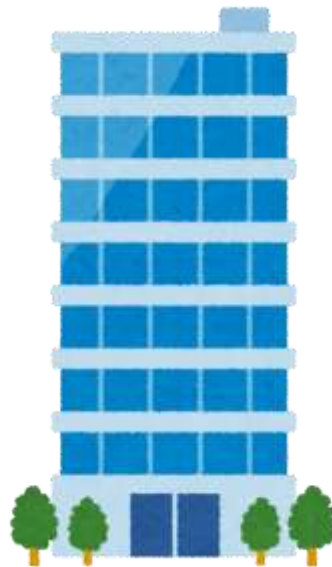


# Examples in JPN

Office Building  
(NHK)



Factory



Using  
circulating water

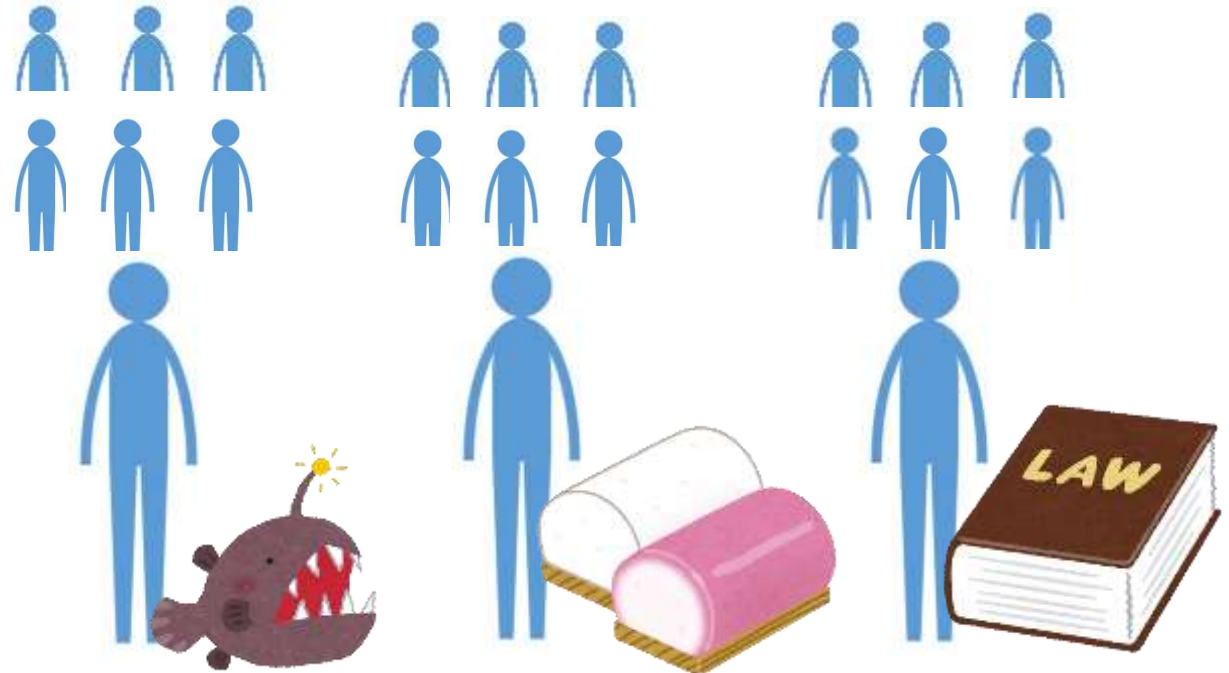


# If We Install Micro Water Power Plant...

1,490 MWh/year  $\doteq$  186 people



School of Marine Life Science

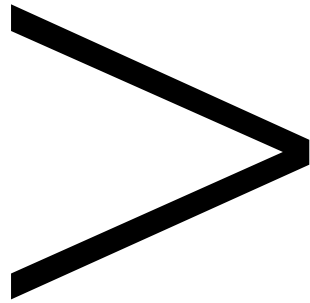


# Use all the Aquarium in Japan...

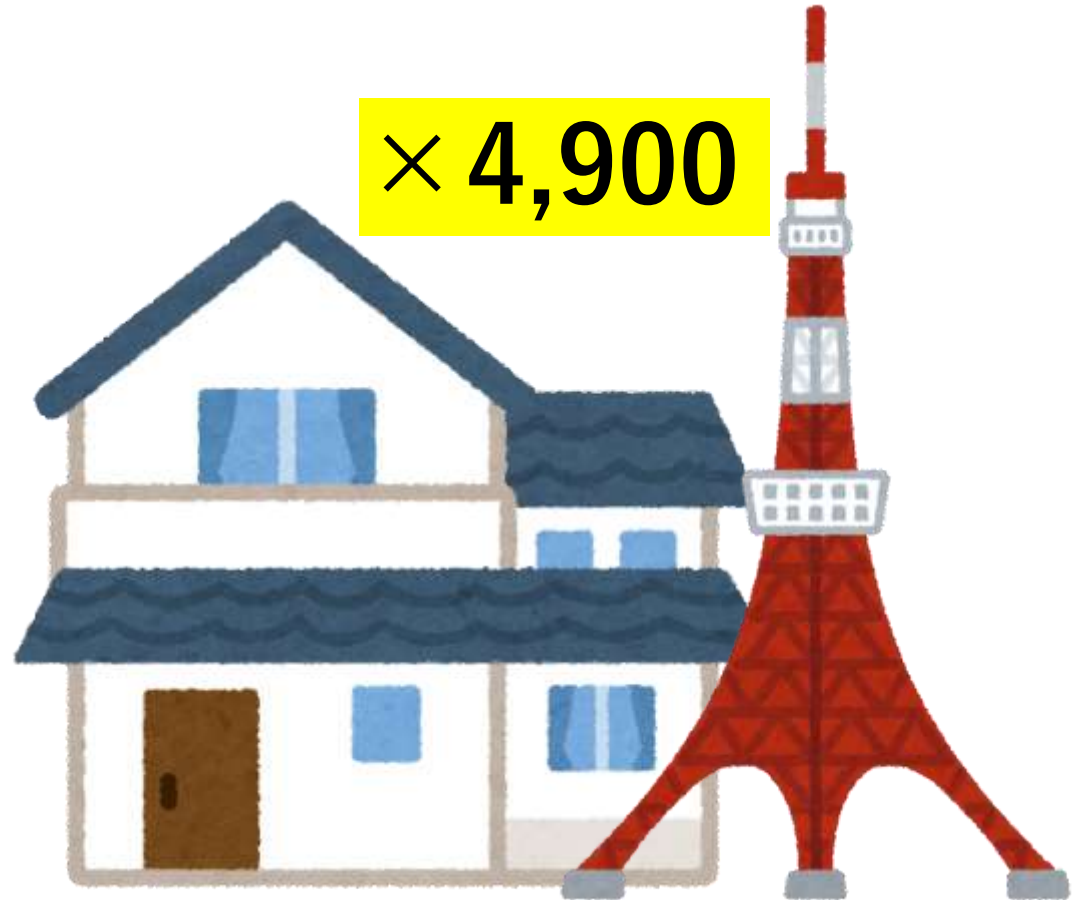
× 150



102,900 kw/day



× 4,900

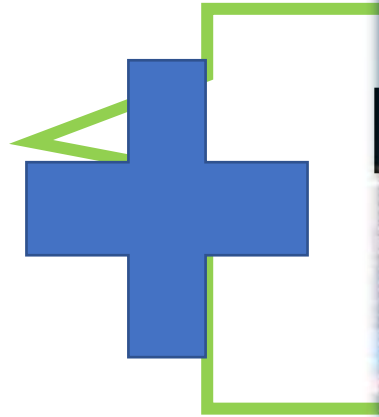


Households in Minato city

# Traditional



# New



Water Power become close to our lives!



An aerial night photograph of a city, likely in Norway, with snow-covered mountains in the background. The city lights are visible, and a large body of water is in the foreground. A semi-transparent white banner is overlaid across the middle of the image, containing the text.

Thank you for listening!  
13<sup>th</sup> Norway team