



DemEcol22

Democratic participation and Ecology: Project to develop European consciousness and democratic behaviour in a sustainable environment



Erasmus+



# Renewable energy sources: **Why water?**

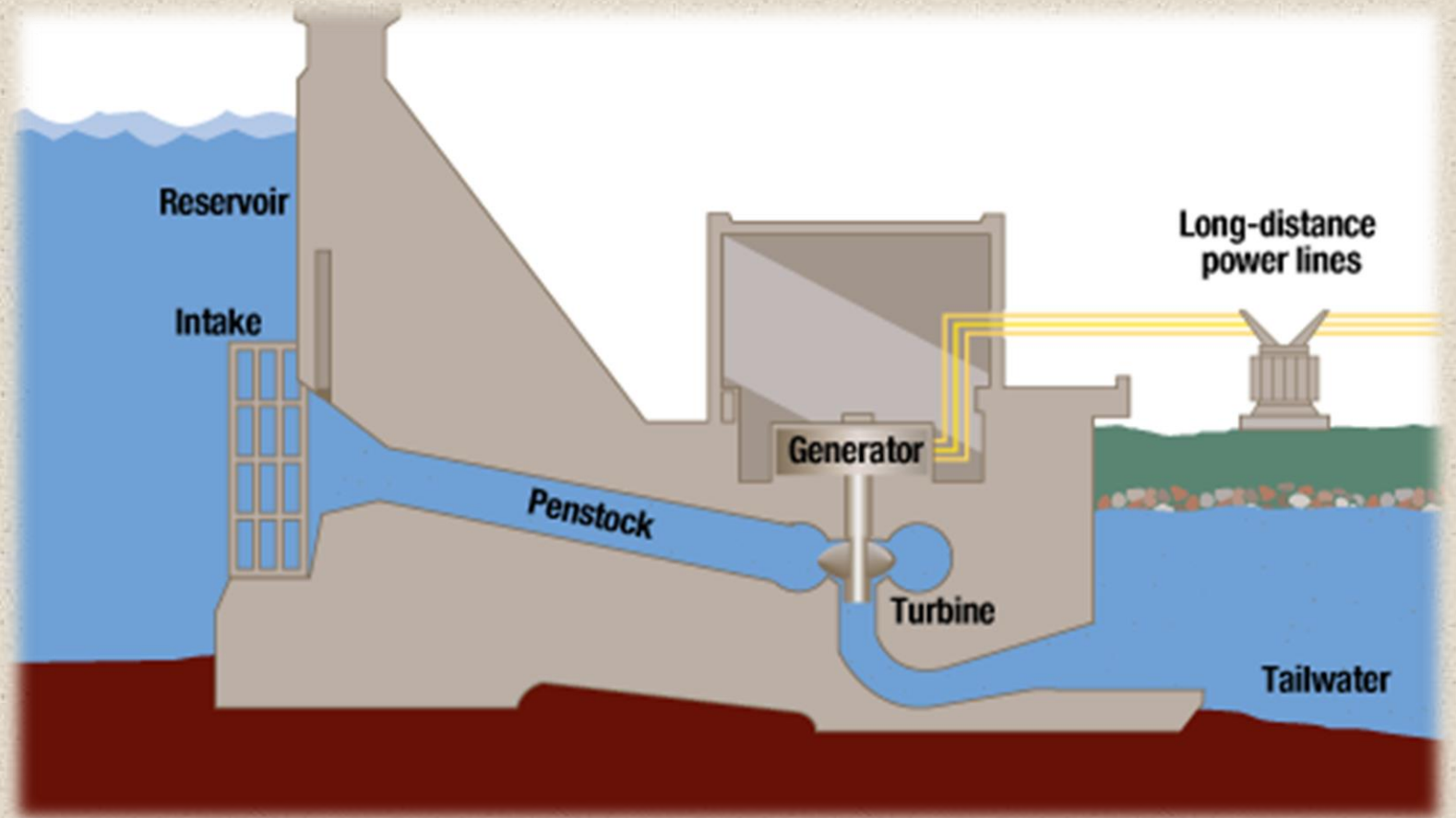


# Several opportunities...

1. The **movement of the water** spins the turbine/wheel.
2. The turbine/wheel is connected to a generator.
3. If the turbine is spinning, the generator creates electricity.

✓ Clean  
Can be used for other things

✗ Can have negative impact on local ecosystems



**Hydroelectric dam**



# Several opportunities...

Captures the energy of **flowing** waters with the help of turbines as **tides** rush in and out of **coastal areas**.



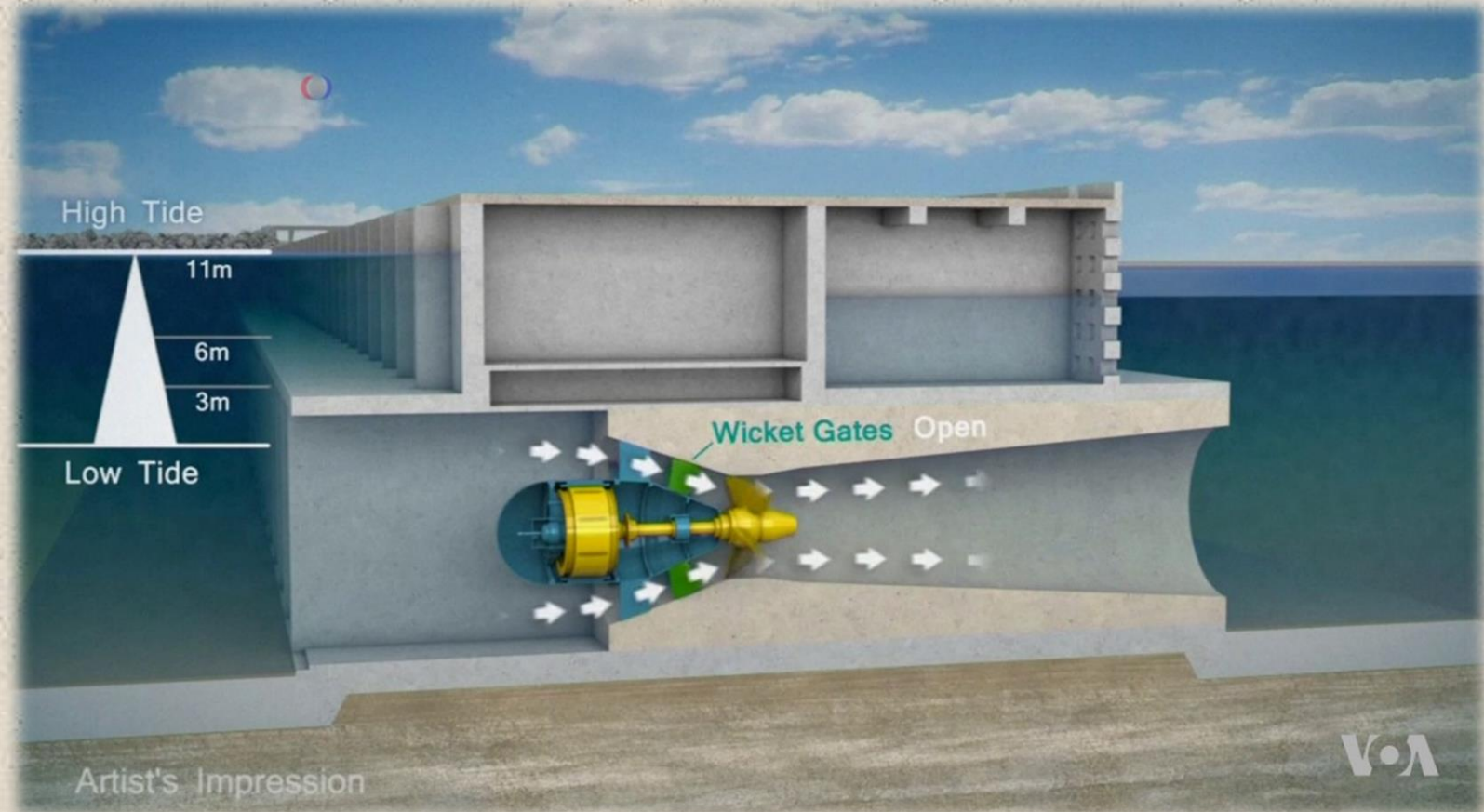
Clean

Can be used for other things



Really expensive!

Depends on the location



## Tidal power plant



# Several opportunities...

Captures **energy from waves** on the surface of the ocean/lake using a special buoy or other floating device.

✓ Clean

**Environmental friendly**

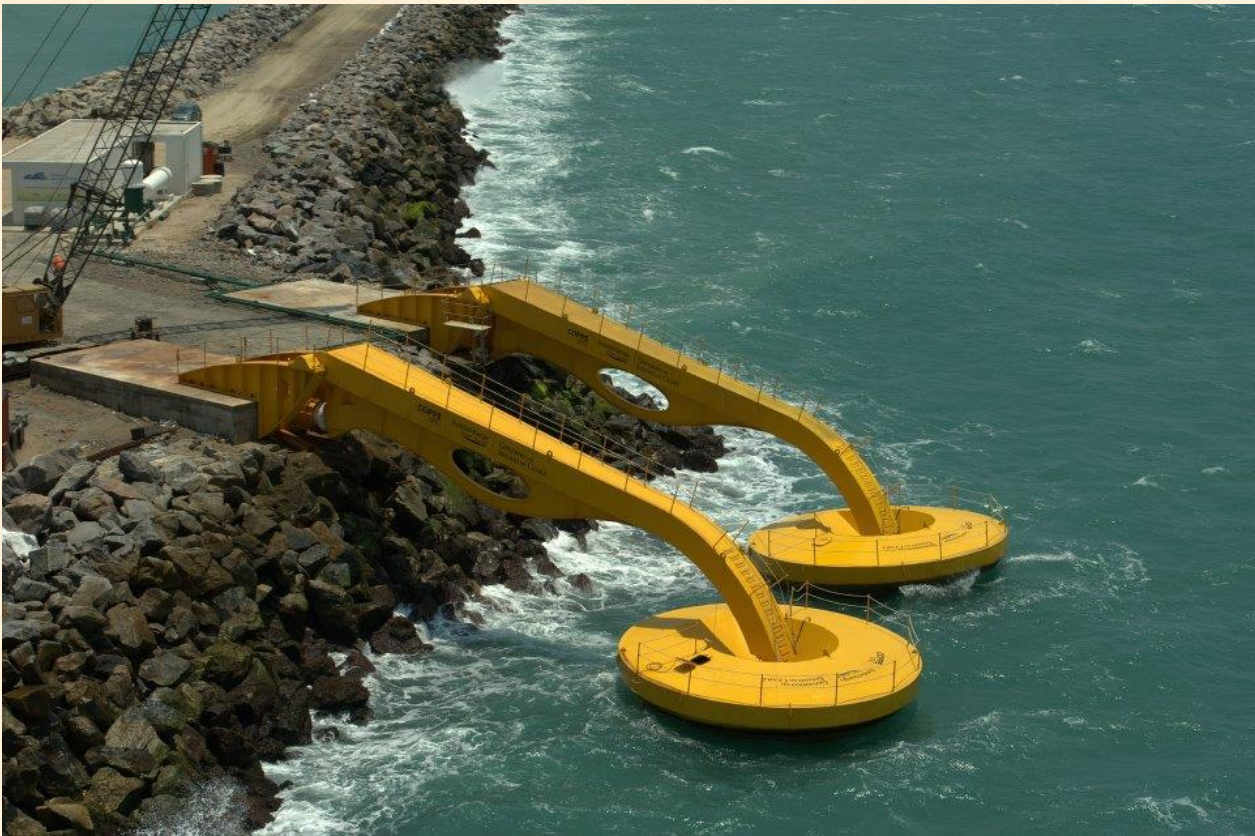
Relatively **cheap**



Early stages of development



**Wave power plant**

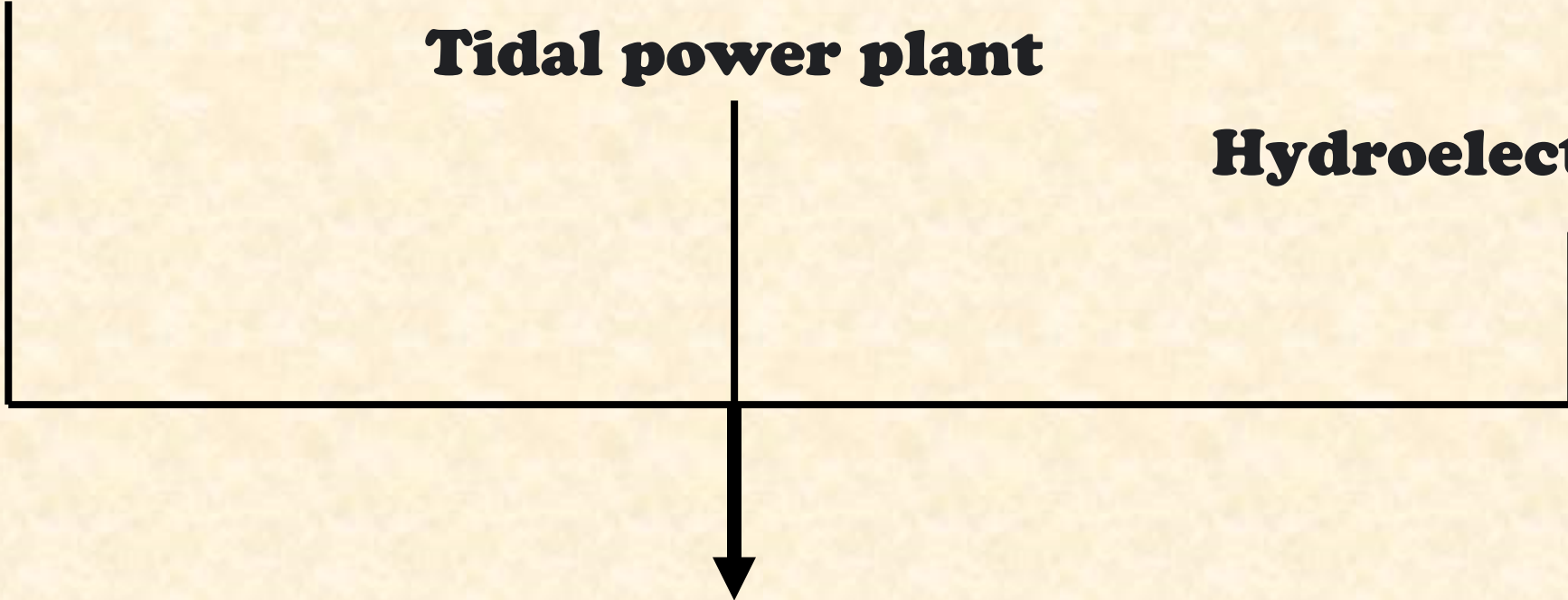




**Wave power plant**

**Tidal power plant**

**Hydroelectric dam**

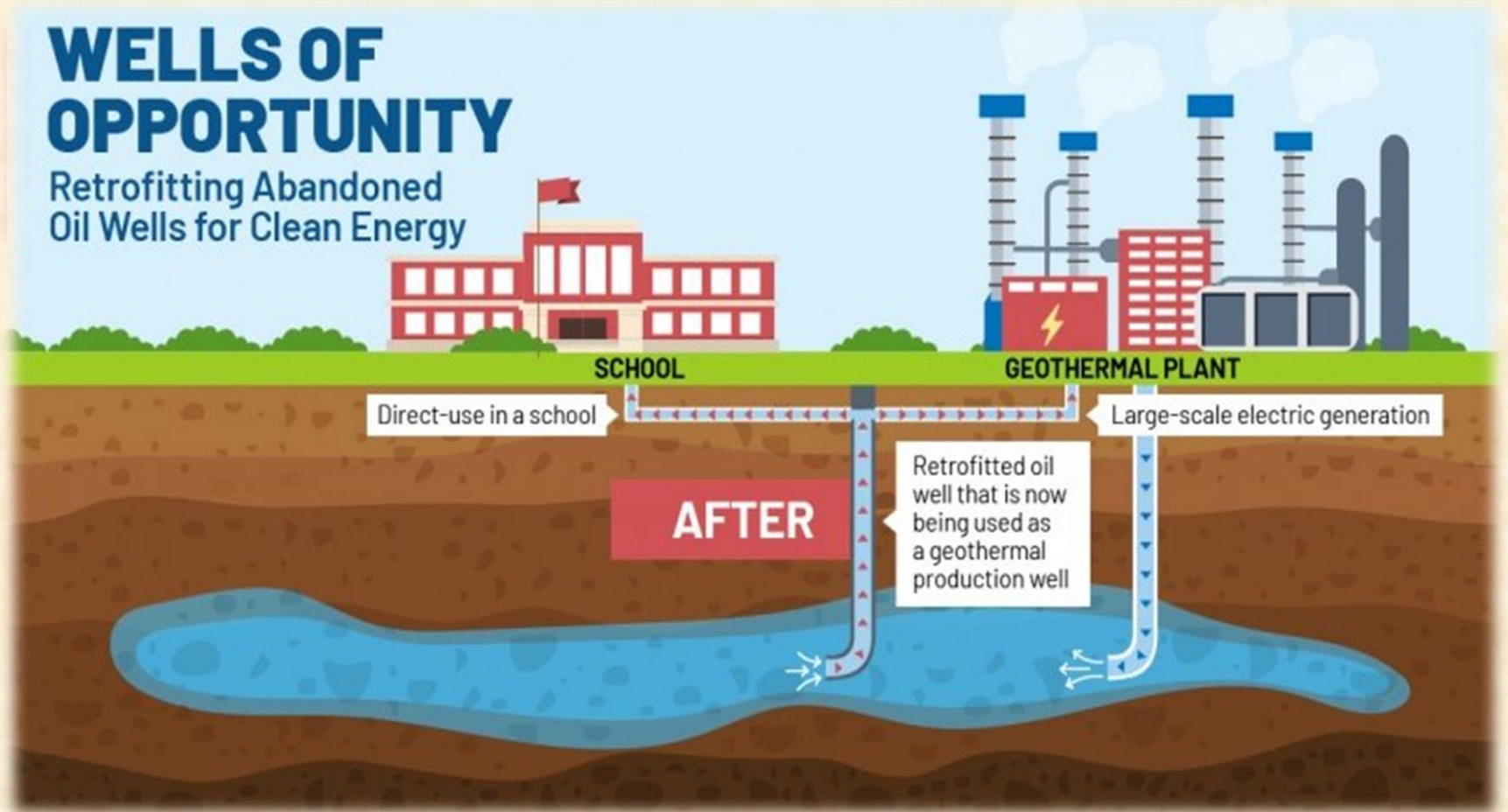


**HYDROPOWER**

**Mechanical Energy → Electrical Energy**

# WELLS OF OPPORTUNITY

Retrofitting Abandoned Oil Wells for Clean Energy



Clean  
**Economical**  
Efficient



Depends on the location

## Geothermal energy:

Heat → Electricity

**A positive example...**

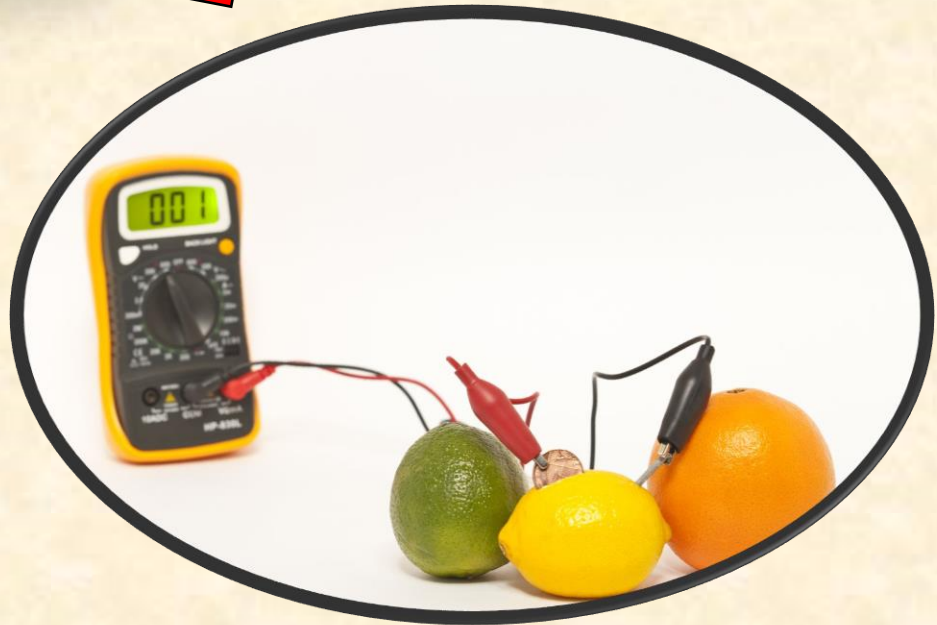
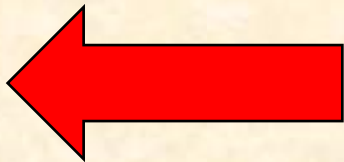


**About 85% of all houses in Iceland are heated with geothermal energy.**

# CONCLUSION



# Game Time!



A hand is shown holding a glass globe of the Earth. The globe is partially filled with water, and a large splash of water is erupting from the top. The background is a bright, blue, rippling water surface. The text "Thank you!" is written in a bold, red, sans-serif font across the middle of the globe.

**Thank you!**



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