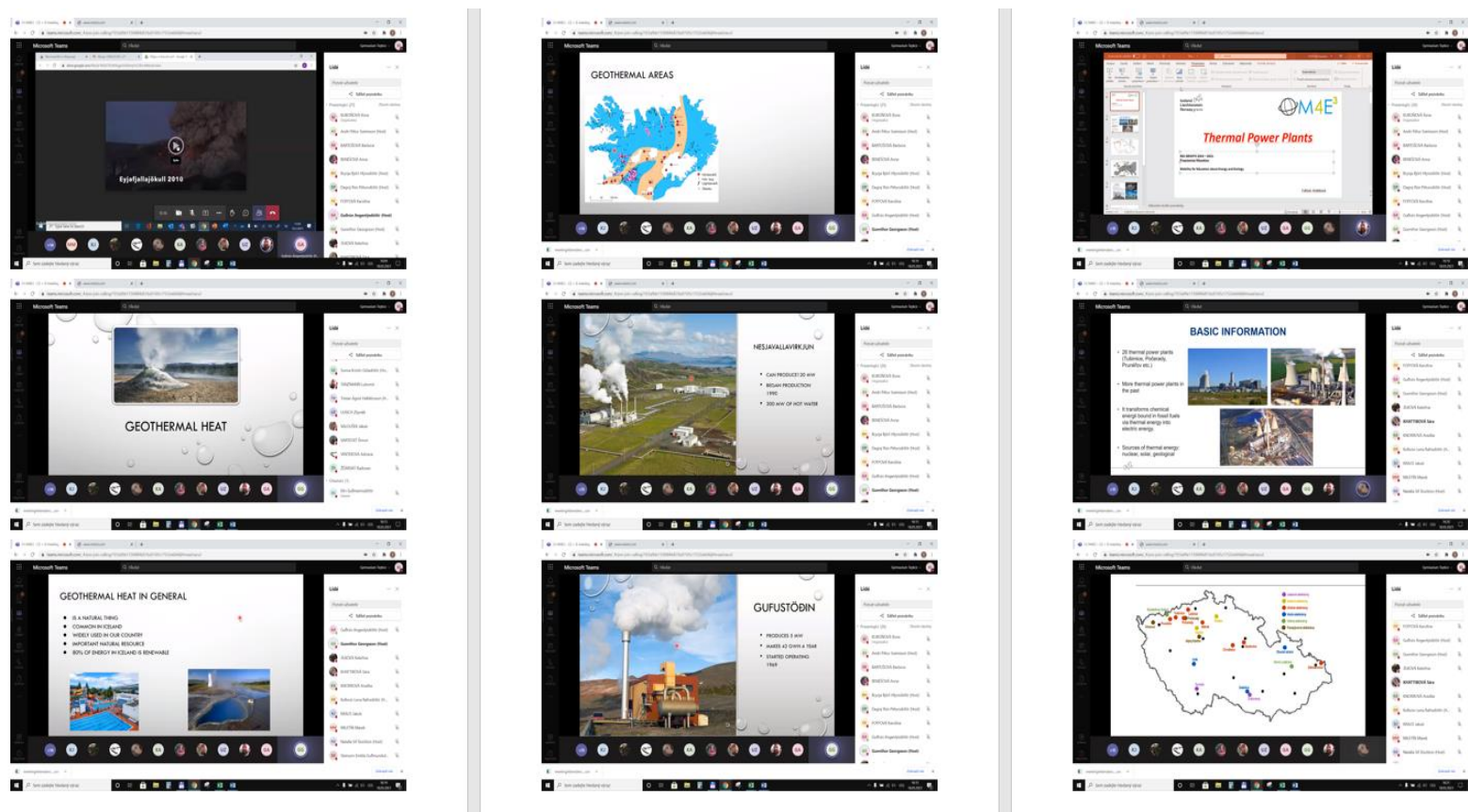


Mobility for Education about Energy and Ecology - EHP-CZ-MOP-1-012

Virtual mobility IS + CZ: 18. 3. 2021

Topic: Presentation about energy sources



LEDVICE

- The oldest thermal power plant
- Built between 1960 - 1962
- 3 production departments in the past
- These days, there are only 2 departments in function
- The highest nuclear power in the Czech Republic

How do they work?

- Thermal energy
- Mechanical energy
- Electrical energy

Advantages and disadvantages

- Fuel is quite cheap
- Require less land
- Pollution of the atmosphere
- Low efficiency

Nuclear Power Plants

EEA GRANTS 2014 – 2021:
Programme Education
Mobility for Education about Energy and Ecology

Diagram of VVER Nuclear Power Reactor

Nuclear Power Plants in the Czech Republic

- 32 %
- Dukovany
 - South-west
 - 1985
 - VVER-440
 - Power 4 + 510 MW
- Děčín
 - South-west
 - 2002
 - VVER - 1000
 - Power 2 x 1000 MW

Status of Nuclear Power in Europe

Advantages and Disadvantages of Nuclear Energy

- It does not emit greenhouse gases - We save 1.8 billion tons of CO₂
- Produces large amount of power at a single power plant (efficiency 30 - 40 %)
- Accidents can emit radioactive materials
- No good solution to disposal of nuclear waste

Nuclear disasters

- Chernobyl
 - 26.4.1986
 - Explosion of RBMK reactor
 - Safety test
 - Area of 30 km radius
 - Cancer, mental illnesses
- Fukushima
 - 11.3.2011
 - Earthquakes and tsunami
 - Massive water pollution