



Bulgarian Seminar, Energy Källhagens skola, Finland

ITTC It's Time to Care



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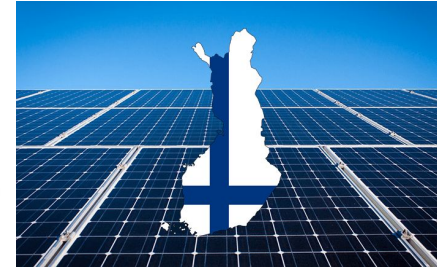


IT'S TIME TO CARE!

ERASMUS+ 2018-2020

1. Renewable Energy - Sources and Technologies

- In Inkoo we have solar energy on five buildings: a daycare center, farm municipality, a home for elderly people, a treatment plant, municipality's water course. The goal is to make the town environmentally friendly place, reduce carbon dioxide emissions, and on the long run save the local residents money.
- For the moment we don't have any windmills in Inkoo, since the last tree were disassembled in spring 2018.
- After Sweden, Finland has the second-highest share of renewable energy in Europe. Hydroelectric is the second largest renewable energy source in Finland after bioenergy. The hydroelectric plants prevent the migrating fishes way to water. The artificial pools covers big areas, organisms are destroyed and harmful substances are transmitted to fishes and people. Counterweight is the energy produced by water extremely small emissions of greenhouse gasses.



2. Ecological impact of energy production technologies on man and his ecosystem

- Human activity is a threat to the planet's biodiversity because of the population growing faster and faster as it gets larger, which leads to overpopulation and not enough resources for everybody.
- Offshore wind farms in Europe: Collision statistics is 0.1-1.2 birds per turbine/year
- Global warming due to release of CO₂ from energy production from fossil fuels
- Pollution
- Hinku project. The Hinku project in Lohja is about decreasing the amount of greenhouse gasses produced.

3. Energy efficiency and environmental impact

- **How do we waste energy?** We have many computers and other technical things on around the clock. We leave the lights on when we leave the room/when its empty.Washes semi-full machines with clothes or dishes, overall clothes what are not dirty.
- **What can we do?**You can build enough insulated houses. Reduce waste. Stop buying things we really don't need. Turn off the lights and other machines. And use compost.



- **What can we do to reduce energy consumption in our homes, schools, offices, cities?**

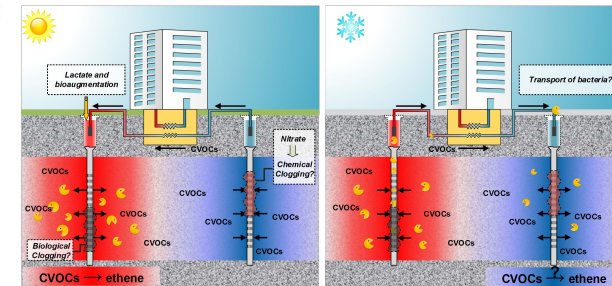
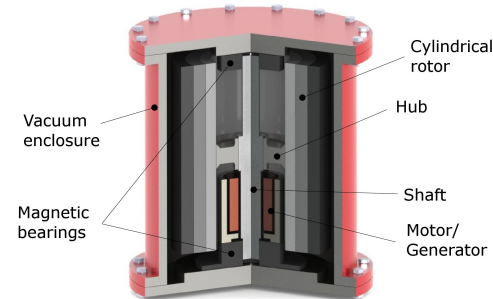
For home You can do everything that was said in the last question. In school, for example, you can become a green school where you reduce waste and then also sort the waste. In offices or job places you can reduce waste and remember to turn off the lights and switch off machines. In cities, waste must be reduced. Turning of the lights is still just as important.

- **Are there any initiatives/campaigns in your towns that stimulate energy efficiency?**

There are many daycare centers often put solar panels on their buildings so they can use more nature friendly energi also schools put solar panels on their buildings like your school that are going to get solar panels during this year's summer.

4. Modern technologies for storing energy from renewable sources

- Compressed air energy storages (CAES)
- Hydrogen and pumped hydrogen storages
- Flywheels
- Thermal storages



5. The future of the energy sector - prospects for development in your country

- Right now we have nuclear power stations, windmills, coal power plants, hydroelectricity, bioenergy and solar energy in Finland.
- In the future we try to get rid of nuclear power stations and coal power plant and instead of that we try to invest on solar energy, windmills, bioenergy, hydropower and geo energy
- Wave energy and geo energy
- good and bad sides with these energy sources
- How much different energy sources affect the climate



Geo energy, Espoo

Yksityisille / Tuotteet ja palvelut / Geolämpö

**Puhdasta geolämpöä
maan syvyyksistä**

<https://www.st1.fi/geolampo>

6. The New Energy in Automotive

- In the future we try to replace the cars witch is using fossil fuel, to electric cars and gas cars
- good and bad sides with electric cars and gas cars
- examples of electric cars: Tesla, Angelica car and Toroidion and the first electric car in the world was a fire engine



Thank you!



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Links

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Mikä Hinku-hanke? - Lohja

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[Vindkraften ska rädda klimatet men i södra Finland finns knappt några ...](#)

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