## Sustainable energy production in Finland

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#### About

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- Over a third of the energy produced in Finland is renewable
- Finland is one of the leading countries of Europe in producing and using sustainable energy (The others being Sweden, Latvia and Austria)
- The last government has planned that by 2030 at least 51% of the produced energy should be renewable
- In addition as a part of the energy- and climate strategy plan the usage of coal in heating and producing electricity will be banned from 1.5.2029.

#### Geothermal and aerothermal energy

In Finland most of our houses are warmed with geothermal energy.
--> We have this device that uses geothermal energy to warm up the house.

- Statistics says that in Finland 15% of households warm up their houses with geothermal energy.
- Geothermal energy is working with aerothermal energy together.
- --> So they dont work without each others
- --> they get heat energy from the earth.
- --> they can also be used to cool our houses down.

### Solar energy

- Solar energy is the cleanest available source of energy, emitting no harmful emissions or waste into the environment.
- The use of solar energy reduces carbon dioxide emmisions generated from traditional electricity production using fossil fuels.
- The use of solar energy also helps to protect natural areas that provide hab itats for local wildlife and vegetation, as the need for new energy production facilities decreases.
- The use of solar energy in Finland has tripled in the last three years.
- Finland has great conditions for the use of solar energy because solar powe r doesn't require constant sunshine; it can generate energy even on cloudy days.

# Water- and windpower

- Most of our energy is produced with water- and nuclearpower, while only about 10% is produced with windpower
- Over 140 windpower-plants were built in 2021, adding to a total of 962 plants towards the end of the year
- Nearly 80% of the materials used in constructing windpower units can be recycled
- The environmental effects of wind power can be significantly decreased with simply building them in convenient places
- The constructing of new waterpower-plants is very unlikely due to it being harmful to the environment and wildlife, but the productivity of already existing units can be increased with improving and fixing them
- Waterpower units work automatically without constant maintaining so the costs of maintaining are low
- It's able to produce massive amounts of reliable and firm power

### Biogas

- Biogas is an environmentally-friendly, renewable energy source produced by the breakdown of organic matter such as food scraps and animal waste.
- We mostly use it to produce warmth and electricity.
- Biogas is also used in our car fuel.
- Statistics says that from the entirety of finnish cars, 15% advances from biogas.

### Sources



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