



GOOD TO KNOW

ABOUT

HYDROPOWER

Hydropower is a renewable energy source, but not without adverse impacts on nature. This leaflet aims to inform what you should know about hydropower and renewable energy as consumers and citizens.

EKOenergy is a non-profit, international environmental ecolabel for renewable energy

EKOenergy communicates to consumers about energy that is produced from renewable sources and according to sustainability criteria.

The origin of EKOenergy-labelled electricity in Europe is certified with Guarantees of Origin. From the sales of electricity, a licence fee is always paid to EKOenergy, in addition to a Climate Fund contribution of 0,10 euro/Mwh, to support renewable energy projects in developing countries.

EKOenergy-labelled hydropower

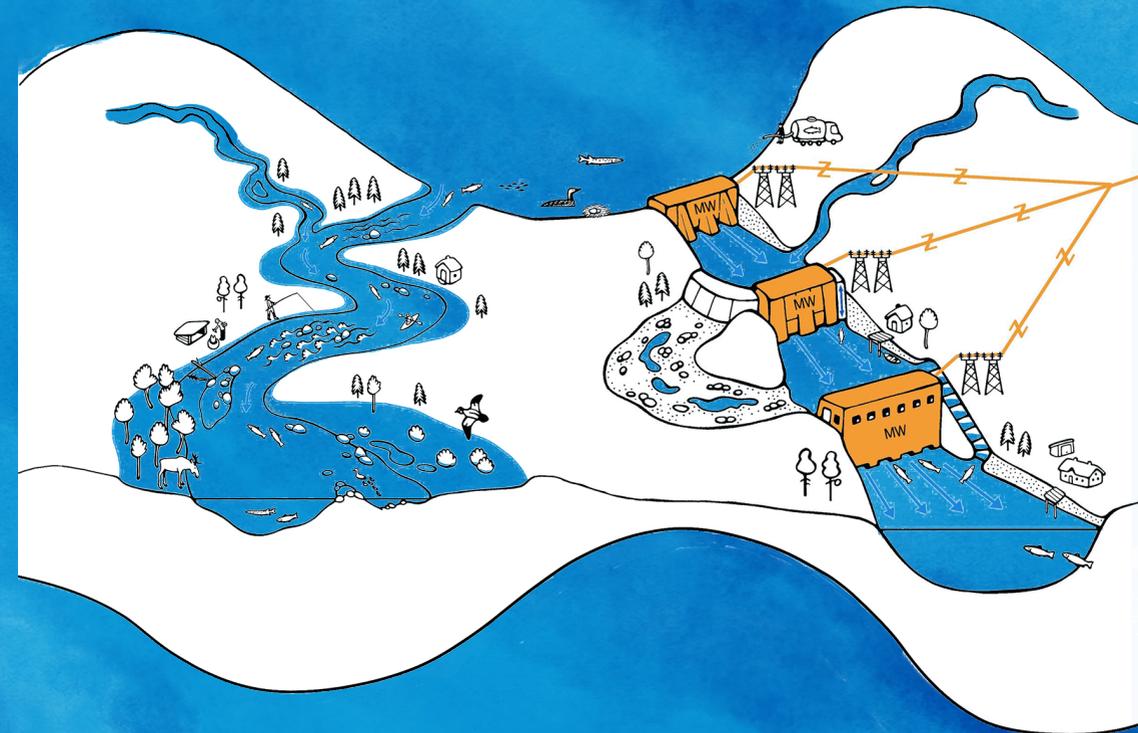
In addition to other renewable energy, EKOenergy also labels electricity that is produced with hydropower. The ecolabel is not issued for a company but for electricity sales from a certain production site, with the following criteria:

1. power plant complies with local laws and its permit conditions
2. power plant fulfils EKOenergy's environmental requirements- the update of requirements is taking place presently
3. in addition of Climate Fund fee, sales of EKOenergy-labelled hydropower contribute to Environmental Fund 0,10 eur/Mwh. These funds are annually used for supporting river projects that compensate, repair or mitigate the adverse natural impacts of hydropower.

Read more in www.ekoenergy.org



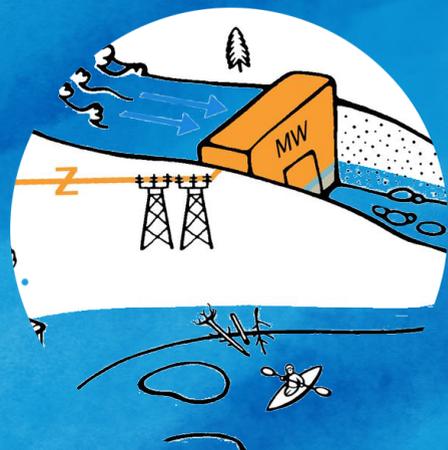
FRESHBIT LIFE IP (LIFE14/IPE/FI/023)



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The advantage of hydropower is the renewability of the energy source. It also allows time-efficient adjustments in electricity production according to demand. Hydropower plants are relatively long-lasting and the constructed capacity is readily available.

The disadvantages of hydropower are strong modifications of river habitats. Stream and riparian ecosystems are threatened. Migratory fish populations have become extinct in many rivers. The damming of rivers and regulation of water bodies change ecosystems and landscape, and restricts recreation use. In certain conditions, reservoirs can also emit methane, which in many ways is a more damaging green-house gas than carbon dioxide.



In Finland, the largest share of hydropower capacity was built after the World War II. At that time it was crucial to get electricity for the needs of reconstruction and industrialisation. Environmental issues were not considered and left for the future generations to worry about.



Read more about the natural impacts of hydropower.

As a starting point, an easy-to-understand material is available on-line at vesivoimanluonto.org (in Finnish with key sections in English also).

WHAT CAN I DO?

1

Reduce your energy consumption.

The greenest electricity is the one that is spared. Try to avoid electrical heating, which contributes to the winter-time electricity demand peaks in Finland and justifies the need to build more adjustable production capacity such as hydropower.

2

If you consider buying hydroelectricity, **buy EKOenergy ecolabelled electricity**. This is the best way to guarantee that the hydropower plant fulfills set minimum criteria

- Does the plant safeguard a flow in the river reach, suitable for living and reproduction of river organisms?
- Does the plant take into account fish migration?
- Is the concession of the plant updated and has the plant already implemented permit conditions?

3

Find your way to act for rivers!

Many non-profit organizations such as Finnish Association for Nature Conservation, WWF, Stream Restoration Society are working for streams and rivers in Finland.