

EKOenergy – Network and label

8.3 Specific requirements

C. Hydroelectric power

The EKOenergy Network promotes an environmentally conscious hydropower industry, minimal impact on nature from existing installations, and the protection of habitats and ecosystems of free-flowing rivers. The EKOenergy ecolabel aims at prevention and mitigation of the environmental impact of hydropower in the immediate site of the power plant and in the affected watercourse, or compensation elsewhere.

Because river habitats are widely threatened, EKOenergy does not support the development of new hydropower installations. We accept power plants that started operation before 1st January 2013. EKOenergy focuses on power plants that are located in countries where information that is needed for ecolabelling is available.

River Restoration Fund

All hydropower installations have some adverse and irreversible impacts on river ecosystems. Thus, in addition to the licence fee (see 6.3.) and contribution to the Climate Fund (see 9.1.), EKOenergy hydropower sellers contribute to the EKOenergy River Restoration Fund. For each megawatt-hour sold as EKOenergy hydropower, a contribution of minimum 0,10 euro (ten eurocents) is paid into the River Restoration Fund.

The EKOenergy River Restoration Fund is managed by the EKOenergy Secretariat, under the supervision of the EKOenergy Board. Costs related to the management of the Fund must not exceed 5% of the amount contributed to the Fund.

The funds raised for the River Restoration Fund are used to implement projects that reduce, mitigate or compensate the environmental damage caused by hydropower. An open call for projects is organized annually, taking into account the country of origin of the electricity production and the country where the electricity has been sold. Project proposals are evaluated by an independent expert panel. Important elements in the selection of the projects to be financed are ecological significance, cost-efficiency, ecological and social impact, opportunities for co-financing, communication potential and the financial solvency of the applicant.

The financed projects are managed by the beneficiaries who are in charge of the implementation and communication of the project. The EKOenergy Secretariat communicates about the project outcomes in collaboration with the suppliers from whom the money originated (through EKOenergy sales).

Environmental requirements for hydroelectric installations

In addition to the general requirements for EKOenergy (e.g. fulfilling all legal requirements, see 8.2.), EKOenergy sets specific requirements for hydropower installations. These requirements are in agreement with international good practice of mitigating the impacts of hydropower. Thus they aim to safeguard river continuity, ensuring the ecological flow requirements are met and creating suitable reproduction habitats for river species. Concession/legal permit documentation is always used as a starting reference, even though national laws and regulations vary in strictness.

EKOenergy supports the implementation of the European Water Framework Directive (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy), in particular the measures that improve the ecological state of rivers and riparian zones.

The environmental requirements include three criteria: water flow, fish migration and river habitats. Each criterion includes basic performance level and extra performance level. For the hydropower installation to qualify for EKOenergy, within each criterion the basic level must *always* be reached. In addition, an extra performance level must be reached within *one* of the three criteria.

Criterion 1: WATER FLOW

Description: The operation of the plant guarantees an adequate and uninterrupted flow to the lower channel, either through turbines or through a bypass channel.

Indicators: Points of flow measurements on a map, flow curves (m³/s), reports.

Basic: Minimum water discharge is defined, and hydro-peaking with zero flow to the lower channel (shortcutting) in normal operation of the plant does not occur.

Extra: Ecological flow for the river has been defined and applied in the planning of the operation of the power plant, or in the planning of relevant mitigation measures.

Criterion 2: FISH MIGRATION

Description: Fish can pass the hydropower installation upstream and downstream on their own as needed.

Indicators: Photographs, fish pass on a map, monitoring reports.

Basic (option 1): Fish pass exists (natural bypass, technical fish pass).

OR

Basic (option 2): Power plant is located in a place where no fish could pass even before the construction of the power plants (including the one that is applying for the approval) and the power plant operation does not diminish possibilities for fish migration on other river stretches.

Extra: The function of the fish pass is monitored and feedback for improvement of upstream and downstream migration is collected.

Criterion 3: RIVER HABITATS

Description: Habitats for species that inhabit and reproduce in the river ecosystems exist in the target river (the main river affected by the hydropower plant).

Indicators: Habitat locations on a map, reports

Basic (option 1): Reproduction areas (for salmonid fish or other important river species) exist either in the river reach, in a natural bypass channel, in old natural reach or in a compensatory reach built for this purpose.

OR

Basic (option 2): The plant is located in a strongly modified river (defined according to European Water Framework Directive, 2000/60/EC) where restoring or creating more river habitats would not lead to a better state of the ecosystem cost-effectively. The power plant owner (electricity producer) makes an additional contribution of ten eurocents per megawatt-hour of its annual production to the River Restoration Fund.

Extra: Reproduction areas are defined in hectares and monitored in terms of their significance for river organisms (e.g. smolt production per hectare)

Application procedure, publicity and issuing period

Electricity from hydropower installations can only be sold as EKOenergy after an application procedure. The procedure to get plant(s) approved is as follows:

- Application to the EKOenergy Secretariat according to the Guidelines (ANNEX). The applicant is the producer of the electricity, or optionally the trader or seller.
- Fact-check and public consultation
- Decision-making and approval of the power plant(s) by the EKOenergy Secretariat

A separate application should be submitted for each power plant. All measures that are necessary to fulfil the requirements need to be completed before the approval can be issued.

Public consultation means that the application will be available online for a minimum of 30 days. Relevant stakeholders and the EKOenergy Board are informed and asked to comment as needed. Relevant stakeholders include in particular national or regional environmental NGOs and river basin management cooperation groups.

The list of EKOenergy-approved hydropower plants is publicly available on www.ekoenergy.org. The list includes a summary report showing how the criteria were met by the power plant.

The approval of hydropower plants is valid for 5 years, thereafter the application can be renewed with updated information.

A hydropower plant will be removed at any time from the list if it does not fulfil

- a) all legal requirements in force at the place of production and imposed by its permits (see also paragraph 8.2).
- b) environmental requirements for hydroelectric installations (as described in paragraph 8.3.), as accepted during the issuing process and verified with application documents

Consistence with other ecolabels

Hydropower plants that have been certified under European labelling schemes for sustainable hydropower are entitled to sell EKOenergy without application procedure.

For this purpose, European labelling schemes for sustainable hydropower include NatureMade Star (www.naturemade.org) and Bra Miljöval (<https://www.naturskyddsforeningen.se/bra-miljoval>). If other certification schemes are developed to guarantee the compliance with adequate sustainability criteria, the EKOenergy Board will accept and review applications for such certification schemes to be granted the same status.