

# ANNEX: Guidelines for the applicant of EKOenergy approved hydropower

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The application (in free format) should include the following information:

## 1. The hydropower plant

- Name
- Owner and contact information
- Operator of the plant (if not the same as the owner) and contact information
- Year of construction
- Fall height
- Capacity and annual electricity production (on average)
- Turbine type

## 2. The permits of the power plant

- Issuing year of the permit, and according to what law
- Obligations concerning water level regulation and water discharge included in the permit
- Obligation to give water (e.g. to by-pass channels), obligation to take care of the fish population (fish passages, any restoration measures, fish stock seeding, other measures or a combination of these), fisheries fees, other obligations
- Analysis on the present state of fulfilment of the conditions and obligations stated in the permits.

## 3. The water basin (where the power plant is located)

- The name of the river basin and the river/tributary
- The ecological state of the water body affected by the power plant, describing separately the hydro-morphological state
- The river basin management cooperation group, plan and/or action plan, that is prepared for the river water basin area affected by the plant

## 4. Dams (constructions, blocks) and clearing (flow-straightening, homogenizing)

- Dammed, dug or dried-up stream, area (hectares)
- Reproduction area for migratory fish that has been lost due to damming (upstream) or clearing (downstream)

## 5. Fish migration and monitoring

- Has fish moved upstream passing the location of the plant, before the plant was built? A list of relevant fish species.
- Is there a fish pass or other solution to safeguard the migration of fish upstream and downstream? In case of a fish pass, describe construction year, the type of construction, does it include reproduction/spawning areas, watering (months) and flow (m<sup>3</sup>).

- Follow-up and reporting of fish migration (attach reports on fish surveys in the power plant impact area)

#### 6. Effects on other, non-fish species communities

- Description of the affected flora and fauna (e.g. mussels, birds, plants)
- Description of the central impacts of the hydropower plant to the species communities

#### 7. Flow regulation

- Description of the natural flow conditions in the water body during annual cycle (dry season – flood season)
- Report on the regulation capacity / type of the hydropower plant (run-off river, impoundment, pumped-storage)
- What is the water flow in the river? Cubic meters per second
  - Minimum flow
  - Annual average flow
  - Maximal flow
- Construction flow of the plant (optimized flow through the turbines)
- Minimum flow that is discharged through the plant (minimum flow that is run through the turbines)
- Is there hydro-peaking caused by the power plant? A report of hydro-peaking
- A report on the impacts of flow regulation up- and down-stream from the plant in terms of high and low water levels (meters) and flows (cubic meters per second)

#### 8. List of relevant stakeholders, identified by the applicant

E.g. specialist groups, the water basin management group, NGO's

#### ANNEX

- Map with the location of the plant in the context of the river and the water basin
- Annotated map of the plant that shows channels for water intake and outflow, and fish migration solutions
- Valid permit(s) for the plant
- Other relevant reports related to flow, fish migration and/or river habitats