



FACTSHEET

2012

## Conservation

# Challenges to Danube Wetlands

## Hydropower



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**Hundreds of hydropower plants are planned or already being built along virtually all tributaries of the Danube River. In many cases, the clean energy that they produce will come at an exorbitant cost.**

### Clean, but at a cost

Hydroelectric power is one of the most widely used and cheapest ways to generate electricity. Hydroelectric power is for the most part pollution-free, but there are environmental and social impacts involved. The operation of hydropower stations includes the construction of dams which can represent a significant

disturbance to the natural environment. Aside from disrupting fish migration and habitats, changes in flow regimes of water and sediment can seriously impact natural habitats and local communities. Often, the negative impacts incurred far outweigh the benefits.

### WWF's goal is reducing environmental impacts

WWF and partner organizations throughout the region are developing guidelines for sustainable use of hydropower in the Danube River basin as well as detailed maps showing the

ecological value of different rivers and river stretches. The overall goal is that strategic planning principles are integrated into the Danube River Basin Management Plan and national legislation.



**DAMS DISTURB  
THE ENVIRONMENT**

**Additional measures include:**

- Setting long-term energy policies aiming at phasing out fossil fuels and nuclear energy while reducing overall energy consumption.
- Proper application of Strategic Environmental Assessments and Environmental Impact Assessments.
- Decommissioning of obsolete dams or of structures at locations critical for river continuity.
- Optimising (upgrading, refurbishing, possibly extending) existing hydropower infrastructure. Such technical mitigation measures (e.g. “fish friendly” turbines) can considerably increase energy production without deteriorating environmental conditions.
- Involving stakeholders, in particular local communities, and NGOs from the start – their knowledge can be used to define the best design and location, and their involvement can avoid future conflicts.
- Eco-labels can promote sustainability but require sufficient understanding of river ecology.

**Low-impact hydropower stations as a solution**

One low-impact option is to improve existing hydropower stations and make them more efficient. The process of retrofitting old stations with modern equipment helps ageing dams produce more electricity. Typical investments include replacing turbines and generators; adding machines to facilitate periods of high demand; increasing storage capacity by raising the height of the dam. Our goal is to reduce the adverse impacts of hydropower development and to promote good practices in the region.



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**Why we are here.**

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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