The Future of Swiss Hydropower (HP):
Swiss Concession Renewal

Challenges and Opportunities in the current context

Renewal of HP concessions is an imminent issue, as discussions can take place 15 years prior to actual renewal.

In Switzerland, the water fee system is imposing companies on the installed power, not on the annual power production or on the profit resulting from operation.

Current electricity prices and context largely limit the launch of new investments in HP in Switzerland.

Electricity prices in Europe have drastically dropped in the recent years, leading to new tensions for new and retrofitted HP plants implementation and operation.

In the current and coming years, a unique window of opportunity for concession renewal is opening.

However, serious challenges have to be addressed in this renewal phase of water rights to use HP.

Some contributions to those imminent challenges can be provided and are currently under research, by...

... Coping with uncertainty by increasing the managerial flexibility of the hydropower project

... Developing a generic framework for sustainability assessment, allowing a comparable and systematic evaluation of projects

... Improving the bidding process of the concession, to ensure sustainability and rent value are taken as major criteria

Necessity to ensure the highest level of sustainability in HP plants construction, retrofitting and future operations.

Necessity to ensure the highest level of rent for local communities.

Long lasting infrastructure, large positive and negative impacts and high investments increase the necessity for HP to reach the highest level of sustainability.

HP relies on renewable natural cycles, and might afford large contribution to shutting down existing fossil-fuel and nuclear power plants.

The rent value assessment is largely challenged by the existence of uncertainties (eg. long term assessment, confidentiality of companies). However, underestimation of the rent value can lead to competition law infringement.

In Switzerland, the end of HP concessions is set to be 80 years as of the Federal level. However, some cantons chose to reduce this length down to 40 years.

Legal aspects

Granting and management of concessions is a cantonal competency in Switzerland. As such, conditions largely vary between cantons. The maximal length of 80 years is set at the Federal level. However, some cantons chose to reduce this length down to 40 years.

Scientific literature