

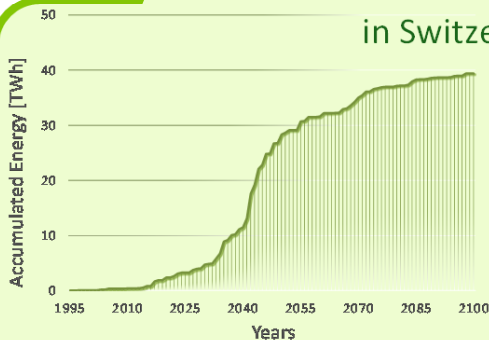
The Future of Swiss Hydropower (HP): Swiss Concession Renewal

Challenges and Opportunities in the current context



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

Current context in Switzerland



End of HP concessions in Switzerland, by average yearly production

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

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

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

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

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

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

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

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

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

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

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

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

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**

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

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

Work in progress

Scientific literature
Voegeli, Gaudard, Hediger and Romerio (2016), *Framework for decision-making process in granting rights to use hydropower in the European Context*.