The Future of Swiss Hydropower

Overview

How can Swiss Hydropower cope with the current market framework? What future role will Swiss Hydropower play in the ‘Energie Strategie 2050’? What does this mean for the Swiss Cantons and Communities?

WP1: HP Operation
What are the short-term operational options for Swiss hydro plants to cope with the volatile market environment?
- Development of a short-term model framework
- Incorporation of different flexibility aspects

WP2: HP Investment
What are the long-term investment options for Swiss HP and how can uncertainty be accounted?
- Development of an investment/retrofitting framework
- Accounting for the most important sources of uncertainty

WP3: HP Sustainability
What are the regional impacts of these developments from a comprehensive sustainability perspective?
- Impact analysis and sustainability assessment
- Role and consequences for regional stakeholders

Major challenges for Swiss Energy Strategy 2050:
- Increase of hydro output → requires retrofitting, new investments
- Integration of renewable generation → need for more flexibility
- Social Acceptance → need for regional stakeholder involvement

The deliverables: HP Future will...
- Create a flexible methodology and tooling to optimize HP operation to cope with the envisioned increase of renewable generation
- Develop an assessment approach for HP investments able to cope with uncertainty and providing insights on the envisioned HP output increase
- Engage in a comprehensive stakeholder process, enabling better informed decision making for public bodies, regulatory authorities, electricity companies, and the Swiss citizen
- Provide recommendations of regulatory and market measures

Contact

René Schumann, WP1
Institute of Information Systems
rene.schumann@hevs.ch

Werner Hediger, WP3
Zentrum für Wirtschaftspolitische Forschung (ZWF)
werner.hediger@htwchur.ch

Franco Romerio, WP2
Institute for Environmental Sciences
franco.romerio@unige.ch

Hannes Weigt, Lead
Forschungsstelle Nachhaltige Energie- und Wasserversorgung (FoNEW)
hannes.weigt@unibas.ch

Industrial partners:
Alpiq
Azienda Elettrica Ticinese (AET)
Forces Motrices Valaisannes (FMV)
Misurio
Repower

Energy Turnaround

Subprojects

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