



POWERING EUROPE IN A
SUSTAINABLE WAY

HYDROPOWER EUROPE Alpine Workshop

11 - 12 September 2019

**Ecole Polytechnique Fédérale de Lausanne
Lausanne, Switzerland**



The HYDROPOWER EUROPE Forum is supported by a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 826010

Agenda

11 September 2019

12:00 – 13:00 **Registrations**

Opening Remarks

13:00 – 13:05 **Anton Schleiss**, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

HYDROPOWER EUROPE: Powering Europe in a Sustainable Way

13:05 – 13:20 *Presentation of the Project*
Anton Schleiss, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

How to Build the Research & Innovation Agenda and Strategic Industry Roadmap for the Hydropower Sector

13:20 – 13:35 *Presentation of the Consultation Process*
Patrick Clerens, Secretary General, EASE – The European Association for Storage of Energy

A Policy Framework that Fosters Research and Innovation for Hydropower in Europe

13:35 – 13:50 **Thomas Schleker**, Project Officer, Directorate-General for Research and Innovation, European Commission

Views of Swiss high-level officials

13:50 – 14:20 **Christian Dupraz**, Head of Hydropower, Swiss Federal Office of Energy

Michel Piot, Expert, Swiss Water Association

14:20 – 14:40 **Q&A**

14:40 – 15:00 **Coffee Break**

Perspectives and Case Studies for Hydropower: Regional Outlook in Alpine Countries

15:00 – 16:00 **Moderator: Anton Schleiss**, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

Nicolas Rouge, Senior Asset Manager - Hydropower production, Alpiq

Hydropower in Italy: the importance of the numerous uses for water resources

Sergio Adami, Head of Global Hydroelectric Centre, ENEL

Alexander Schwery, Chief Engineer Electrical, GE Renewable Energy

Global overview of the key challenges and opportunities of Hydropower in Europe from the industrial EDF perspective

Denis Aelbrecht, Chief of the Technical Mission, EDF Hydro

16:00 – 16:20 **Q&A**

16:20 – 16:40 **Coffee Break**

Perspectives and Case Studies for Hydropower: Regional Outlook in Alpine Countries

Moderator: Anton Schleiss, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

Integration and role of Hydro assets in the local territories

16:40 – 17:40 **Dorothee Manière**, Responsible for territorial anchoring and stakeholders' relations – Hydropower production, EDF Hydro

Juergen Schuol, Head of Sustainability - Group Division Hydro, Voith Hydro

Thomas Buchsbaum, Technical Expert, Kleinwasserkraft Österreich (KWÖ)

Marko Hočevár, PhD, University of Ljubljana - Faculty of Mechanical Engineering

17:40 – 18:00 **Q&A**

Closing Remarks

18:00 – 18:10 **Anton Schleiss**, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

18:30 – 20:00 **EPFL Visit Hydraulic Laboratory**

The modern experimental hall of the Platform of Hydraulic Constructions (PL-LCH) at the Ecole Polytechnique Fédérale de Lausanne (EPFL) enables a vast range of scale model studies. The Platform of Hydraulic Constructions (PL-LCH) maintains a permanent synergy between teaching, research and services. Hydraulic engineering of civil structures and systems constitutes the main field of activity of PL-LCH. In particular, PL-LCH focuses by the help of not only physical but also numerical modelling on hydropower plants and dams and related appurtenant

structures, water supply systems in rural and urban areas, river draining works as well as extreme flood determination and safety of hydraulic structures. (For more information please see: <https://www.epfl.ch/labs/lch/>)

12 September 2019

8:30 – 9:00 **Registrations**

Opening Remarks

9:00 – 9:05 **Patrick Clerens**, Secretary General, EASE – The European Association for Storage of Energy

State-of-Art of the Research and Innovation Agenda

9:05 – 9:20 **Anton Schleiss**, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

9:20 – 9:30 **Q&A**

Debating the Research and Innovation Agenda

Participants, divided into focus groups, will have the possibility to discuss strengths, weaknesses, opportunities and threats around specific issues that the Hydropower sector has to face in Europe.

The discussion will be focused on several statements covering the following topics:

- 9:30 – 10:30
- The challenge of increasing storage in existing or with new reservoirs
 - Pumped hydro storage: a tool to enable security and flexibility of the energy system
 - Uprating existing hydropower plants: technical challenges and opportunities
 - Possible contribution of small hydropower and hydro marine energy solutions
 - Role of hydropower in mitigation of global warming effects considering performance and resilience
 - Innovative design, multi-purpose projects and social acceptance

10:30 – 11:00 **Coffee Break**

Presentation of Focus Group Results

Moderator: **Patrick Clerens**, Secretary General, EASE – The European Association for Storage of Energy

11:00 – 12:00

One representative for each focus group will present the outcome of the discussion and the key needs for the development of a Research and Innovation Agenda for Hydropower.

The presentations will be followed by Q&A.

12:00 – 13:00 **Lunch**

Opening Statement

13:00 – 13:05 **Hendrik Multhaupt**, Hydropower Advisor, VGB PowerTech E.V

State-of-Art of the Strategic Industry Roadmap

13:05 – 13:20 **Anton Schleiss**, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

13:20 – 13:30 **Q&A**

Debating the Strategic Industry Roadmap

Participants, divided into focus groups, will have the possibility to discuss strengths, weaknesses, opportunities and threats that the Hydropower sector has to face in Europe.

13:30 – 14:30 The discussion will be focused on several statements covering the following topics:

- Potential development and research needs
- Challenge of hydropower large scale deployment
- Sustainability and auxiliary services: flood protection, navigation, water supply, irrigation...
- Environmentally friendly solutions: a future business case for hydro?
- Hydropower: a safe long-term investment with high economic return under liberalized and undistorted market conditions

14:30 – 15:00 **Coffee Break**

Presentation of Focus Group Results

Moderator: Anton Schleiss, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator

15:00 – 16:00 One representative for each focus group will present the outcome of the discussion and the key needs for the development of a Strategic Industry Roadmap for Hydropower.

The presentations will be followed by Q&A.

Closing Remarks

16:00 – 16:10 **Anton Schleiss**, Honorary President, International Commission on Large Dams and HYDROPOWER EUROPE Project Coordinator