

Dams and Reservoirs: climate change adaptation and public awareness strategies

AQUAWATT: Hydropower in the Energy Transition

Piacenza, 30th October 2024 - 9:30 – Room A

The European Union has committed to turning Europe into the first climate neutral continent by 2050. This transition to a greener future puts hydropower at the forefront of two specific issues. On the one hand, it can contribute to cover the greater demand for grid flexibility and balancing services to enable a higher integration of variable renewables. On the other hand, thanks to its storage capacity, hydropower can provide climate mitigation and adaptation services, particularly in case of long periods of drought or flooding due to heavy rainfall. These socio-economic benefits are valuable but difficult to quantify, even though they avert costly agricultural and societal disasters every year. Considering that climate change is likely to exacerbate water stress and scarcity worldwide, creating strong economic interests around this common good, already deemed as "blue gold", hydropower must play a proactive role in responsible, sustainable, and multi-purpose water management. However, there is still a need to raise awareness among society regarding the effectiveness of dams and reservoirs in providing water, energy and food security, flood control, firefighting, and opportunities to organize sports competitions and recreational activities for families.

In this workshop, AQUAWATT presents how climate change adaptation calls for ever-better governance of the water resource and how a greater awareness of the role of dams and reservoirs in our society is essential for managing often-competing interests while ensuring the water-energy-food nexus.

WORKSHOP curated by ITCOLD and ETIP HYDROPOWER (3 hours)

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| 09:30 - 09:40 | Introduction
Giovanni Ruggeri, former President of ITCOLD |
| 09:40 - 10:10 | The role of dams in energy transition and climate change adaptation: the ICOLD World Declaration
Michel Lino, President of ICOLD |
| 10:10 - 10:30 | ETIP HYDROPOWER: the impact of climate change on water and energy security in Europe
Antonella Frigerio, Governing Board of ETIP HYDROPOWER, RSE |
| 10:30 - 10:50 | Water reservoirs and dams in the EU: complexities and challenges for their sustainable operation within the WEFE (Water Energy Food Ecosystem) nexus
Emanuele Quaranta, European Commission, DG Joint Research Centre |
| 10:50 - 11:10 | Management of water stocks for sustainability, safety and resource protection in the energy transition
Damiano Di Simine, Legambiente Lombardia |
| 11:10 - 11:30 | The system of dams serving the Southern Apennine Hydrographic District in Italy
Giuseppe Grimaldi & Pasquale Coccaro, Autorità di Bacino Distrettuale dell'Appennino Meridionale |
| 11:30 - 11:50 | Strategies and actions for Public Awareness on Dam Benefits: Dam Day in Europe
Sera Lazaridou, President of EURCOLD |
| 11:50 - 12:10 | ITCOLD's initiatives to promote public awareness of dams and reservoirs
Guido Mazzà, President of ITCOLD |
| 12:10 - 12:30 | Open discussion |