

# The role of hydropower in the energy transition process

*AQUAWATT: Hydropower in the Energy Transition*

*Piacenza, 29<sup>th</sup> October 2024 – 14:30 – Room A*

Strengthening the role of hydropower plants, thanks to the advantages offered today by new technologies aimed at improving generation flexibility and energy storage capacity (e.g., digitalisation, more flexible turbines, hybridisation), is a necessary factor to provide the balancing services increasingly needed by the power grid for the exploitation of renewable energy characterized by intermittent generation.

The workshop aims to provide insights on the advantages offered by the deployment of new flexibility technologies and hydropower pumped storage facilities to achieve European green deal goals towards a climate-neutral energy system. The benefits of other solutions, such as floating photovoltaic systems for reservoirs or the heightening of existing dams to increase water storage capacity, are addressed.

The initiatives promoted by AQUAWATT thus constitute a specific framework dedicated to the role of hydropower in the energy transition aimed at identifying possible synergies for the development of the sector.

*WORKSHOP curated by ITCOLD and ETIP HYDROPOWER (3 hours)*

## **Introduction**

Antonella Frigerio, Governing Board of ETIP HYDROPOWER, RSE

## **Hydropower as catalyst for the energy transition in Europe**

Jean-Jacques Fry, ETIP HYDROPOWER Secretariat

## **XFLEX HYDRO: increasing the flexibility of hydropower**

Matteo Bianciotto, International Hydropower Association (IHA)

## **Hybridization of hydroelectric plants with floating & Canal coverage PV plants: a great opportunity**

Michele Verzillo, ENEL Green Power

## **Sustainable development of pumped hydro storage for a green energy transition in Europe**

Emanuele Quaranta, Joint Research Center (JRC)

## **Innovation and experience in international hydropower projects: from pumped storage to dams heightening**

Marcelo Leite Ribeiro, Gruner

## **Pumped hydro storage in Italy: present and future development**

Ezio Baldovin, Geotecna Progetti

## **Utility scale storage needs and market-based support scheme in Italy**

Michele Benini, RSE

## **Open discussion**