## Find out more about iAMP-Hydro

Visit our website to register for the Community of Practice, find out what's happening in the project, about the latest results, and the next possibility to get directly involved:

# www.iamp-hydro.eu





# iAMP-Hydro

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## **Communication & Dissemination**

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in







Cuerva\*









#### The iAMP-Hydro Project

The current hydropower plant fleet in the EU is aged, and it is estimated that 50% of the fleet will require upgrade actions by 2030. In particular, modernisation actions related to digitalisation are required in the short to medium term, in order to offer enhanced services, increase grid flexibility, environmental and socio-economic sustainability and to foster the green and digital transitions in Europe.

The iAMP-Hydro project will improve the operations of existing hydropower stations through the development of new digital sensors and services. Combined, these will form a novel intelligent Asset Management Platform, the iAMP.

The iAMP will encompass secure, open and transparent data-sharing protocols and three novel digital solutions. These include new condition monitoring and predictive maintenance tools for hydropower turbines, the ecological water status monitoring, and improved weather and flow forecasting.



<sup>\*</sup> R6 Evidence of current baseline and achievable improvements in 5 existing hydropower plants

The following aspects are worked on in the project to reach the iAMP-Hydro objectives:

- Condition Monitoring of Hydropower Equipment
- Predictive Maintenance Modelling
- Ecology Monitoring Sensor Development, Data Analysis & Smart Flow Steering
- Flow & Available Power Prediction Model Development
- Semantic Interoperability Mechanisms for Hydropower, Energy & other relevant Data
- End-User Requirements and Architecture Design for the ICT Components of iAMP-Hydro & iAMP implementation
- Data Analytics and Hydro Asset Management Platform Development
- System Validation in Operating Hydro plants & Case studies

#### The iAMP-Hydro demonstration sites

The different approaches are assessed in four different hydropower sites in Spain (Bermejales, La Vega, and Bérchules) and in Greece (Makrochori).



#### → Get involved

Over the course of the project, iAMP-Hydro invites interested stakeholders to participate in so-called **Co-Development Workshops**, to find out about the latest project results, to discuss these, and share opinions and experiences how the digitalisation of hydropower plants can contribute to an increased energy production from renewable energy sources.

Stakeholders are also invited to learn and discuss the project results in the Community of Practice of the iAMP-Hydro project.