



PROJECT

XFLEX HYDRO

Hydropower Extending Power System Flexibility

The XFLEX HYDRO project will demonstrate how modern hydroelectric power plants can provide the vital grid services required by variable renewable energies, such as wind and solar energy.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 857832.

19

PARTNERS

6

COUNTRIES

€ 18M

TOTAL BUDGET

4

YEARS

XFLEX HYDRO

EN UN CLICK

Coordinator	Programme	Dates
EPFL	HORIZON 2020	2019-2023
Sector	Web	
Hydropower		

01

The Challenge

Supporting the EU's targets for 2030 wants to show how modern hydroelectric power plants can provide the vital services required by any country that invests in variable renewable energies such as solar and wind energy. Its aim is to help the EU reach the target of 32% of energy from renewable sources by 2030.

02

The Solution

XFLEX HYDRO will demonstrate new hydropower technologies such as intelligent controls, improved fixed and variable speed turbine systems, as well as a hybrid battery and turbine in European power plants. The project will conclude with a roadmap for increasing adoption of the technologies throughout the hydroelectric fleet, with policy and market recommendations for governments, regulators and industry.)

03

Impacts

The XFLEX HYDRO project will test innovative solutions based on renewable energy sources that will provide greater flexibility and sustainability to the energy system. The project aims to increase the potential of hydropower in terms of plant efficiency, thereby boosting electric power systems and enabling plant and system operators to operate more successfully in electricity markets. This can make a powerful contribution to Europe's renewable energy objectives and policies.