



## **X-FLEX: Flexible solutions for decentralised energy grids**

November 2020, Valencia (Spain). - [X-FLEX](#), project funded by the European Union's Horizon 2020 research and innovation programme with a budget of €9,5 M, is designing, developing and demonstrating a set of tools in order to integrate the emerging decentralized Renewable Energy Sources (RES) and other flexibility systems into the existing European energy ecosystem, in an efficient and cost-effective manner, in order to create more stable, secure and sustainable smart grids.

In October 2019, 12 partners from 6 European countries have started working in X-FLEX project, led by the Spanish company ETRA, which will be run for four years.

Up to now, the projects and research activities in this area have been focused mainly on specific energy sources and actors, considering only a very limited and isolated part of the distribution network, leaving aside all the opportunities existing throughout the flexibility offered by the energy value chain. In this context, "X-FLEX H2020 project proposes a new concept that will integrate and create synergies among all energy flexibility sources and technologies, promoting an efficient cooperation among all the actors of the smart grid and energy market", as explains ETRA's team.

All the stakeholders of the smart grid value chain are taking into consideration within X-FLEX project, from DSO to final consumers, including microgrid operators and TSOs, considering flexibility in both on the generation and on the demand side, on an individual or aggregated level.

In total, X-FLEX will develop four complementary products so-called: Serviflex, Gridflex, Marketflex and X-FLEX Platform. They will enable flexibility managers to optimally leverage the value of flexibility from the different flexible sources; allow network and microgrid operators to monitor the grid in a simple and safe way, responding to supply quality problems; and, also, provide end consumers and intermediaries with access to the energy market and interact with wholesalers and distributors.

These solutions will be tested in real conditions in four pilot sites in three EU Member states (Bulgaria, Slovenia and Greece), with different needs and socioeconomic and technological boundaries, involving multiple flexibility assets (batteries, power to heat/cold, vehicle to grid and other storage solutions) and all complementary actors of the energy network.

X-FLEX project contributes to achieve EU's energy objectives and a climate neutral economy by 2050 as well as to ensure a socially fair transition while delivering on Europe's competitiveness. It will address decarbonisation of energy supply through the integration of distributed RES and other flexibility sources (batteries, power to heat, electric vehicles, new market mechanisms and demand response) and the enhancement of regional and local cooperation among energy



stakeholders, including the participation of local communities and prosumers in the retail energy market and demand response schemes.

**Further information:**

**Lola Alacreu (X-FLEX Coordinator)**

**ETRA I+D**

C/ Tres Forques, 147 46014 VALENCIA (ESPAÑA)

Tel.:+34 96 313 40 82

eMail: lalacreu.etraid@grupoetra.com

**Raquel Castán (X-FLEX Project Communication Manager)**

**ETRA I+D**

C/ Tres Forques, 147 46014 VALENCIA (ESPAÑA)

Tel.:+34 96 313 40 82

eMail: rcastan.etraid@grupoetra.com

**Website:** <http://xflexproject.eu/>

**Video:** <https://youtu.be/mTVZw8NWaJQ>

**Twitter:** [@XFlex\\_H2020](https://twitter.com/XFlex_H2020)