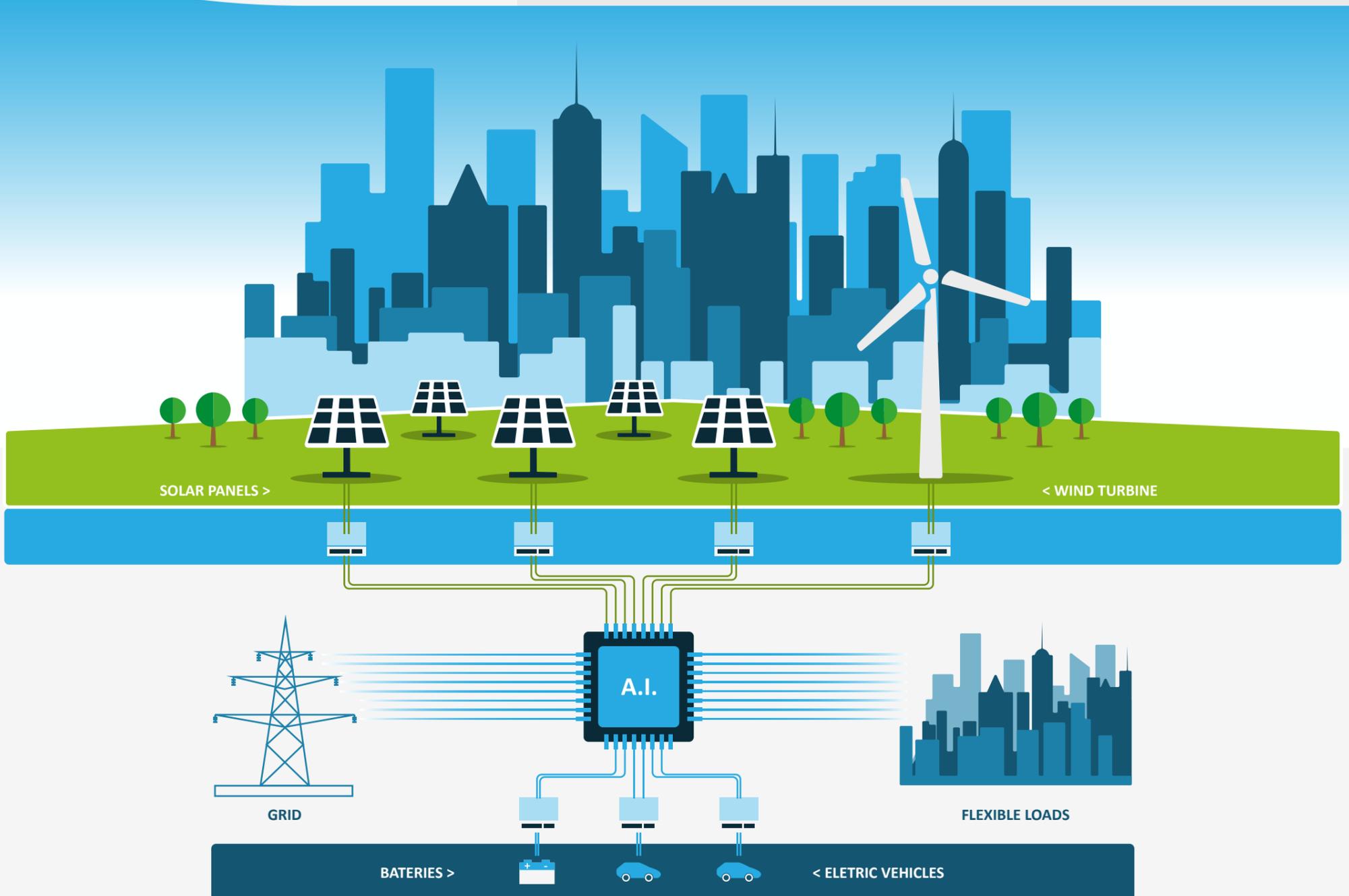




SCALING-UP POWER FLEXIBLE COMMUNITIES EMPOWERED BY BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE

FleXunity project aims to deploy novel services for retailers and aggregators, enhanced by Virtual Power Plant technology empowered with AI algorithms that can be focused on minimising the cost of energy bought in the wholesale market and optimizing the use of distributed renewables from the utility or community portfolio.



The Expected Results

Flexibility pool engine optimised

with AI mechanisms for enabling energy and flexibility management, compliant with utility revenues maximization at community level and end-user comfort and energy dynamic requirements. Attractive and informative end-user dashboard and applications backed with blockchain.

Robust and highly scalable back-end VPP

enabling Framework supported by na IoT architecture; including high-speed data acquisition and transmission module, high speed data and signal processing module, as big-data analytics and storage module.

New market design and new balancing services

to accommodate aggregated flexibility offers. With the definition of innovative tariff options that will ensure end-user engagement and facilitate their participation on market signals, as well as reduce the payback period of PV and batteries investments and optimise energy

The Work Plan

Two demonstration pilots (Iberia and UK) would be undertaken in real – world buildings and communities to ensure technology fulfils user and technical requirements under different markets, legal frameworks and diverse stakeholders. In the ambit of these two pilot projects there would be installed the following equipment: PV solar panels, batteries, flexibility management devices for remote control and EV charging stations.

The Project Consortium

To achieve successfully this 24-month, 3,7 M€ valued action, a project Consortium of 5 members has been gathered:

