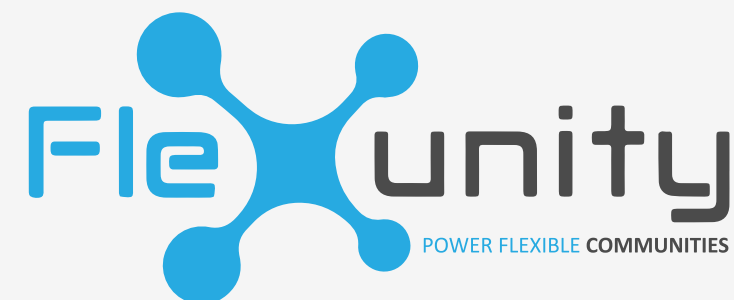


flexunity.eu

You can also follow our project
in social Network:





FleXunity project aims to deploy innovative services for energy communities, retailers and aggregators.

Enhanced by Virtual Power Plant (VPP) technology, empowered with AI algorithms.

FleXunity focuses on minimizing the cost of energy and optimizing the use of distributed renewables from the utility or community portfolio. Our energy community approach will promote active participation of end-users monetizing their flexibility and energy sharing, supported by secure transaction mechanisms with technologies such as blockchain.

OUR NUMBERS:

24

FleXunity
Duration
in months

05

FleXunity
Consortium
partners

02

FleXunity
Pilots
number

03

Levels
of Innovative
Business Models



The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nr. 870146

Our main objectives:

- 1) Validate AI algorithms and blockchain deployment in an operational environment to reach high scalability, test the reliability of system performance and validate end-user applications;
- 2) Validate the end-to-end VPP enabling Framework, complying with user and technical requirements under different market conditions and diverse stakeholders;
- 3) Validate three levels of Innovative Business Models for energy communities and grid balancing services;
- 4) Pave the way for market-wide uptake and for scaling up for commercialization.

The key project outcomes will be achieved by

testing and demonstrating the proposed services in two distinct pilots with very different market conditions:

**IBERIAN
energy
market**
(in transformation –
opening to use flexibility
from demand-side)

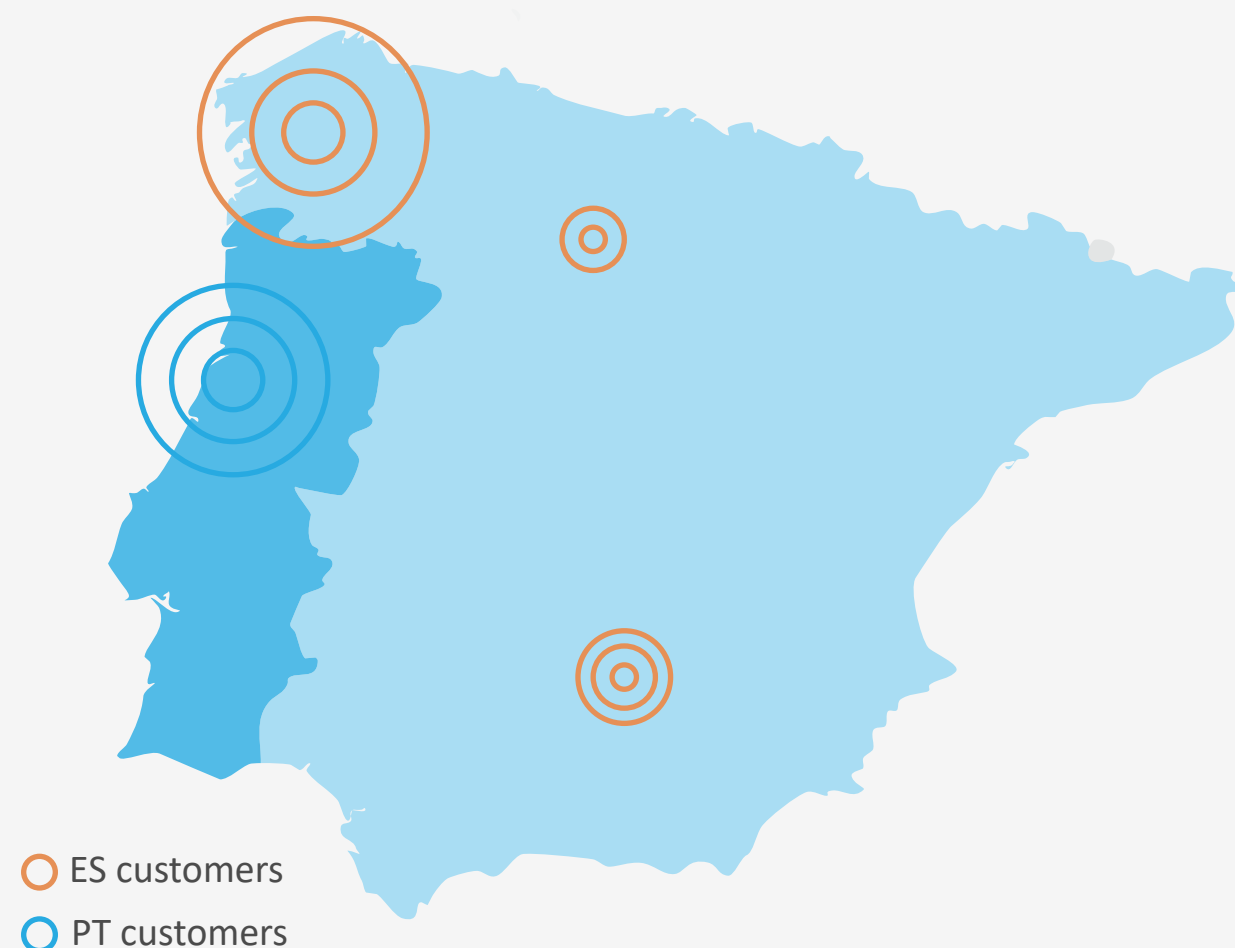
**UK
energy
market**
(open mature market)



PILOT

IBERIAN energy market

(currently in
transformation - opening
up to use flexibility from
demand-side)



The Iberian pilot comprises of a distributed flexible energy community across two distinct countries: Portugal and Spain.

Internet of Things (IoT) devices and cloud-based platforms will be deployed at each site to enable control of small loads. With the objective to enable the validation of the overall flexibility platform and its innovative services, the project is installing:

- * PV and battery storage
- * V2G/X electric vehicle charging
- * Energy monitoring and management devices



All the information about the pilot sites can be found here, clicking on D6.1 – Pilot sites survey and audits report

Pilot sites successfully recruited in Portugal

01

Home
with PV

05

Homes
without PV

02

Non-residential
sites

Pilot sites successfully recruited in Spain

19

Homes
with PV

05

Homes
without PV

04

Non-residential
sites

Non-residential sites include office buildings, a hotel, a municipality building, and a water service facility

IoT devices to be installed

200

IBERIAN pilot community at a glance:

0.5

GWh

Total annual
consumption

333

kW

Total
flexibility

101

kW

Total PV
power



PILOT

UK energy market

(open mature market)



The Pilot Community is located in Corby, Northamptonshire and represents a localized pilot community with members clustered within the geographical area of the Borough of Corby.

The pilot in Corby will leverage pre-existing PV systems on homes and buildings and will add new storage and energy management devices to enable control of the community's collective flexibility profile. IoT devices and cloud-based platforms will be deployed at each site to enable control of small loads. With the objective to enable the validation of the overall flexibility platform and its innovative services, the project is installing:

- * Battery storage
- * V2G/X electric vehicle charging
- * Energy monitoring and management devices

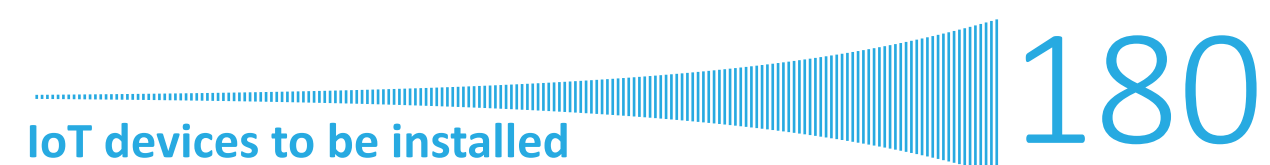


All the information about the pilot sites can be found here, clicking on D6.1 – Pilot sites survey and audits report

Pilot sites successfully recruited in the UK, in Corby, Northamptonshire



Non-residential sites include: Industrial food manufacturer, Industrial equipment manufacturer, Business centre and a Municipal vehicle and maintenance depot



UK pilot community at a glance:

