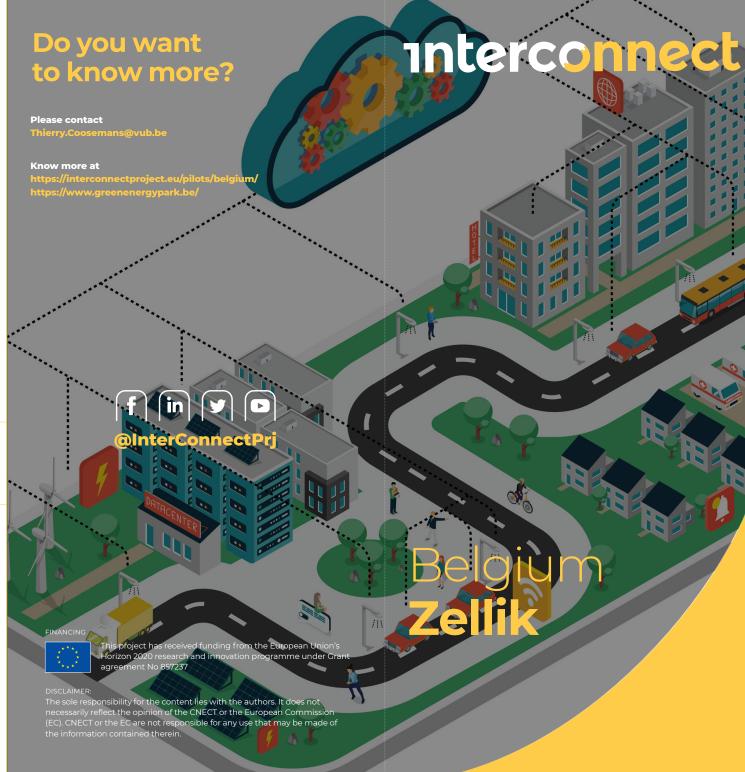


Partners involved









Location



Objectives

The Green Energy Park is a project of construction and development of an innovation centre on green energy, that will be operational in 2021. It lays in an industrial zone – Research Park Zellik – where another 70 companies, from different sectors, are active.

The primary objective of the Green Energy Campus will be to develop and implement a CO_2 neutral, self-sufficient multi-energy grid, that also serves as a living lab to develop, test, and validate market product and services for microgrids in real-life conditions. On the short term, the objective is to install digital meters for all the existing buildings and create a digital twin – a scale model that visualises the live energy data.

We want to achieve the following goals:

- → Local energy community based on P2P energy trading.
- → Aggregation of different smart homes to the smart grid.
- → Demonstrate the value of integrating bidirectional charging infrastructure and household appliances inside the micro-grid.
- → Enable flexibility services.
- → Increase RES.

Technologies & Infrastructures

The Green Energy Park will be a large-scale living lab that will enable the proof of concept of the IoT based technologies developed under InterConnect framework. Users will have access to their energy consumption data and will be allowed to control their assets. Additionally, users will have access to flexibility services, trading electricity whilst empowering them an increasing RES. Its infrastructure is composed by dwellings, smart home lab, tertiary offices and tertiary labs. The Green Energy Park will have the following technologies:

PV Panels



Energy storage

- → Neighbourhood batteries
- → House batteries



EV charging infrastructure

The charging infrastructure will consist of several charging points. It will include V2G system and fast charging points.



Smart whitegoods

Washing machines, dryers, fridges, heat pumps and others that will be controlled remotely by user preferences.



Energy management system

It will be an energy management platform that allows users to set preferences, control and monitor their energy consumptions, as well as receiving suggestions on their energy consumption behaviour.



green energy park 2