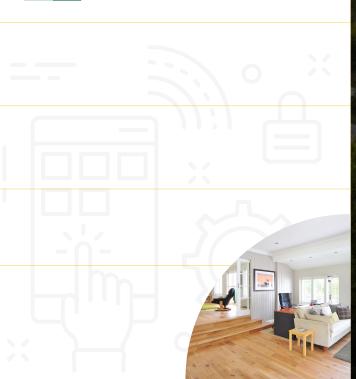


Partners involved







Location



Objectives

Thor Park will be the test location for integrating Grid-interactive buildings in a common ICT platform in order to make them controllable as a Local Energy Community (LEC). By coordinating the flexible consumption of the buildings, related to EV charging and cooling, the collective self-consumption of local renewable generation will be increased, and it will be demonstrated how grid congestion problems can be mitigated.

The main goal of this pilot for the InterConnect project is to set up an integrated Building and Neighbourhood Energy Management system where Building Energy Management Systems share the forecasted consumption and flexibility information that results from their building-centric optimization with a Neighbourhood Energy Management system. The latter uses this information to determine an optimal and grid-secure consumption plan for the collection of buildings, with appropriate flexibility activations in each of them.

Our objectives are to:

- → Manage flexibility at community level to reduce electricity bill.
- → Maximise flexibility at community level to mitigate local grid congestion problems.
 - Optimally coordinate the operation of EV charging and Cooling to make the most effective use of local generation.

Technologies & Infrastructures

Thor Park is a new science and business park on a former mining site, and it is the first regulatory sandbox in Belgium.

Three buildings will be part of this pilot:

EnergyVille 1 building

- → PV: 369 kWp;
- → EV charging stations: 527kW, 27 sockets distributed over 7 brands; including fast charging (AC and DC) and one Vehicle-to-Grid;
- → HP cooling 150 kW / heating 180 kW;
- → Smart whitegoods.

IncubaThor building

→ HP cooling: 418 kW.

Parking Tower

- → PV: 54 kWp
- → EV charging stations: 10 x 11kW
- → A research/office building with PV, EV charging poles and smart whitegoods

