



InterConnect (Interoperable Solutions
Connecting Smart Homes, Buildings and
Grids) is the name of the project that gathers
50 European entities to develop and
demonstrate advanced solutions for
connecting and converging digital homes
and buildings with the electricity sector.
The main goal? Bringing efficient energy
management within reach of the end-users
by interoperable Solutions Connecting
Smart Homes, Buildings and Grids.

The project, which was approved by the European Commission under the Horizon 2020 programme, places the foundation for the future of smart energy management solutions by seven connected large-scale test-sites in Portugal, Belgium, Germany, the Netherlands, Italy, Greece and France.

The solutions developed within the scope of InterConnect will allow a digitalisation of homes, buildings and electric grids based on an Internet of Things (IoT) architecture. By including digital technologies (artificial intelligence, Blockchain, Cloud and Big Data) based on open standards, such as SAREF, it will guarantee the interoperability between equipment, systems and privacy/cybersecurity of user data. Energy users in buildings, either residential or non-residential, manufacturers, distribution grid operators and the energy retailers will have the opportunity to take advantage of these solutions.

The InterConnect project will focus on eight major domains: standardisation, ontology, digital platforms, IoT, cloud, electric grid, big data and cybersecurity.

Development of advanced solutions for buildings and electric grid with different objectives:





Large-scale pilots leading to market driven deployments



Establish
interoperability
framework validating
SAREF and semantic
interoperability







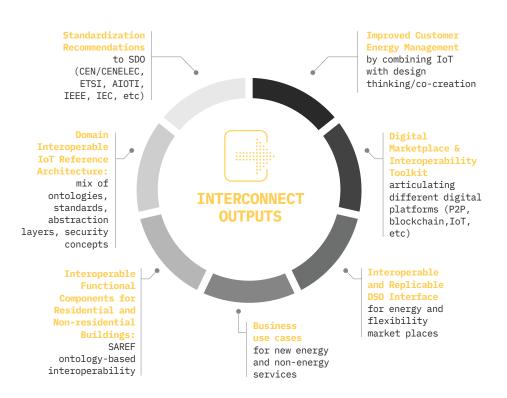
Marketplace of integrated digital platforms bridging the gap between IoT and energy



User-centric energy and non-energy services

To produce long-term outcomes





Large-scale demonstration pilots in seven different European countries:





Greece

Large residential community with smart appliances and EV integration

France
Residential & non-residential,

with tertiary buildings and apartments

Portugal
Residential & geographically
widespread tertiary buildings

Netherlands
Residential & non-residential buildings

Groups of re

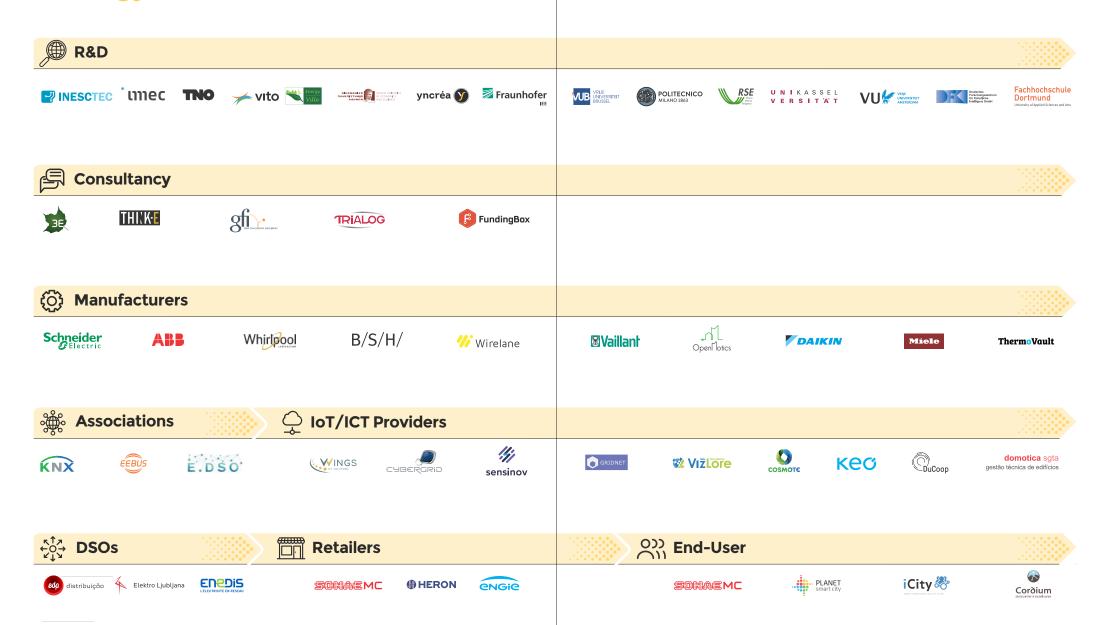
Groups of residential buildings and hotels

Belgium

residential and tertiary buildings in communities of multi-energy vectors

Italy Residential social housing

InterConnect 51 Project Members covering full IoT & energy value chain



The InterConnect project outcomes will have an impact to different stakeholders



INTERMEDIARIES

Digital Single Market









IoT Industry









Energy Community



- -DSOs/DSFs/DRES
- -Grid users/storage
- -Electric Vehicles
- -Domestic PV
- -Behind-meter storage

European regions/ Cities







- Real estate builders
- Government hodies
- Smart home related associations



Regulators & Policy Makers



End-users

(home/building owners)



Developers

(SMEs & Startups)



System Integrators FINAL TARGETS

INTERMEDIARIES

Standardization **Bodies**



International Networks





Influencers

- -CE Influencers
- -EU Projects
- -Scientist/Researchers
- -Relevant Media
- -PR Agencies

Others

- -Building Designers/
- -Operators
- -Consultants
- -Students



General Public

Our milestones

	2019	2020		2021		2022	2023
Use cases, business models and services	Services and business use cases identified	and	essment of f non-function uirements fi	nal			
Domain interoperable IoT reference architecture	Architecture, related s and ontologies document						
Semantically interoperable components, applications and devices for smart homes and buildings	Components SAREFized and integrated in Digital Platforms						
Smart grids framework for an interoperable energy system	Standardized DSO interf ready for testing in pi				platfor	exibility rm available sting in pilots	
Digital platforms and marketplace	Catalogue of digital platforms, services and systems available			rable marketplace and enablers ready ts			
Preparation, coordination and monitoring of pilots	Field tests are up and running						
Large-scale demonstration and integration of solutions	Demonstrated solutions Results communicated to		ers				
Sustainability of the interconnect project	InterConnect community launched					pact assessment concluded d recommendations available	

Cascading

Besides the developments that will be conducted by the 50 partners of the consortium, the project will also foster innovation to expand the ecosystem of players by offering opportunities for entrepreneurs through open calls.

3 open calls will be launched to select 42 innovative bottom-up projects – 14 prototypes and 28 small -demonstrators

The open calls will be launched in 2022. In 2023 the prototypes and small-demonstrators will be executed



