# NETWORKING

# NTEGRATE

## STRATEGY

## **URBAN ECOSYSTEM**

A replicable, systemic and integrated strategy to transform European cities and urban ecosystems into the Smart Cities of the Future

SYSTEMI

# INNOVATIVE

 $\bigcirc$ 

ABLE

### **COMMUNITY OF INTEREST**







# METHODOLOGY



CITyFiED is a pioneering smart city project based on a mix of demonstration, technologies and sound business models. It has developed a replicable, systemic and integrated strategy for sustainably renovating residential districts. The benefits include reduced thermal energy consumption, lower greenhouse gas emissions and greater use of renewable energy.

The buildings all have 12 floors with 4 dwellings on each. They were

built between 1977 and 1981. Retrofitting took place between May 2014

and March 2018, allowing over 4,000 residents to benefit from the project.

LAGUNA DE DUERO | Torrelago District The Torrelago demo site consists of 31 private buildings.

### **CITyFiED** Community

To ensure outreach, the project team set up a broad community of smart cities and stakeholders both locally and across Europe.

3 demo sites in different countries served as real-life test cases for deep building retrofitting, novel district heating and grid management solutions, all of which have been designed to be sustainable and costeffective.

CITyFiED attracted 11 European smart cities to encourage replication of these new measures and methods. In addition, 44 other cities have closely followed the interventions at the demo sites for their own benefit.

### **3 DEMO CITIES**

### **LUND** | Linero District

Linero is a housing district where two blocks - Eddan and Havamal consist of 28 three-level council dwellings, built in the early 1970s. The demo site involves approximately 2,000 tenants. Buildings after the retrofitting have an energy performance that resembles new buildings.

### **Energy Efficiency Measures Energy Efficiency Measures Energy Efficiency Measures** Facade renovation Facade renovation Facade renovation • New district heating (Biomass) • District heating (100% renewable) Solar thermal Monitoring platform Photovoltaic integration New pumping system Smart district heating Combined heat and power facility • Smart grid • Smart grid Monitoring platform Monitoring platform 1,488 dwellings 379 dwellings 31 buildings 16 buildings 17 buildings Conditioned area Conditioned area Conditioned area 35.6% 30.8% 59.4 % renewable 75.6% renewable 143,025 m<sup>2</sup> 7,037 m<sup>2</sup> 40,400 m<sup>2</sup> energy sources energy savings energy savings energy sources THE COMMUNITY OF INTEREST As a demonstration project, CITyFiED needed to encourage replication of its methods, technologies and benefits in other towns and cities @ivl acciona Skraftringen Amintamiento de **Demir**Eneri CONSORTIUM beyond the project consortium. To this end, the Community of Interest enabled the project to maximise its project's impact and legacy in the wider community. mir unique reengen CITY CLUSTER European cities with the highest potential for replicating CITyFiED's 50 retrofitting approach were invited to form a City Cluster to closely STEINBEIS tecnalia) Inspiring Business YOUr is.com \_\_\_\_ТÜВІТАК\_\_\_\_ follow the project's developments, insights and outcomes.

### Contact:

**Project Coordinator** Ali Vasallo Belver **Energy Division** Centro Tecnológico CARTIF cityfied@cityfied.eu

CITyFiED Dissemination & Communication Secretariat secretariat@cityfied.eu

### **SOMA** | Manisa Province

between 2014 and 2018.





CITyFiED is a member of My Smart City District and Community





The Soma demo district comprises 9,970 m<sup>2</sup> of gross area with 7,037 m<sup>2</sup> of conditioned area. Seventeen buildings with 200 dwellings have been energy-efficient retrofitted and some 150 inhabitants have directly benefited directly. The buildings were built in 1982 and the retrofitting took place

