# MAIN ACTIONS

## Summary of implementations in lighthouse cities



#### **ENERGY EFFICIENCY ACTIONS**

- Building Retrofitting in 696 dwellings and 34 commercial premises.
- District Heating System.
- Smart Grid and Demand Side Platform.



#### SUSTAINABLE MOBILITY ACTIONS

- Acquisition/Monitoring of 31 EV Cars, 26 e-motos, 4 e-buses, 112 e-taxis, 12 e-bikes.
- Advanced Charging Infrastructure, 151 charging points.
- Transport Management services for Citizens.



#### **ICT AND INFRASTRUCTURES ACTIONS**

- Smart City Platform integrating Local IT System.
- Open data and Citizen Participation services.
- Deployment of services and sensors.
- High Speed Wireless Mobile Network deployment.
- Public Smart Lighting deployment.



#### **CROSS CUTTING ACTIVITIES**

- Strategic planning, business models and exploitation.
- Replication and scale-up.
- Monitoring.



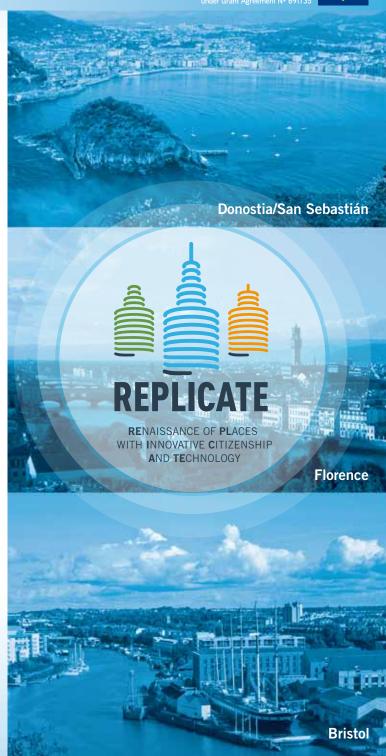
RENAISSANCE OF PLACES
WITH INNOVATIVE CITIZENSHIP
AND TECHNOLOGY

www.replicate-project.eu info@replicate-project.eu @ReplicateEU

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement Nº 691735











RENAISSANCE OF PLACES
WITH INNOVATIVE CITIZENSHIP
AND TECHNOLOGY

Coordinator: Fomento de San Sebastián (38 partners).

3 cities: San Sebastián, Florence, Bristol. 3 followers: Essen, Lausanne, Nilüfer. 2 observers: Bogota, Guangzhou.

Budget: 29,3 millions €.

5 years (60 months) project

Starting date: 01/02/2016. Y1-Y2-Y3 Implementation. Y4-Y5 Monitorisation.

**Our vision:** To increase the quality of life for citizens across Europe by demonstrating the impact of innovative technologies used to co-create Smart City services with citizens, and prove the optimal process for replicating successes within cities and across cities.

#### SCC1 SMART CITIES LIGHTHOUSE

**CALL:** SCC-01-2015 - Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse projects.

www.replicate-project.eu info@replicate-project.eu



San Sebastián, Florence and Bristol have already collaborated in the **STEEP project** (Systems Thinking for Comprehensive City Efficient Energy Planning) called Energy 2012. 8.8.1 Strategic sustainable planning and screening of the city plans.

www.smartsteep.eu







#### DONOSTIA / SAN SEBASTIÁN





Donostia / San Sebastián: Me 186.377 inhabitants 32

Metropolitan area: 324.511 inhabitants

#### URUMEA RIVERSIDE DISTRICT

Nearly zero district: District branding in sustainability. An integrated strategy aiming for a smart district

- Residential area + Industrial Park + Green Park.
- 200 hectares of surface.
- Industrial Park: 350 companies and 4.500 people.
- · Largest Green Park of the city Ametzagaina: carbon sink.

#### Actions

- Energy Efficiency in residential areas: Building Retrofitting (156 dwellings + 34 commercial premises). District Heating (service to more than 1.500 new properties + 156 existing dwellings) and Demand Side Platform.
- Sustainable Mobility: Connection of the area with the city centre, public and private e-mobility (bus, car, e-motos), charging infrastructure and advanced mobility services.
- ICT and Infrastructure deployment: Smart City Platform with integrated services, Open data and Citizen Participation services, IP services, high speed connectivity network and Smart lighting deployment.

#### FLORENCE





Florence: 377.587 inhabitants

Metropolitan area: 1.007.252 inhabitants

#### **NOVOLI / CASCINE / LE PIAGGE**

An integrated strategy for a first smart district to be replicated and scaled up

- Novoli urban park: The new entrance to the very centre with a mix of uses with residential but also industrial settlements dismissed and important tertiary activities closed to the Cascine, the biggest park in Florence.
- Residential area: 5000 m<sup>2</sup> constructed /6000 buildings.

#### Actions

- Energy Efficiency & District Heating.
- Smart grid and energy demand management: 600 smart info for families.
- Capillar e-mobility infrastructures, very fast recharge and e-taxi fleet, advanced mobility services to citizen.
- Data management and smart city control room.
- Smart lighting and intelligent systems (IoT).

#### BRISTOL





Bristol: 442.500 inhabitants

City Region:

1.104.300 inhabitants

### ASHLEY, EASTON & LAWRENCE HILL SMART DISTRICT

#### Social, economic, environmental challenges:

50.600 people – Bristol's largest district with its highest rate of population growth. A culturally diverse area with many new UK citizens.

- 10% of households in fuel poverty.
- 1/3 of area in the top 10% of deprived areas in UK.
- Less personal transport choice than city average.

#### Actions

- 240 homes retrofitted with energy efficient measures.
   Photo voltaic (PV) cells to public and community buildings.
- 150 connected homes with smart appliances.
- District Heating system connected to CHP energy centre.
- Energy demand management, including smart grid.
- 10 electric vehicles and 12 electric bikes.
- E-bike and e-vehicle charging points.
- On-demand EV public transport.
- New apps to help with parking and transport options.