BRISTOL
(United Kingdom)

FLORENCE
(Italy)

ESSEN
(Germany)

LAUSANNE
(Switzerland)

NILÜFER
(Turkey)

SAN SEBASTIÁN
(Spain)

······ Lighthouse cities
······ Follower cities

REPLICATE

REPLICATE PROJECT INSIGHT

Coordinator: San Sebastián (36 partners)

3 lighthouse: San Sebastiàn, 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 sity 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.

PLANNING FOR A BETTER LIFE

FIRENZE PILOT PARTNER

COMUNE DI FIRENZE

SPES CONSULTING DAL 2005 — 10 anni

UNIVERSITÀ DEGLI STUDI FIRENZE

Consiglio Nazionale delle Ricerche

e-distribuzione

mathema

THALES

TIM

REPLICATE

San Sebastián - Florence - Bristol

RENAISSANCE OF **PL**ACES
WITH **I**NNOVATIVE **C**ITIZENSHIP
AND **TE**CHNOLOGY

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@ReplicateEU

COMUNE DI FIRENZE

FIRENZE/ FLORENCE SMART CITY LIGHTHOUSE

REPLICATE

RENAISSANCE OF **PL**ACES
WITH **I**NNOVATIVE **C**ITIZENSHIP
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Florence:
377.587 inhabitants
Florence Metropolitan City:
1.007.252 inhabitants

Unesco World Heritage Site
The Historic Centre of Florence was added to the list on December, 1982

A city to visit, a city to live
not only artistic heritage, very fertile literary history, fashion and life style, landscapes and agricultural and food products but also high level industries in innovation and technology and excellent training institutes

THE DISTRICT: NOVOLI/CASCINE/LE PIAGGE

An integrated strategy aiming for a smart district to be replicate and scale up.
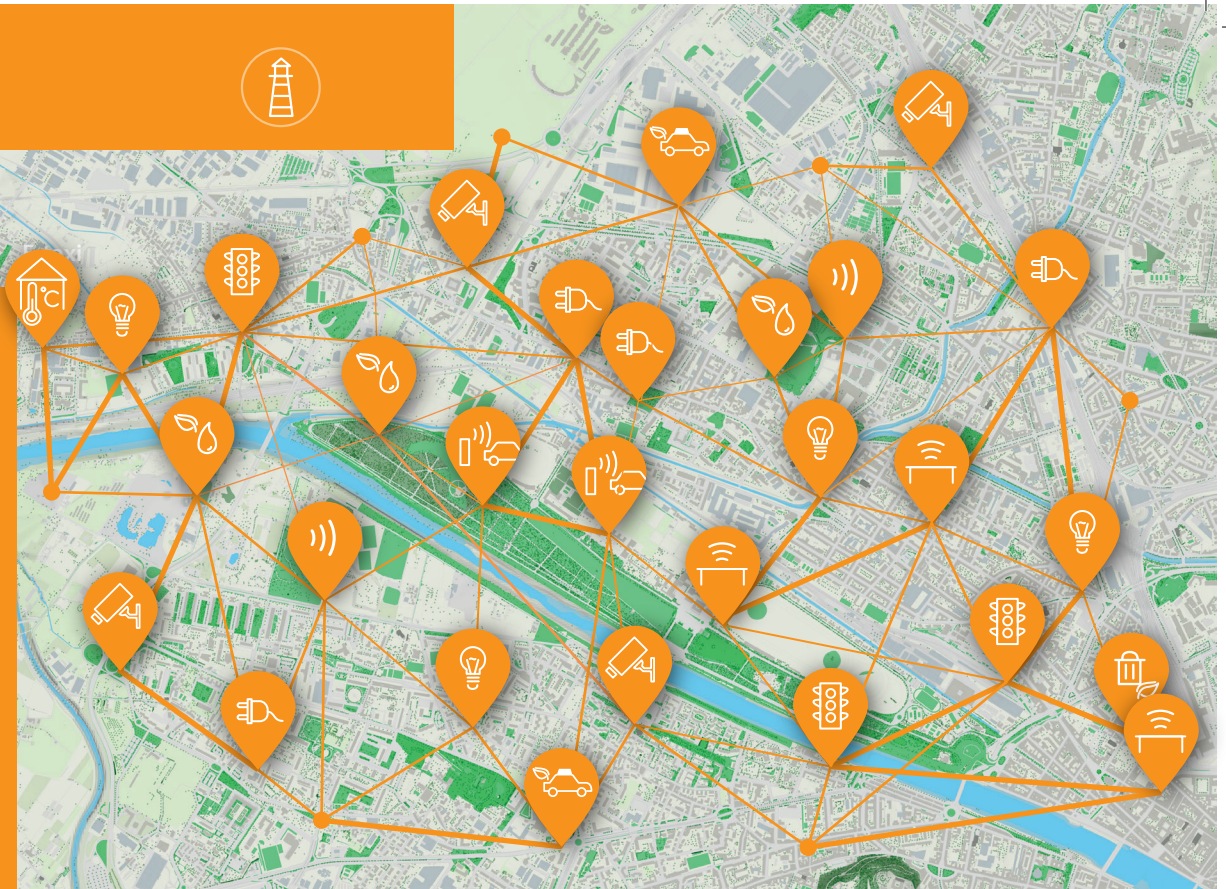- mix area used: industrial settlements dimissed (ex Fiat, Manifattura Tabacchi) and tertiary activities (University campus, Justice Court, Mercafir wholesale chain market,...)
- residential area: 5000 mq constructed area/6000 buildings
- Novoli urban park closed to Cascine, the biggest park of the city.

Towards an eco district: closed to the environment, closed to cityuser thanks to the innovation.

FLORENCE
SMART DISTRICT PILOT

- Smart lightning
- District heating
- Smart bench
- Smart waste
- E-recharge
- Wi-fi
- Videosurveillance
- Super fast recharge
- Road car detection
- Smart irrigation

MAIN ACTIONS

ENERGY EFFICIENCY

Retrofitting and district heating: 300 dwellings with 700 people, 20.000 m^2, Thermal Seasonal Energy Storage with solar plants on roofs saving consumption 50% and energy bills for tenants 10%.

Smart grid & energy demand side platform: advanced remote control and automation funtionalities on L/MV network on 2 primary and 60 secondary substations enabling services (e-mobility, active demand), 25.000 citizens involved, - 3100 t CO_2/year.

SUSTAINABLE MOBILITY

E-mobility: 100 ev for taxi fleets, 6 super fast recharge (for taxi), 40 recharging stations in the district (total number: 200), - 250 t CO_2/year (in the district)

New services: control system to user information, advanced mobility services to citizens, ad hoc system and information for taxi fleets.

ICT & INFRASTRUCTURES

Smart lighting: 1000 led lights, techno equipment for value-added, services (refurbishment of the network), luminance digital sensors, self diagnostics and maintenance management, - 3500 t CO_2/year.

Intelligent system: smart benches, smart waste bins, smart irrigation system, free wifi system, road car detection sensors, emissions level sensors.

Data management: ICT smart city platform, Smart City Control Room, Big data and open data, local service management services and digital services.

REPLICATE

RENAISSANCE OF PLACES
WITH INNOVATIVE CITIZENSHIP
AND TECHNOLOGY