VISION

LISBON. One of the most smart, competitive, innovative and creative cities of Europe

City challenges

- Decrease of resident population in the city area from 800 000 inhabitants in the 80´s to 550 000 today;
- Increase in population in the metropolitan area to 2 800 000 inhabitants in 2011;
- Mass use of individual automobile;
- In 1981 public transport was the main means of transport in home to work or school trips with a 67% share (the automobile had a 14% share). Nowadays the automobile has 48% and public transport 34%;
- Since 2009 the public transport system of the city lowered it´s offer in 19%;

City challenges

- Load caused by EV charging on the electric distribution grid;
- Illegal occupation of EV parking/charging spots by internal combustion cars;
- Lack of a “sharing” vehicle culture by the population;
- Data integration and single management platform for the city infrastructure;
- Regulations;
- Migrating the portuguese pilot E-Mobility program to a more flexible model;
- Making the TCO of a EV more competitive;

Lisbon: Challenges and Opportunities

2014 → 2030

- Ageing Society
- Urban Rehabilitation
- Employment and Employability
- Reshaping Economic Profile
- Promoting Knowledge and Innovation
- Business Friendly
- Smart City

A Smart City might be described as one that…

…dramatically increases the pace at which it improves its sustainability and resilience,

…by fundamentally improving how it engages society, how it applies collaborative leadership methods, how it works across disciplines and city systems, and how it uses data and integrated technologies,

…in order to transform services and quality of life for those in and involved with the city (residents, businesses, visitors) *ISO 'Working Definition'*

Strategy

A strategy built with all of the stakeholders of the city, through a participative and open approach - materialized and assumed in public strategy documents.


entrepre-
neurship
knowledge
and research
network of
equipment
MORE JOBS
Capital of
the Atlantic
MORE PEOPLE
inclusive
and
sustainable
mobility
tourism
BIP/ZIP
regeneration
culture and
creativity
BETTER CITY
rehabilitation
of buildings

BUILDING SMART CITIES TOGETHER

SHARINGCITIES

What's Sharing Cities?

An introduction to the vision, the objectives, the approach and the work packages of this complex programme

Rui Bochmann Franco

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement N° 691895

WHAT IS SHARING CITIES

Horizon 2020 'lighthouse' programme - proving ground for a better, common approach to making smart cities a reality. It seeks to develop affordable, integrated, commercial-scale smart city solutions with a high market potential.

The programme partners work in close **cooperation** with the **European Innovation Partnership on Smart Cities and Communities** and with other `lighthouse` consortia.

The programme draws on **€24 million in EU funding**. It aims to **trigger €500 million in investment** and to engage over 100 municipalities across Europe.

VISION

- Sharing Cities aims to **irreversibly change the way we think about the role of digital technology** in our cities and to clarify how we all can benefit from and contribute to this transformation process.
- At three strategic locations, the 'lighthouse cities' – London, Lisbon and Milan – will demonstrate the effectiveness of new technologies in **improving urban mobility, increasing the energy efficiency of buildings and reducing carbon emissions**.
- Our vision is of a **more agile and more collaborative smart cities** market that dramatically increases the speed and scale at which we implement smart solutions across European cities.
- By **sharing** solutions, practices, experiences and results, and by improving the way we manage city data and infrastructure, we will **co-create** an improved living environment and at the same time reduce our energy costs.

TEN AUDACIOUS GOALS

1. Aggregate demand and deploy smart city solutions

89 cities engaged and
50 cities using products

2. Deliver common and replicable innovative models

10 replicable solutions

3. Attract external investment

€500 million in external investment

4. Accelerate take-up of smart city solutions

identify three business models that prove the acceleration of uptake (e.g. refurbishment, smart lamp posts)

5. Pilot energy efficient districts

reduce energy bills by €600,000 per annum for 15,000 district residents

6. Shift thinking irreversibly to local renewable energy sources

100 cities engaged and
50 cities using products

7. Promote new models of e-mobility

make at least 10% of local citizens choose electric over fossil fuel vehicles

8. Successfully engage with citizens

Prove the active participation of at least half of the 15,000 locals affected by the building renovations

9. Exploit city data to maximum effect

Demonstrate the real value of city data for users, including SMEs and startups. Achieve a twofold increase in datastore use by 2020

10. Foster innovation at local level, promote the creation of new businesses and jobs

Create at least 100 jobs in three districts

HOLISTIC APPROACH

PEOPLE

by **engaging** with the **people**, we will develop **participatory** mechanisms for the **co-design** of smart city solutions

PLACE

we will demonstrate the significant **benefits** of smart city concepts and solutions by **focusing** on the **needs** of **low-energy neighbourhoods**: retrofitting buildings, installing integrated energy management systems and smart lamp posts, and introducing shared-use electric vehicle services

PLATFORM

by **engaging** with the **people**, we will develop participatory mechanisms for the co-design of smart city solutions

SMART CITY SOLUTIONS

Implement **integrated energy management systems** to optimise energy from all sources in districts (and interface them with city-wide systems); include demand response measures

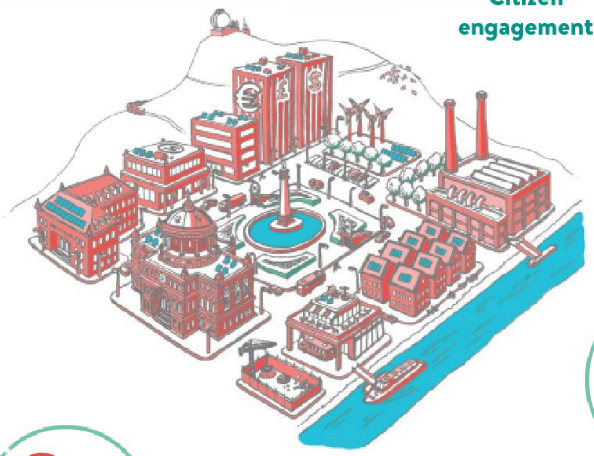
Energy management

PLACE

PEOPLE

Citizen engagement

Develop new approaches and tools to improve **public understanding** of how smart cities should operate. Promote **citizens participation**



PLATFORM

Urban sharing platform

Conduct **building energy retrofits** of public/private residential properties affecting 15,000 people. This includes integration of low-carbon energy sources, and physical modernisation, digital controls. Promote policy innovations and citizen/private incentives to save energy

Building retrofit

e-mobility

Smart lamp posts

Manage **city data** from a wide range of sources, including sensors, as well as traditional statistics. Rely on **common principles, open technologies and standards**

A portfolio of interconnected initiatives supporting the shift to **low-carbon shared mobility solutions: smart parking; e-logistics; e-vehicle charging points; e-car and e-bike sharing**

Demonstrate **smart lighting** integrated with other smart service infrastructure (eV charging stations; smart parking; traffic monitoring via sensors; data management, wifi). A swift and secure way to 'bootstrap' smart cities

MEASURES

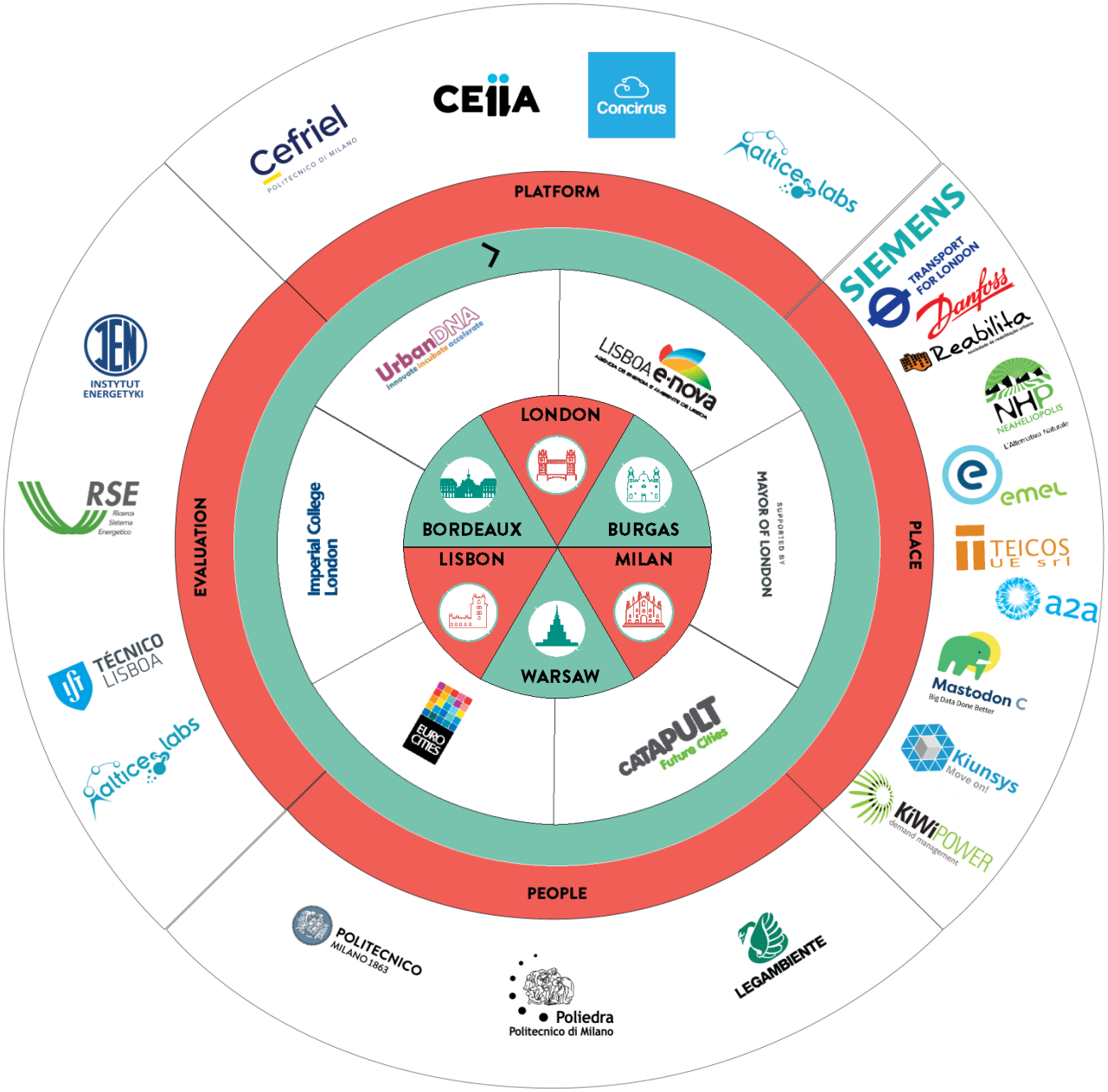
high replicability, low specificity, high potential value, speed to delivery, aggregation potential

city specific complex delivery, modest value, longer leadtime

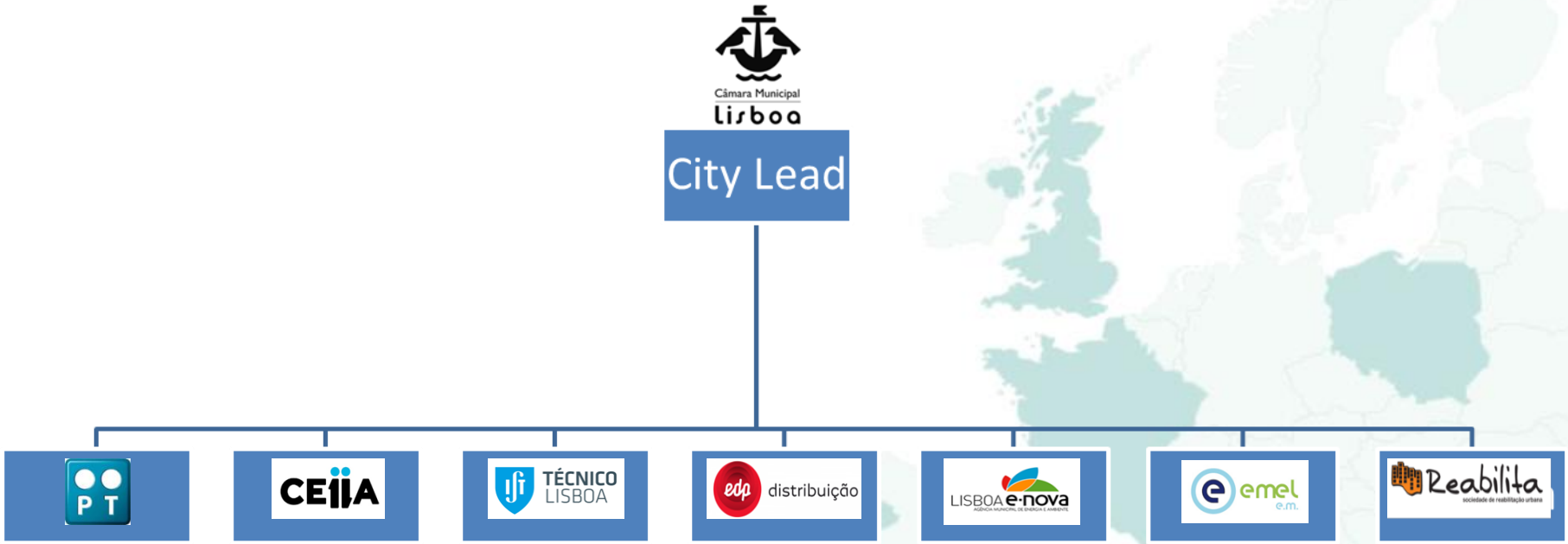
- citizen engagement tools
- smart parking
- smart lamp posts
- urban platform
- building retrofit
- e-vehicle charging
- people apps
- e-mobility
- electric car sharing
- e-bikes
- e-logistics
- people digital bond scheme

The consortium structure and partners

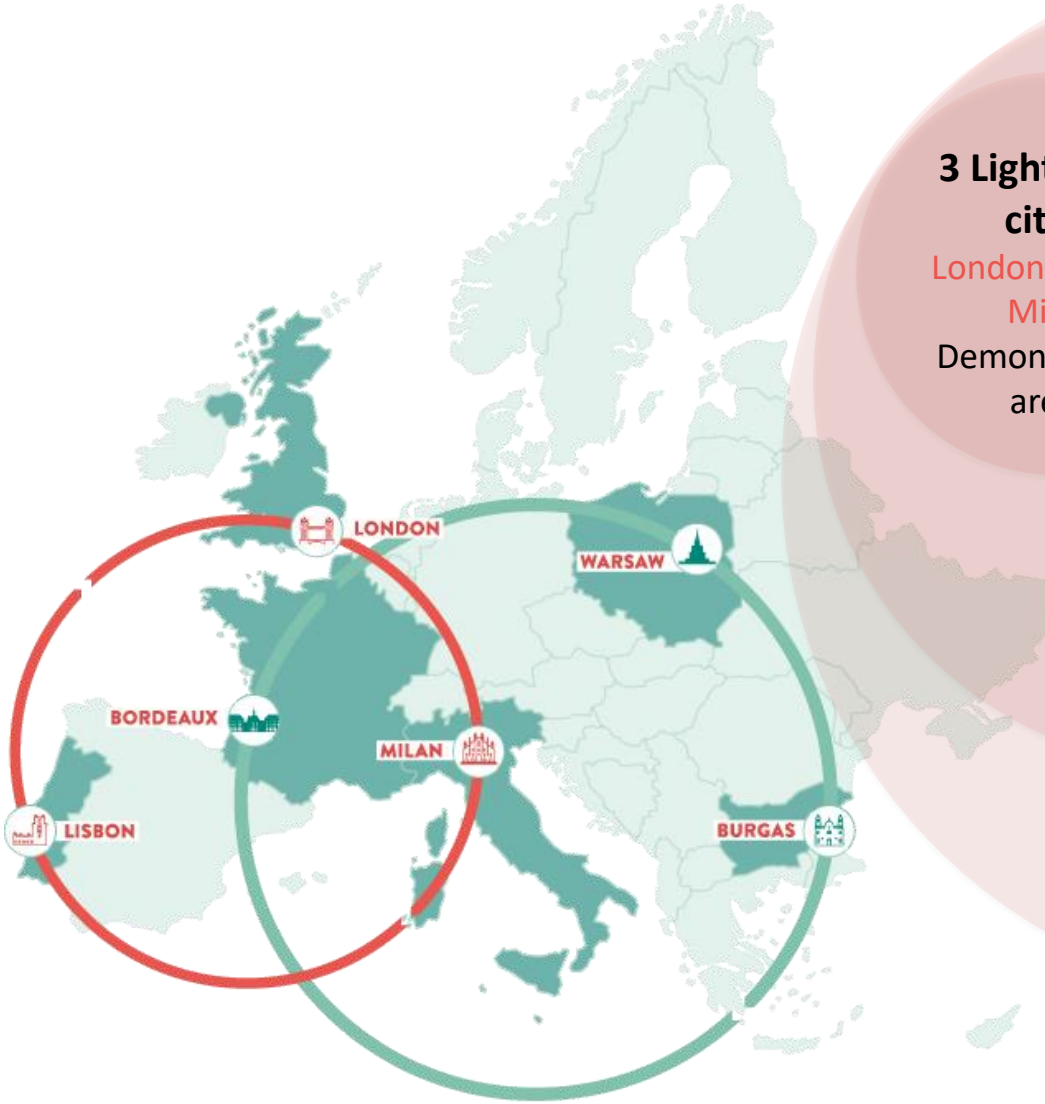
CONSORTIUM PARTNERS



Lisbon Consortium



'LIGHTHOUSE', 'FELLOW' CITIES AND SCALE UP



3 Lighthouse cities
London, Lisbon, Milan
Demonstration areas

3 Fellow cities
Bordeaux, Burgas, Warsaw
Co-design, validate, implement

+100 cities
Scale-up

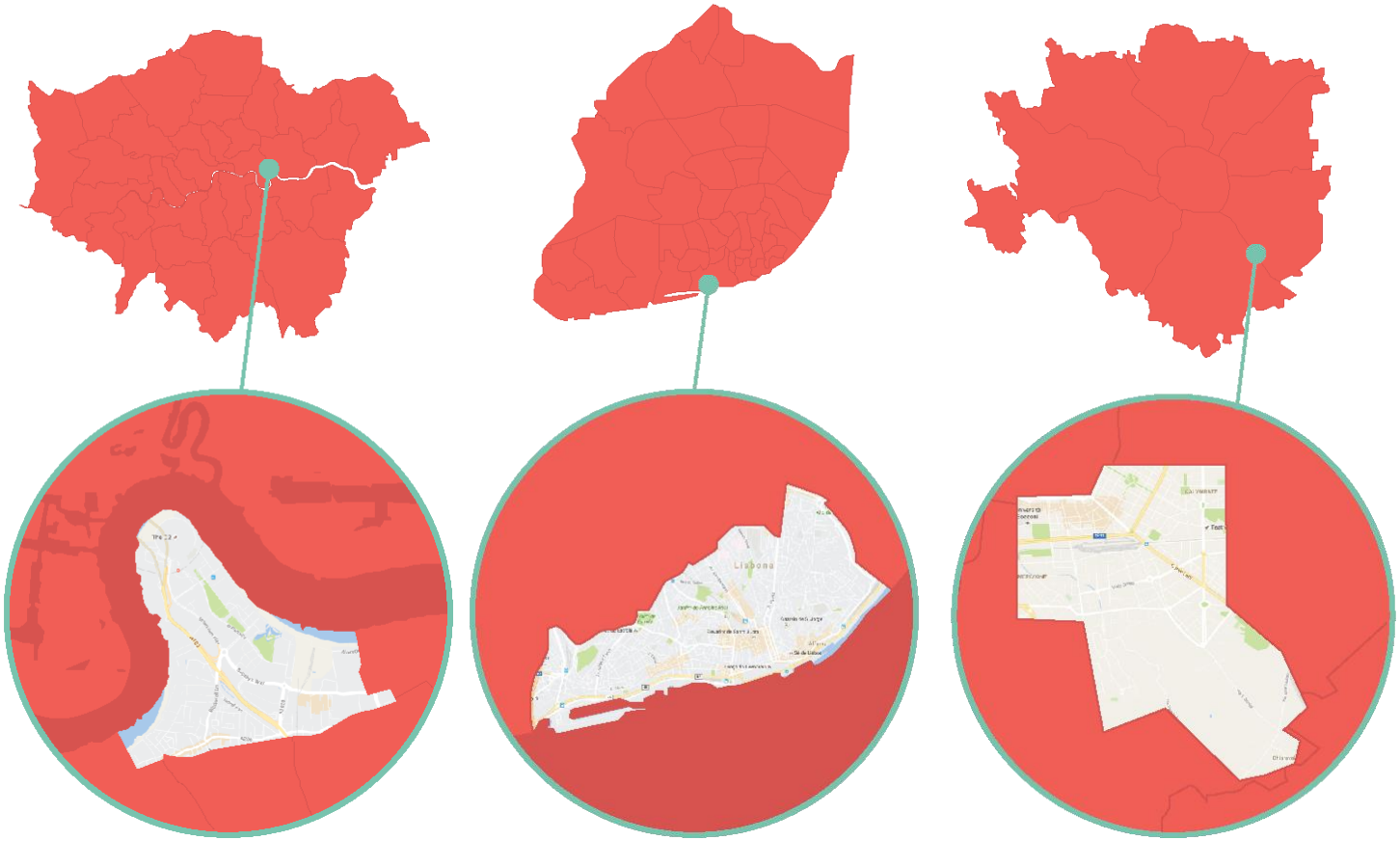
Global link cities
support

And your city?

LIGHTHOUSE CITIES AND FELLOW CITIES
measures, demonstration areas and solutions

DEMONSTRATION AREAS

The **Royal Borough of Greenwich in London, Porta Romana/Vettabbia in Milan and downtown Lisbon** will retrofit buildings, introduce shared electric mobility services, and install energy management systems, smart lamp posts and an urban sharing platform through engaging with citizens.



LONDON
Greenwich

LISBON
Downtown

MILAN
Porta Romana

MEASURES - 1/2

Citizen Engagement

Develop new approaches and tools to improve the public's understanding of how smart cities should operate. Promote the citizens' active participation.

Building Retrofit

Conduct deep energy retrofits of public/private residential properties affecting 15,000 people. This includes integration of low-carbon energy sources, physical modernisation, digital controls, and promote policy innovations and citizen/private incentives to save energy.

Energy Management

Implement Integrated Energy Management System to integrate and optimise energy from all sources in districts (and interface with city-wide system); including demand response measures.

Smart Lamp Posts

Demonstrate smart lighting integrated with other smart service infrastructure (eV charging stations; smart parking; traffic monitoring via sensors; data management, wifi, etc). A swift and secure way to 'bootstrap' smart cities.

Urban Platform

Manages data from a wide range of sources, including sensors, as well as traditional statistics. It is built on common principles, open technologies and standards. This development draws on London's data analytics expertise (DataStore); Milan's work on an application programming interface (API) marketplace and public use of data; and Lisbon's experiences with sensor data analysis and gateways.

MEASURES - 2/2

eMobility

A portfolio of inter-connected initiatives supporting the shift to low carbon shared mobility solutions.

eBikes

Build on existing e-bike sharing schemes and install a sufficient number of charging stations.

EV Logistics

Implement electric vehicles in city logistics to reduce the number of gasoline-powered delivery trucks (e.g. with growth in on-line and local deliveries). This includes implementation of electric logistics to test and prove the business cases and promote potential re-use.

EV Charging

Install a network of eV charging stations, and integrate them with overall place-based measures (building refurbishment; PV; lampposts; energy management system) to support shift from conventional cars to electric vehicles.

EV Car Sharing

Adjust ambitions to actual reduction in car ownership and facilitate practice exchange amongst the cities and enable learning from different city contexts and ownership models to support EU-wide take-up.

Smart Parking

Implement smart parking technologies, including evaluation of sensor type, implementation (potentially different sensor types and business models), testing and capture of operational experience.

Smart Lampposts

EV Charging Posts

Building Retrofit

Shared EV´s in fleets

E-bike charging

E-bike sharing

CITIES IMPLEMENTATION

Lisbon	London	Milan

will implement all measures

	Bordeaux	Burgas	Warsaw
Citizen Engagement	✓	▶	
Building Retrofit	▶	▶	✓
Energy Management	✓	◯	▶
eMobility	▶	✓	▶
EV Car Sharing		◯	▶
eBikes		✓	▶
EV Charging		✓	✓
Smart Parking		✓	▶
EV Logistics		◯	
Smart Lamp Posts	✓	✓	▶
Urban Platform	▶	▶	

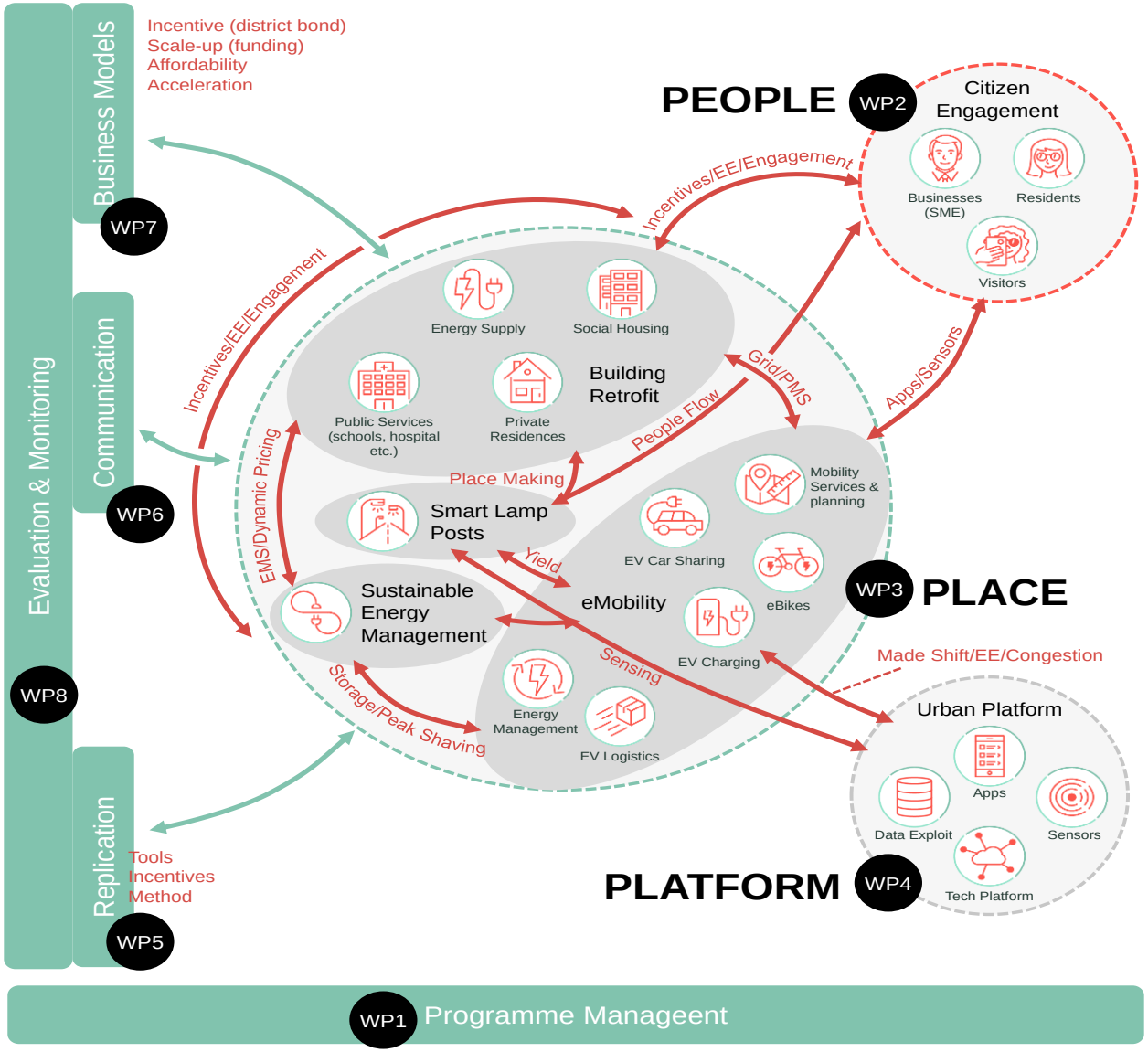
✓ Implement

◯ Co-design

▶ Validate

SHARING CITIES WORKING PACKAGES

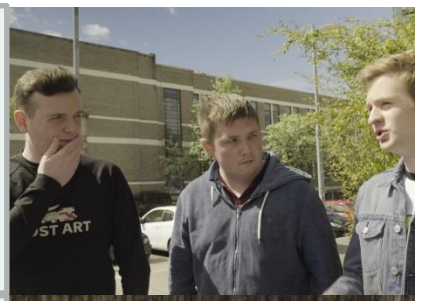
8 integrated work packages



WORKING PACKAGE 2: PEOPLE
Lead: Future Cities Catapult

Activities

Qualitative **user research** (diary studies and in-home interviews) to understand behaviours and attitudes around Sharing Cities measures



Build a collection of **engagement activities** and methods to use to speak and connect with citizens

Establish community hubs in each city

Co-design services and digital interfaces: organise workshops with citizens, local businesses and city representatives

Testing prototypes for validation: testing ideas and developments for digital interfaces interacting with representative users in each city to validate their helpfulness and attractiveness

WP3 – PLACE
Lead: Lisbon

WP3 Place : Purpose

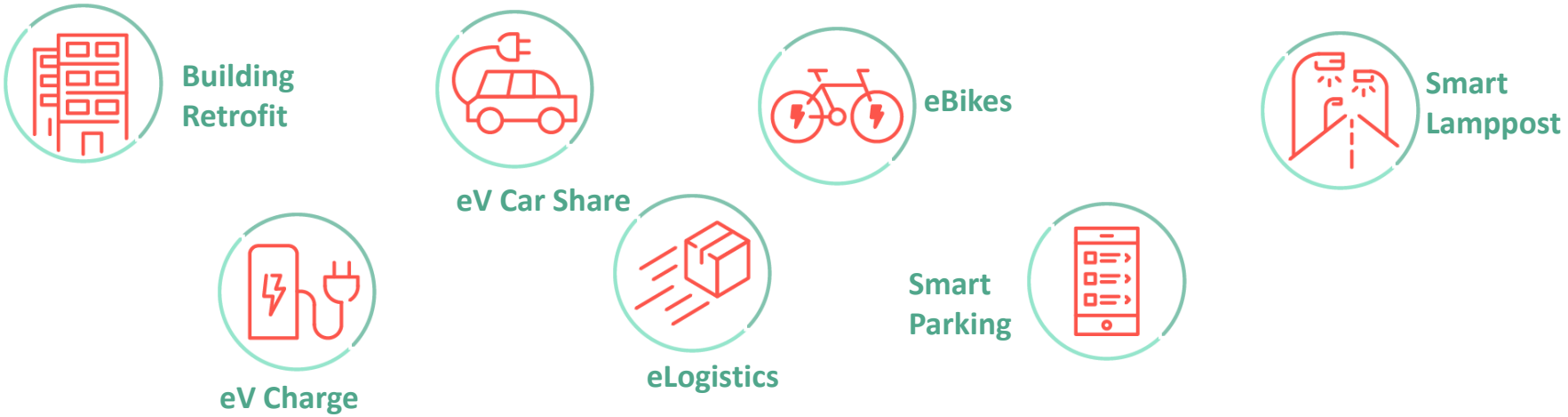
Sub-programme (with 8 different projects and a same goal)

The project will demonstrate real tangible value through a new shared, digital-first, scaled and market accelerator approach to integrated design and operation of core urban infrastructures and services, delivering low energy districts and sustainable mobility – all exploiting the active involvement of citizens who live, work and visit these districts.

Objectives

- Deliver leading, practicable and replicable building retrofits, including local low carbon energy production – exchanging across the main cities and generating case studies to support exploitation
- Support shift from high to low carbon mobility through the implementation of shared emobility infrastructures and services
- Demonstrate how the humble-smart lamp post can deliver additional integrated smart services
- Put in place sustainable energy management systems that integrates and optimises energy from all sources in the district and provides a means that supports users in understanding and being incentivised to get informed and be more efficient in energy consumption

WP3 - Place



8 repeteable measures-projects

Demonstrates the significant benefits of smart city concepts and solutions by focusing on the needs of:

- Low-energy neighbourhoods: retrofitting buildings
- Installing integrated energy management systems
- Smart lampposts
- Shared-use electric vehicle services

Task 3.1 Building retrofit and renewable energy generation

Apply deep-retrofit measures

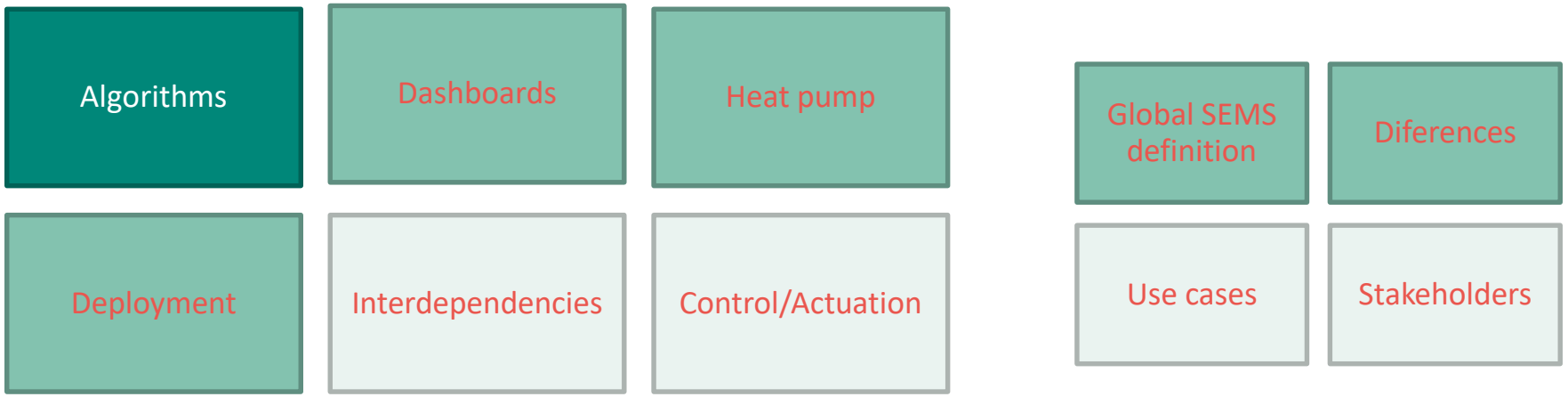
- to public and private residential properties
- affecting 15,000 citizens across the six cities and
- integrating the properties with
- low carbon energy sources (solar PV, water source heat pump) and electric vehicle charging,
- all wrapped together by
- a digital first digitally driven sustainable energy management systems wrapping it all together

Task 3.2 Sustainable Energy Management Systems

- Put in place a sustainable energy mangement system (SEMS) that integrates and optimises energy (e.g. demand and supply) from all sources in the districts (interfacing with city wide systems). Provide a means that supports citizens in being incentivised to get informed and understand their energy consumption with the aim of becoming more efficient with their use and reduce their bills.

- SEMS:
  - Collates all project data and carries out analytics, pushing to urban sharing platform
  - Provides control and optimisation functions.

- Heat network optimisation
- Building mounted PV
- Building energy management
- Local grid-connected PV Microgrid management
- Forecasting ev/pv (district level)
- Demand Side Response (DSR)
- Integration with the E015 platform



Task 3.3 E-Mobility

eV car share

eV Charge

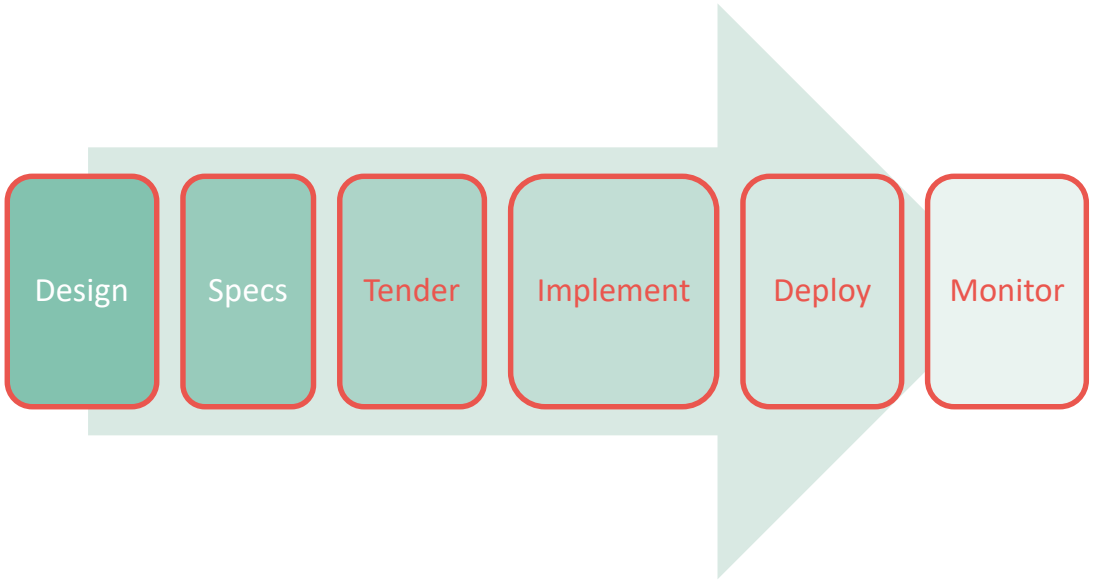
eLogistics

eBikes sharing

Smart parking

To implement novel means to support shift from high to low carbon mobility, through implementing a number of shared eMobility infrastructures and services

- Prediction of availability of mobility mode
- User-based bike reallocation with rewards
- Mobility island / Hub
- Optimization of parking space usage
- Optimization of logistics EV routing



SHARINGCITIES

PORTUGUESE ELECTRIC MOBILITY PROGRAM
MOBI.E MODEL PRINCIPLES

MOBI.E®
ELECTRIC MOBILITY

- **FOCUS ON THE USER** / CITIZEN
- FAIR, ADVANTAGEOUS AND **COMPETITIVE PRICING** WHEN COMPARED TO ICE VEHICLE
- **UNIVERSAL ACCESS** OPEN TO EVERY MANUFACTURER, UTILITY, PRIVATE OPERATOR
- **INTEGRATION** OF INFORMATION, ENERGY AND FINANCIAL FLUXES
- ATTRACTION OF **PRIVATE INVESTORS**
- TRULY **NATIONAL SCALE**, ANTICIPATING MASSIFICATION OF ELECTRIC VEHICLES.

eMob eV Charge


eMob eV Charge
P
1
51-JZ-53


ÖRBITA
emel
mais mobilidade
melhor cidade
Câmara Municipal
lisboa
eMob eBikes
MOBILIDADE SUSTENTÁVEL | BIKE SHARING

SHARINGCITIES

Ciclovias em Lisboa

eMob eBikes

SHARINGCITIES

eMob Smart Park

SHARINGCITIES

eMob eV Share

eMob eLogistics

Task 3.4 Smart Lamppost

Upgrade city lampposts to LED to gain the RoI benefits (of energy and operational savings) and in parallel, multi-purpose these assets to enable delivery of smart city services; and in so doing develop a common design that is fundable and can be exploited by other cities.

Committed total smart lamppost volumes are ~1,000. Specifically, bring attractive funds / loan terms to expand volumes from H2020 commitments to bolder levels.

- Basic LED Energy, GHG, and Maintenance Improvements
- Additional Energy Savings / Optimisation via CMS systems
- Safety, Attractiveness & Façade / Mood Lightin
- Alternative Clean Energy
- Public WiFi – using mesh network to provision WiFi
- Environmental Monitoring – Air Quality; Noise measurement & Controls
- Public Engagement
- Safety of place (residents / visitors)
- Public Information Signage
- Public Information Speakers
- Tourist Information
- Transport & Mobility – Driver Information; Traffic Monitoring; Parking
- eVehicle Charging (car / bike)
- Geo-Fencing: Pedestrian monitoring for commercial gain/events

WP4 – PLATFORM
Lead: Milan

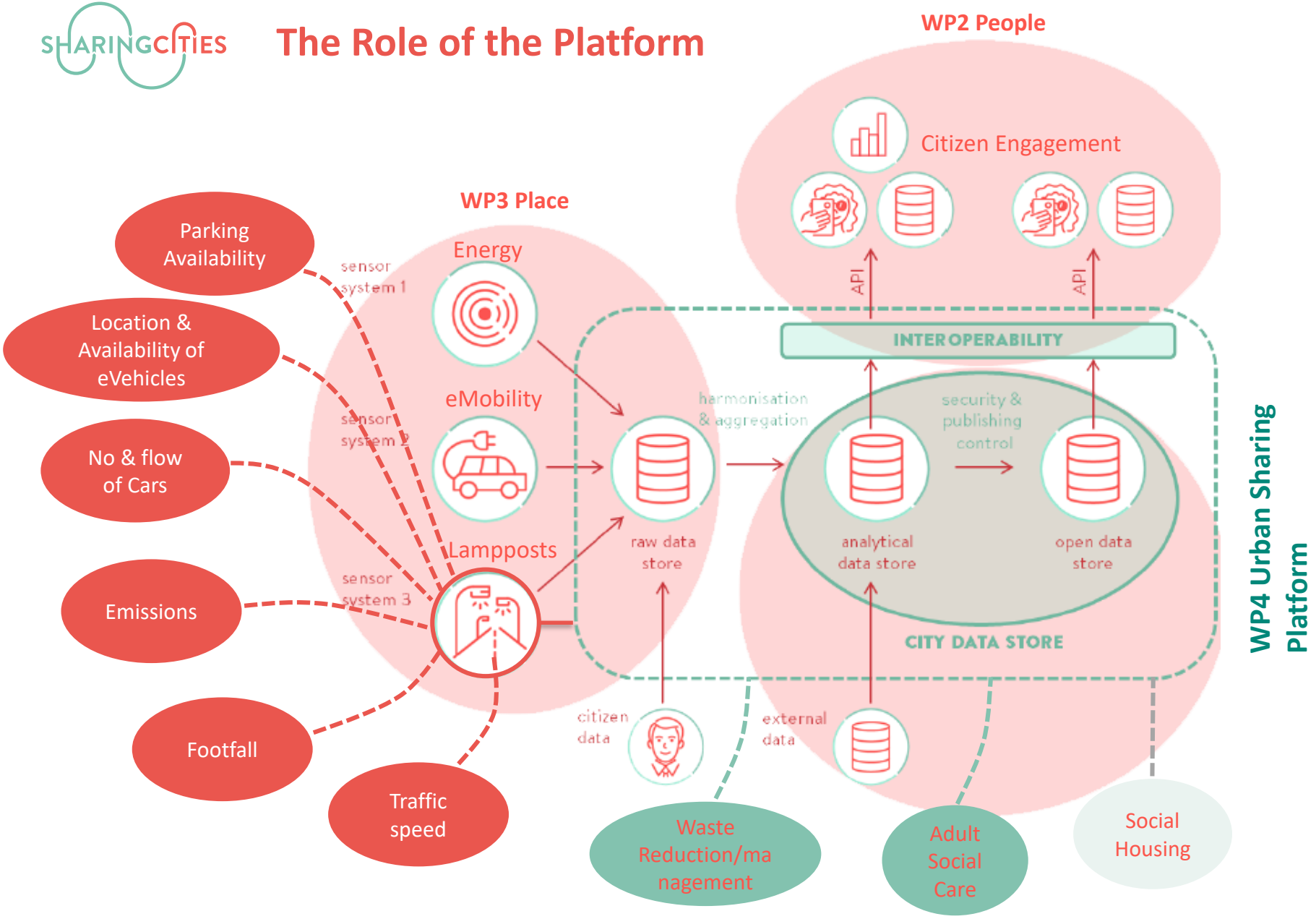
WP4 Platform | Purpose

Design and implement a common interoperable Urban Sharing Platform to be deployed in each of the three ‘lighthouse’ cities and beyond in other ‘follower’ cities through the capture of an open standard reference architecture.

Objectives

- The platform will be co-developed by the consortium to:
  - Provide a shared reference architecture that extends the strenghts and capabilities of each of the cities
  - Enable sharing by providing an interoperable platform based on open standards
  - Utilise Enterprise Architecture and API economy best practices to align city needs with services and technology
  - Provide a federated governance structure to ensure alignment between cities
- The platform will provide the following key functions:
  - Support collection of data from different sources
  - Provide data storage facilities as well as components for analysing, processing and refining data
  - Provide guidelines and tools for interoperability both at technical and process level
  - Enable sharing of information through Open standards and APIs and knowledge and skills sharing

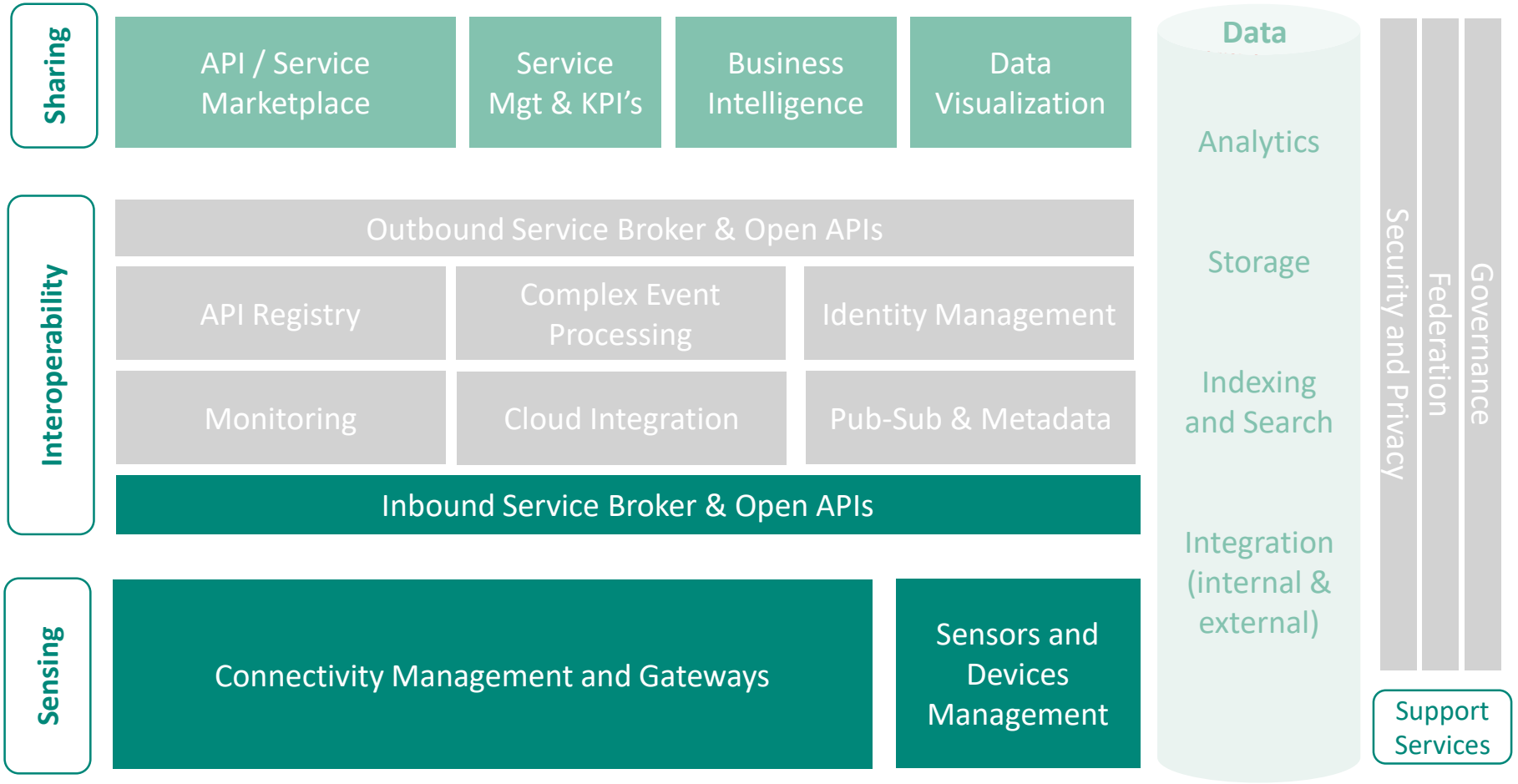
The Role of the Platform



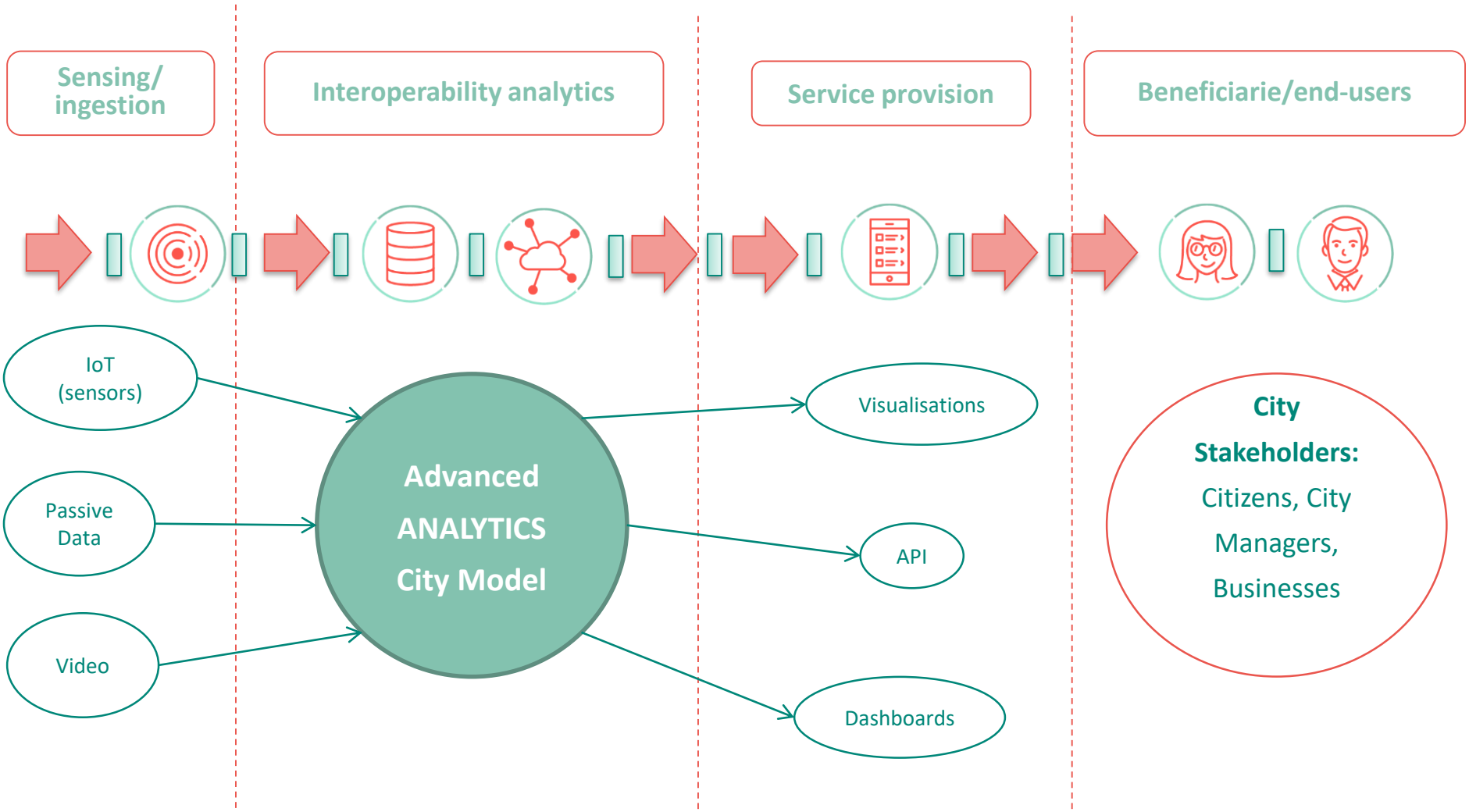
Which features the USP should have?

- Awareness (reporting and alerts)
- Measure the relationship between behaviour, actions and outcome
- Predictive models for pollution
- Predictive models for energy
- Prescriptive models and actions
- Optimization algorithms and predictive models for demand
- Predictive (or prescriptive) models for demand
- Measure the relationship between whether and others and energy costs
- Reporting (short term) and measure the relationship between air quality and health (long term)

USP Reference Architecture



USP Functionality



WP5 – REPLICATION

Lead: EUROCITIES

WP5 REPLICATION - Purpose

- Follower cities are included at very early stage in the definition and design of the lighthouse projects;
- Follower cities have a strong role in the project to allow for the replication of given lighthouse projects according to their local conditions;
- Follower cities receive adequate support from other consortium partners to be well equipped to translate the lighthouse solutions into their local context;
- By the end of the project the follower cities are ready to replicate the lighthouse projects/solutions in their city;
- Lighthouse and follower cities cooperate efficiently;
- Knowledge, experience and results from replication activities in the follower cities is shared with non-partner cities (national scale-up cities and other European cities).

Replication activities

* European Innovation Partnership on Smart Cities and Communities

Main delivery partners

Lighthouse cities: London, Milan and Lisbon

Follower cities: Bordeaux, Burgas and Warsaw

Other partners: Urban DNA

CITY AND STAKEHOLDER ENGAGEMENT

Open to scale-up cities and public

- Urban sharing platform
- London city data strategy (London)
- Smart city Planning Guidance (Greenwich)

Preparatory webinars, capacity building targeted to fellow cities

- e-mobility Lisbon
- building retrofit Lisbon
- SEMS London etc

Smart city solutions webinars for scale-up cities

- follow-up and communicate about lessons learnt during peer-learning visits

REPLICATION ACTIVITIES | PEER LEARNING VISITS

LISBON

- e-mobility
- building retrofit
- citizen participation, participatory models
- smart city governance

LONDON-GREENWICH

- USP
- SEMS
- citizen engagement
- Greenwich smart city strategy and governance
- smart lighting
- energy management
- GATEway
- autonomous vehicles
- augmented reality for mobility

MILAN

- Mobility
- SEMS
- USP
- Interoperability
- building retrofitting
- lamp posts

KNOWLEDGE PLATFORM

→ http://www.sharingcities.eu/sharingcities/knowledge-platform

Interest-based profiling and learning opportunity for cities and interested stakeholders

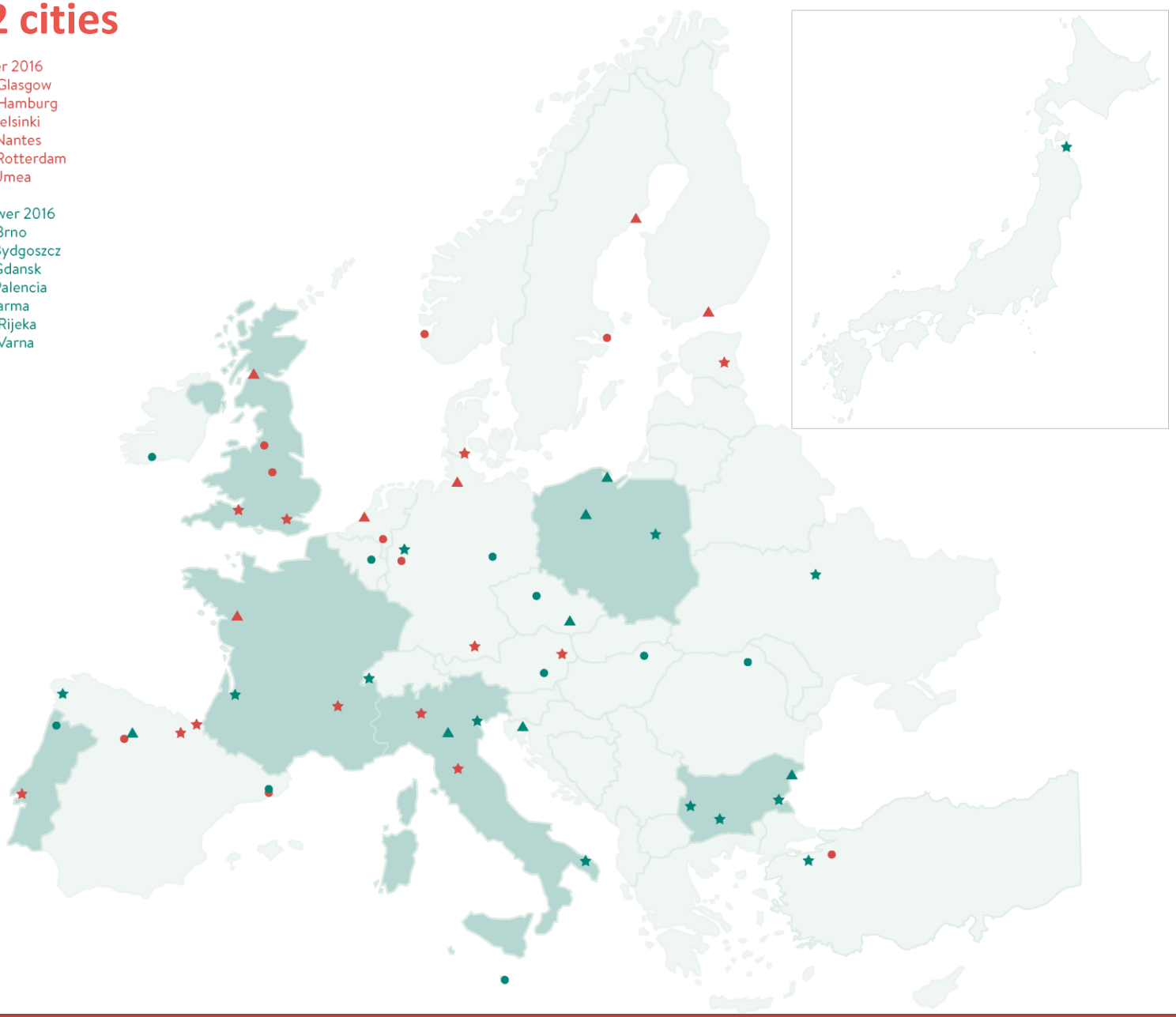
Registration is open the platform is available since February 2017

	Peer learning visits		Webinars
	Videos		Reports
	Trainings *Eg. Attendees lists, minutes, agendas and presentations from capacity building meetings. The replication strategy.*		Smart city measures and use cases
	Scale-up cities		Cooperation with other lighthouse projects *Eg. Meetings material (presentations, minutes, contact list, agenda)*

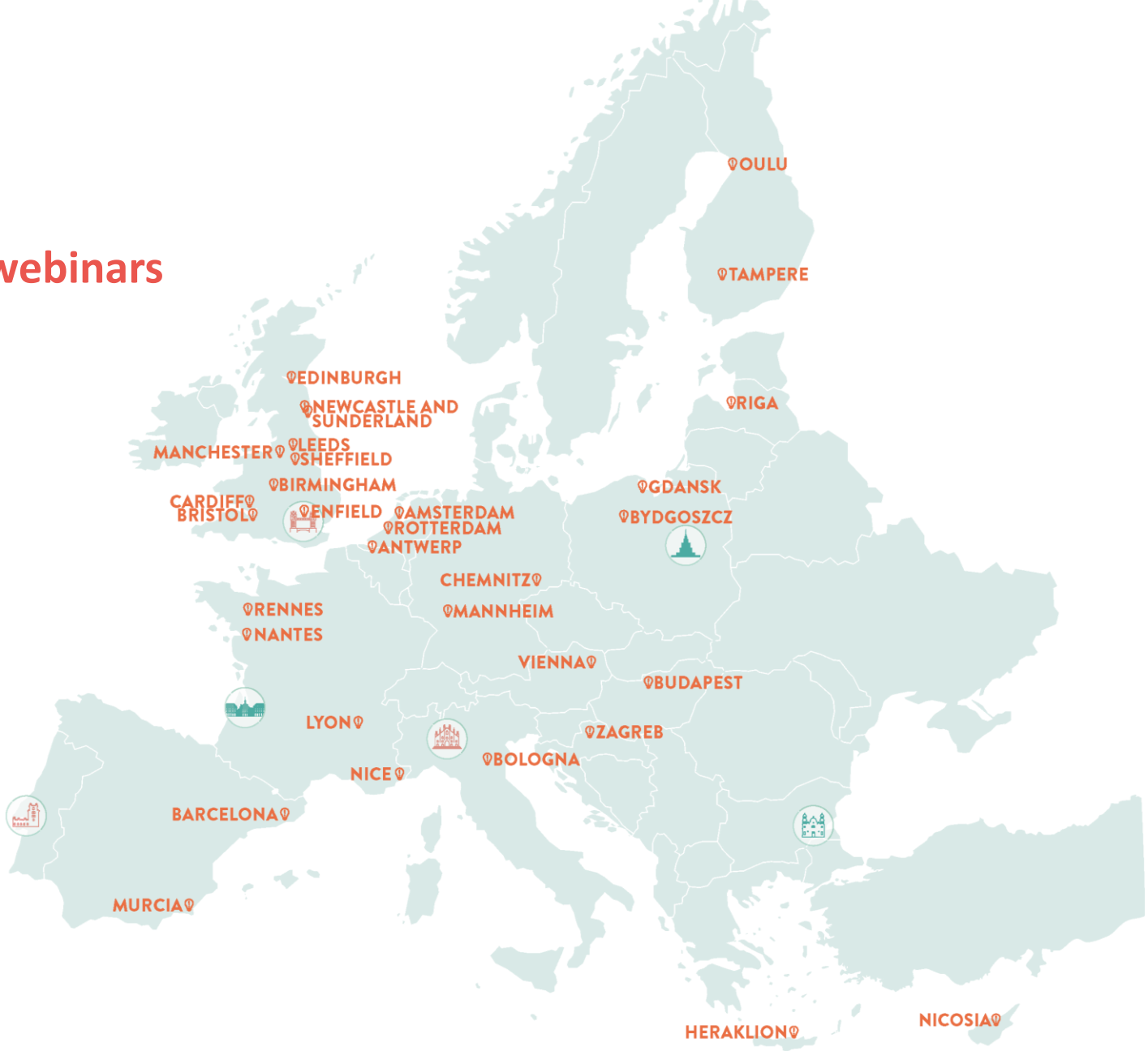
Scaling up and the programme reach

SCC01-SCC02 cities

- Leader 2014
  - DE - Cologne
  - ES - Barcelona
  - ES - Valladolid
  - NL - Eindhoven
  - NO - Stavanger
  - SE - Stockholm
  - TR- Tepebasi
  - UK - Manchester
  - UK - Nottingham
- Follower 2014
  - AT - Graz
  - BE - Seraing
  - CZ - Prague
  - DE - Leipzig
  - ES - Sabadell
  - HU - Miskolc
  - IE - Cork
  - MT - Valletta
  - PT - Porto
  - RO - Suceava
- Leader 2015
  - AT - Vienna
  - DE - Munich
  - DK - Sonderborg
  - EE - Tartu
  - ES - Saint Sebastian
  - ES - Vitoria-Gasteiz
  - FR - Lyon
  - IT - Florence
  - IT - Milan
  - PT - Lisbon
  - UK - Bristol
  - UK - London
- Follower 2015
  - BG - Asenovgrad
  - BG - Burgas
  - BG - Sofia
  - CH - Lausanne
  - DE - Essen
  - ES - Santiago de Compostela
  - FR - Bordeaux
  - IT - Lecce
  - IT - Venice
  - JP - Yokohama
  - PL - Warsaw
  - TR - Nilufer
  - UA - Kiev
- Leader 2016
  - UK - Glasgow
  - DE - Hamburg
  - FI - Helsinki
  - FR - Nantes
  - NL - Rotterdam
  - SE - Umea
- Follower 2016
  - CZ - Brno
  - PL - Bydgoszcz
  - PL - Gdansk
  - ES - Palencia
  - IT - Parma
  - HR - Rijeka
  - BG - Varna

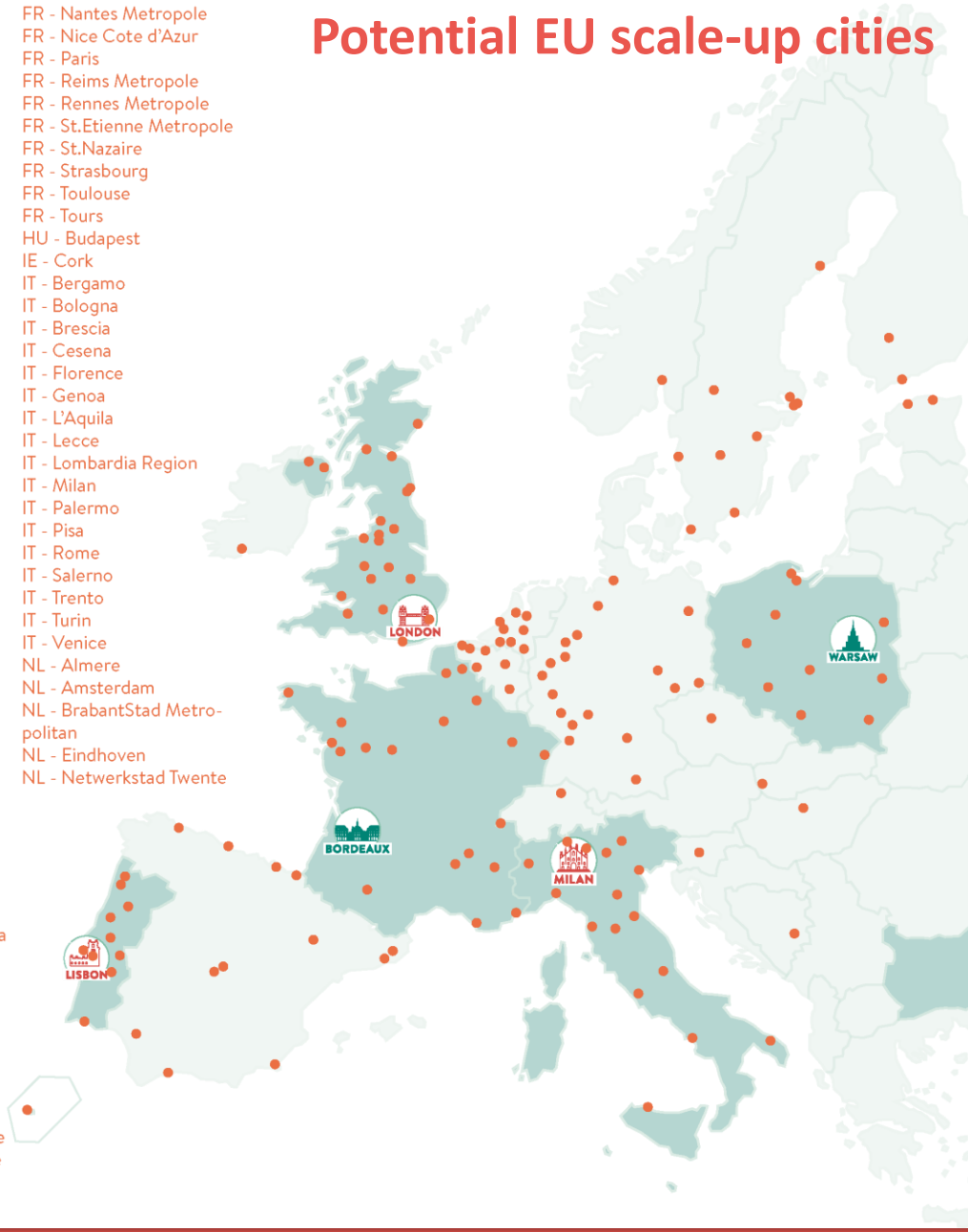


Interested cities participating to webinars



Potential EU scale-up cities

BA - Sarajevo
BE - Antwerp
BE - Brussels Region & City
BE - Charleroi
BE - Ghent
BE - Kortrijk
BE - Ostende
BG - Burgas
CH - Geneva
CH - Zurich
CZ - Prague
DE - Berlin
DE - Bonn
DE - Bremen
DE - Chemnitz
DE - Cologne
DE - Dortmund
DE - Dresden
DE - Dusseldorf
DE - Essen
DE - Frankfurt
DE - Hagen
DE - Hamburg
DE - Karlsruhe
DE - Leipzig
DE - Mannheim
DE - Munich
DE - Munster
DE - Nuremberg
EE - Rakvere
EE - Tallinn
ES - Barcelona
ES - Bilbao
ES - Fuenlabrada
ES - Gijon
ES - Madrid
ES - Malaga
ES - Murcia
ES - Santander
ES - Saint Sebastian
ES - Seville
ES - Terrassa Metropolitan Area
ES - Zaragoza
FI - Espoo
FI - Tampere
FR - Amiens Metropole
FR - Angers Loire Metropole
FR - Bordeaux
FR - Brest Metropole Oceane
FR - Grand Nancy
FR - Grenoble Alpes Metropole
FR - Lille Communaute Urbane
FR - Lyon
FR - Marseille
FR - Nantes Metropole
FR - Nice Cote d'Azur
FR - Paris
FR - Reims Metropole
FR - Rennes Metropole
FR - St.Etienne Metropole
FR - St.Nazaire
FR - Strasbourg
FR - Toulouse
FR - Tours
HU - Budapest
IE - Cork
IT - Bergamo
IT - Bologna
IT - Brescia
IT - Cesena
IT - Florence
IT - Genoa
IT - L'Aquila
IT - Lecce
IT - Lombardia Region
IT - Milan
IT - Palermo
IT - Pisa
IT - Rome
IT - Salerno
IT - Trento
IT - Turin
IT - Venice
NL - Almere
NL - Amsterdam
NL - BrabantStad Metro-politan
NL - Eindhoven
NL - Netwerkstad Twente



Rotterdam - NL
The Hague - NL
Utrecht - NL
Oslo - NO
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Bydgoszcz - PL
Gdansk - PL
Gdynia - PL
Katowice - PL
Lodz - PL
Lublin - PL
Poznan - PL
Rzeszow - PL
Warsaw - PL
Wroclaw - PL
Abrantes - PT
Coimbra - PT
Evora - PT
Funchal - PT
Lisbon - PT
Loures - PT
Portalegre - PT
Portimao - PT
Porto - PT
Sintra - PT
Vila Nova de Gaia - PT
Viseu - PT
Gothenburg - SE
Kapsch - SE

Karlstad - SE
Linkoping - SE
Malmo - SE
Nacka - SE
Ronneby - SE
Solna - SE
Stockholm - SE
Umea - SE
Bratislava - SK
Ljubljana - SL
Bakirkoy - TR
Besiktas - TR
Beyoglu - TR
Bursa - TR
Gaziantep - TR
Istanbul - TR
Izmir - TR
Konya - TR
Nilufer - TR
Ozmangazi - TR
Pendik- TR
Sanliurfa - TR
Serdivan - TR
Aberdeen - UK
Belfast - UK
Birmingham - UK
Brighton and Hove - UK
Bristol - UK
Cardiff - UK
Derry - UK
Edinburgh - UK
Glasgow - UK
Huddersfield / Kirklees - UK
Leeds - UK
Liverpool - UK
London - UK
Manchester - UK
Newcastle/Gateshead - UK
Nottingham - UK
Oxford -UK
Peterborough - UK
Preston - UK
Southend - UK
Sunderland - UK
Wolverhampton - UK

Global link scale-up cities

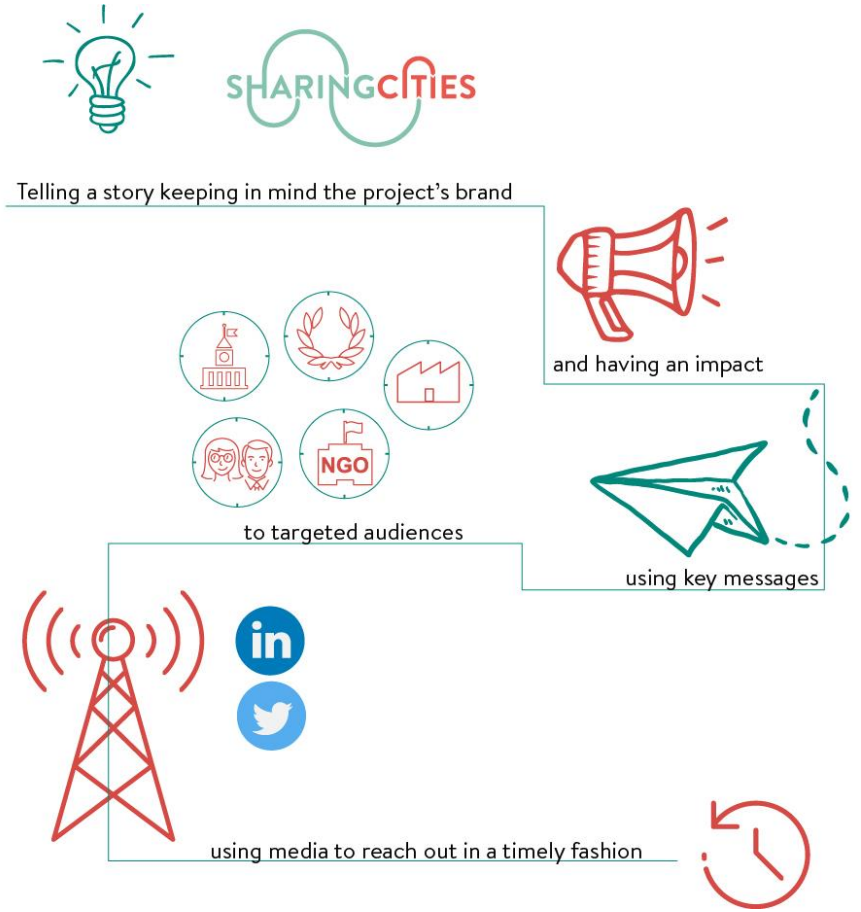
…and now S.Caetano/SP!

WP6 – COMMUNICATION

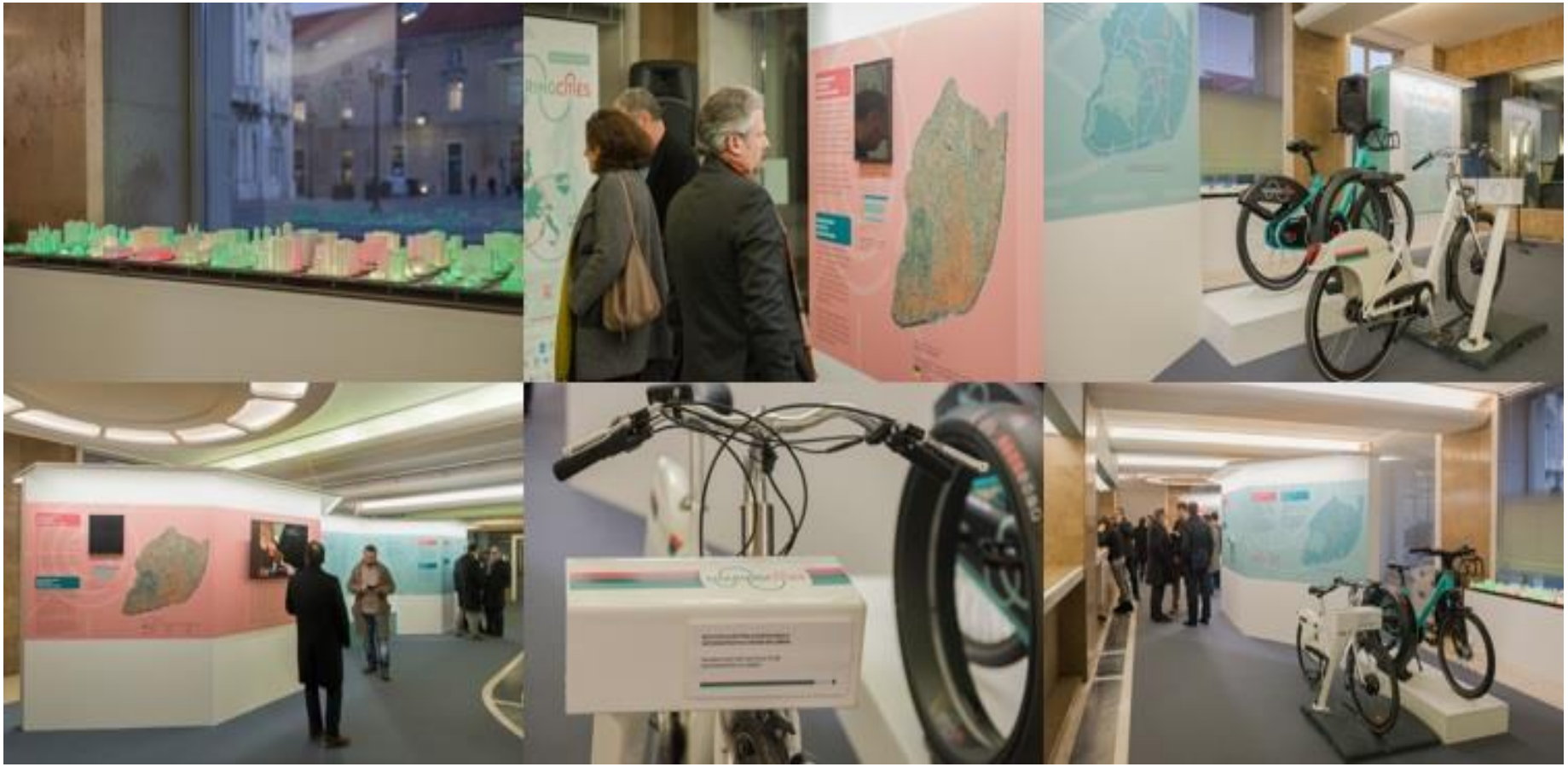
Lead: EUROCITIES

WP6 COMMUNICATION - Purpose

- Define and implement a **communication and dissemination strategy** to maximise the impact of Sharing Cities
- Ensure that Sharing Cities is addressing **relevant stakeholders** from both city and industry parties at national, European and international level
- Establish **links with other initiatives**, projects, networks and events related to smart cities
- **Support lighthouse and follower cities** in their communication activities

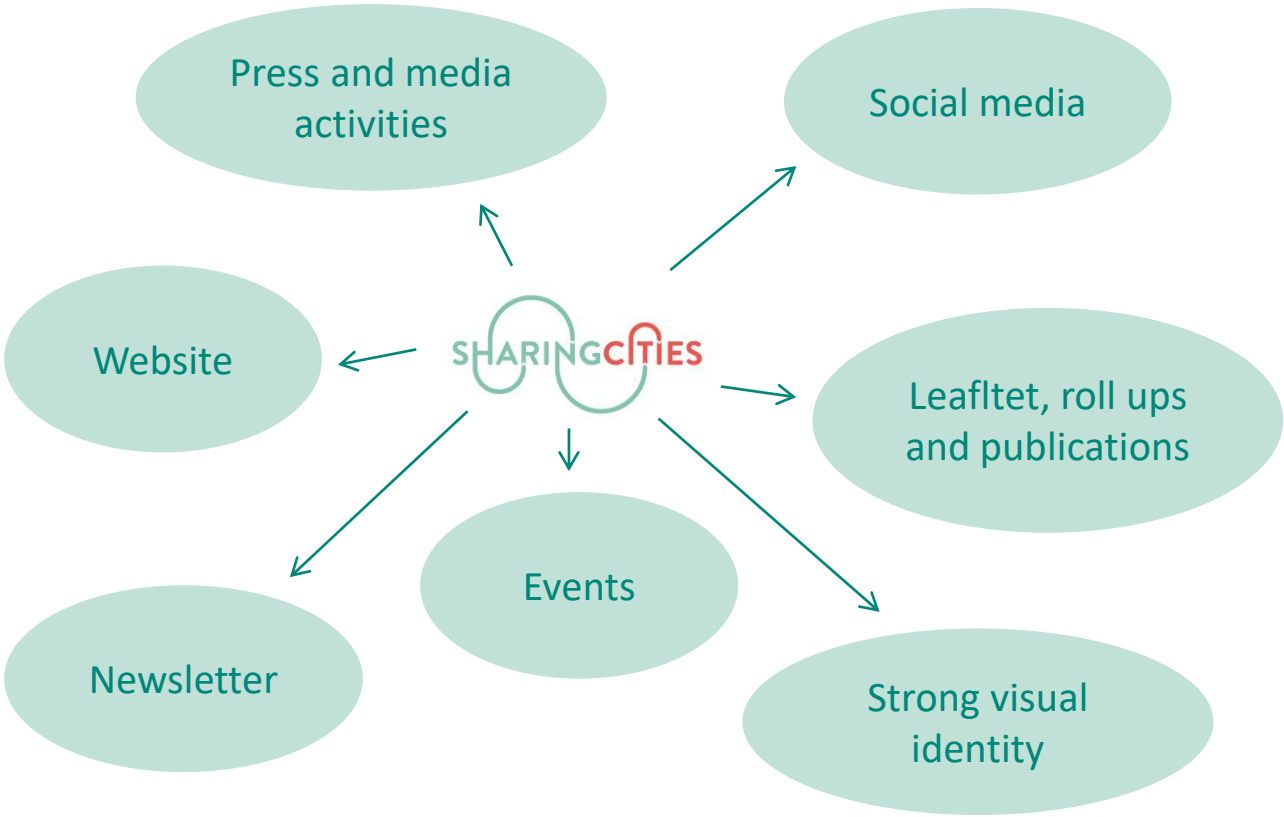


WP6 COMMUNICATION – Lisbon Showroom



WP6 COMMUNICATION – Lisbon Showroom

Communication tools



Main delivery partners

Lighthouse cities: London, Milan and Lisbon

Follower cities: Bordeaux, Burgas and Warsaw

+ **contributions from all partners**

WP7 - BUSINESS MODELS AND FINANCING
Lead: Urban DNA

WP7 BUSINESS MODELS AND FINANCING | Purpose

Adressing vital enabler to ensure the solutions from other working packages can be exploited within and across a broad portfolio of cities. It discusses the triggering of funding for smart city investment funds and investment for exploiting solutions in scale up cities.

Objectives

- Develop a series of fundable business models to ensure that the measures delivered across the demonstrators can become sustainable, financially viable and scalable propositions across the full range of European cities.
- Trigger €500M European Smart Cities Investment to accelerate exploitation of common integrated smart city solutions.
- Establish Smart City Investment Funds in 3 of the principal cities
- Boost scale-up businesses to support the ‘jobs and growth’ agenda (locally)

WP7 – Key themes

1. **Matching Measures to Cities**

- Profile cities to better understand context & needs
- Characterise Measures and assess measure-specific needs
- Develop business models that enable adoption
- Perform matching (3+3+many)

2. **Establish Funds**

- A: Design & tailor implementations in other SHAR cities
- Design & implement an EU-level fund
- B: Package “Funding London” (SME enablement) model
- City-level SME focused support

WP8 – EVALUATION AND MONITORING
Lead: Imperial College

WP7 BUSINESS MODELS AND FINANCING | Purpose

Covering how to deliver a comprehensive and qualitative evaluation of the performance in the various measures. Critical for developing new models.

Objectives

- Methods to enable the impacts to the specific measures implemented in the partner cities to be reliably understood, quantified and evaluated
- A toolbox of models and methods to enable these results to be used as a basis for the development of future policy technology and business models. In particular enabling both the scaling up of existing measures and the translation replication and evolution of these measures to cities across Europe.
- Develop a common **framework** to:
  - Identify the dimensions of impact
  - Identify the effects in these dimensions
  - Develop appropriate methods to measure these effects
  - Develop methods to describe and understand the mechanisms giving rise to these effects

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