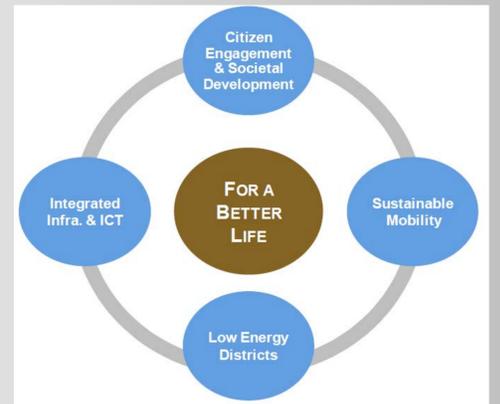


## INTRODUCTION

SMARTER TOGETHER's overarching vision is to find the right balance between smart technologies on the one hand and organisational and governance dimensions on the other hand in order to deliver smart and inclusive solutions and to improve citizen's quality of life. The project gathers the European Lighthouse cities Lyon, Munich and Vienna, the Follower cities Santiago de Compostela, Sofia and Venice. The cities are complemented by business partners from energy, mobility and ICT sectors, leading European research and academia organizations as well as a European city network. Together the consortium stands for a high replication potential, relevant under different economic and climatic conditions. SMARTER TOGETHER delivers 5 clusters of co-created and replicable integrated smart solutions: (1) Living labs for citizen engagement, (2) District heating and renewable energies for low energy districts, (3) Holistic refurbishment for low energy districts addressing public as well as private housing, (4) Smart Data management platform and smart services for integrated infrastructures and (5) E-mobility solutions for sustainable mobility. Commercial exploitation is enhanced by the development of new business models for widespread use by the stakeholders. Furthermore, contributions to open data government are expected to create additional business opportunities as well as inputs to standardization work.



## EU'S SMART CITY LIGHT HOUSE PROJECTS



The **European Commission** is actively promoting research activities on the reduction urban greenhouse gas emissions within its research program **HORIZON 2020**. The most prominent call in this area, and also the biggest in terms of volume, is the **SCC1 Call for "Smart City Light House Projects"**.

In September 2015, the cities of **Lyon, Munich and Vienna** and 28 partners from research and industry were awarded funding for a joint project proposal within the SCC1 call. Under the headline „SMARTER TOGETHER“, the consortium applied for a volume of 25 Mio. EUR for the implementation of „smart“ and innovative actions in the three partner cities and for cooperation with three so called follower cities – **Santiago de Compostela, Sofia and Venice**.

## LYON'S LIGHT HOUSE AREA

The deployment of the SMARTER TOGETHER project in Lyon aims at four main objectives

- **Increasing the quality of life** with several strategies: construction of comfortable and affordable dwellings and office places, convenient public spaces, easy access to the district, new services and others.
- **Involving citizens** in the redevelopment of the Lyon Confluence area, and assist them in improving the comfort of their dwellings and to reduce the amount of energy consumed for the heat demand.
- **Refurbishment of existing buildings** of the Perrache / Sainte-Blandine area with a target of 550 dwellings – 35,000 m<sup>2</sup>. In addition, SPL Lyon Confluence will build a 2MWe/4MWth wood-gas fired cogeneration power plant connected to the district heating and 4 PV systems for a total power of approx. 1 MWp.
- Providing support to inhabitants about **alternative means of transport** with smart charging stands and electric-vehicle car-sharing system.



## THE „SMARTER TOGETHER“ AMBITIONS

Five areas of **co-created and replicable smart city solutions**:



- Living labs for citizen engagement
- District heating and renewable energy for low energy districts
- Holistic refurbishment for low energy districts
- Smart data management platform
- E-mobility solutions for sustainable mobility.

The project is striving for:

- Outperforming the European 2020 targets in large urban scale demonstration projects
- Implementing smart city business models, foster job creation and business acceleration
- Actively pursuing user-centric innovation
- Following a holistic low energy approach
- Developing flexible and reliable next generation district heating systems
- Creating citizen-oriented data platforms
- Providing various e-mobility solutions

**Lyon, Munich and Vienna will deliver:**

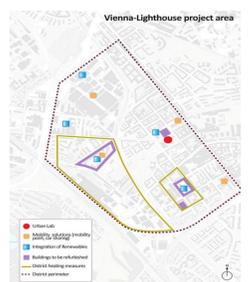
- more than 143,000 m<sup>2</sup> of refurbished housing leading to a CO2 reduction of more than 50%
- 17.2 MW of newly installed RES
- 15 new e-mobility solutions saving 95.5t/years of CO2
- over 1500 new jobs.

## VIENNA'S LIGHT HOUSE AREA

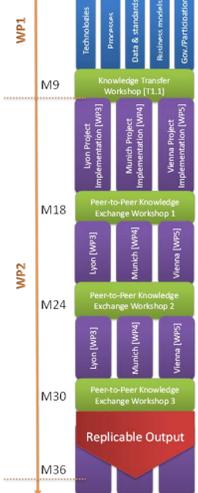
Vienna's Light House District Simmering NW is a traditional worker's district with large housing estates from 1920-1980 but also some industry. To reduce energy consumption and CO2 emissions in the lighthouse-area, a multitude of actions are taken. The project will

- Focus on **refurbishment of social housing** and a **public secondary school** with a gym (8.800m<sup>2</sup>) at large scale (66.000 m<sup>2</sup>) reducing energy demand by >60 % by using new methods
- Upgrade the **district heating system, integrating local renewable energy** and waste heat source
- **Develop a flagship e-mobility area** and reduce mobility-related energy consumption by novel business and implementation concepts as well as citizen engagement
- **Involve tenants and residents** in co-design processes
- **Work out governance structures** suitable for complex integrated renewal projects

In addition to these measures, an **Urban Living Lab** is currently in development to increase acceptance of the intended actions and to represent the project in the district.



## METHODOLOGY FOR CO-CREATION



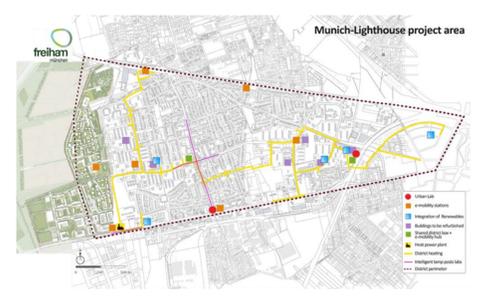
A strong interaction between the so-called "enabler" and "demonstration" work packages will be established in four steps:

1. **Design of a first innovation action framework** for the successful implementation of innovative smart solutions. This first set of recommendations of key-components, frame conditions and barriers for successful solutions will be the basis for the demonstration activities.
2. A **peer-to-peer knowledge exchange** process will bring together the experts and affected stakeholders at different stages of the implementation process in order to overcome common challenges and to benefit from lessons learned.
3. The demonstration activities will be based on a common methodology of **urban design thinking**.
4. Based on the outputs from the demonstration activities, evaluation and **transversal activities** like replication, monitoring and dissemination will be deployed. In order to ensure the inclusion of the follower cities in all outlined Enabler activities a dedicated work package has been foreseen.

## MUNICH'S LIGHT HOUSE AREA

The project will concentrate on Neuaußing-Westkreuz, a district in need of redevelopment, and Freiham, a new neighbouring district that is still under construction. The targets expressed for the area are to implement CO2-neutral energy supply by 2050 and to reduce primary energy demand by 80% up to 2050. The smart city project sets out additional objectives in the area of mobility and integrated infrastructures:

- To provide **multi-modal mobility solutions**.
- An **open data platform** allowing for the creation of innovative services.
- To address **policy and regulation issues** for solutions to be deployed on both public and private ground.
- To leverage citizens' and stakeholder expertise for **user-centred solutions**
- To support **business model innovation** for solutions in the district.



## PARTNERS



## ACKNOWLEDGEMENT

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