



SMARTER TOGETHER

Smart and Inclusive
Solutions for a Better
Life in Urban Districts

Project Presentation

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Retour d'expérience: Smarter Together
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**SMARTER
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We are SMARTER TOGETHER

- www.smartertogether.eu
- 5 year project (2016-2020)
- 29 M€ , co-funded by H2020 programme (24 M€)
7M€ pour Lyon
(2,4M€ for Lyon Métropole)
- 30 partners from 8 countries
- Coordinator:
SPL Lyon Confluence (FR)



An innovation project involving:

- Smart Cities Industrial players
- SMEs
- Universities, Research & Technologies Organisations
- European Network
- Players in the standardisation field



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- Lighthouse cities: **Lyon, Munich, Vienna**

GRAND LYON
la métropole



Landeshauptstadt
München

Stadt Wien
Wien ist anders.

- Follower cities: Santiago de Compostela, Venice, Sofia



- Observer cities: Kiev, Yokohama



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We focus on

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



**Citizen
engagement**



**District
heating and
renewable
energy**



**Holistic
refurbishment**



Smart data

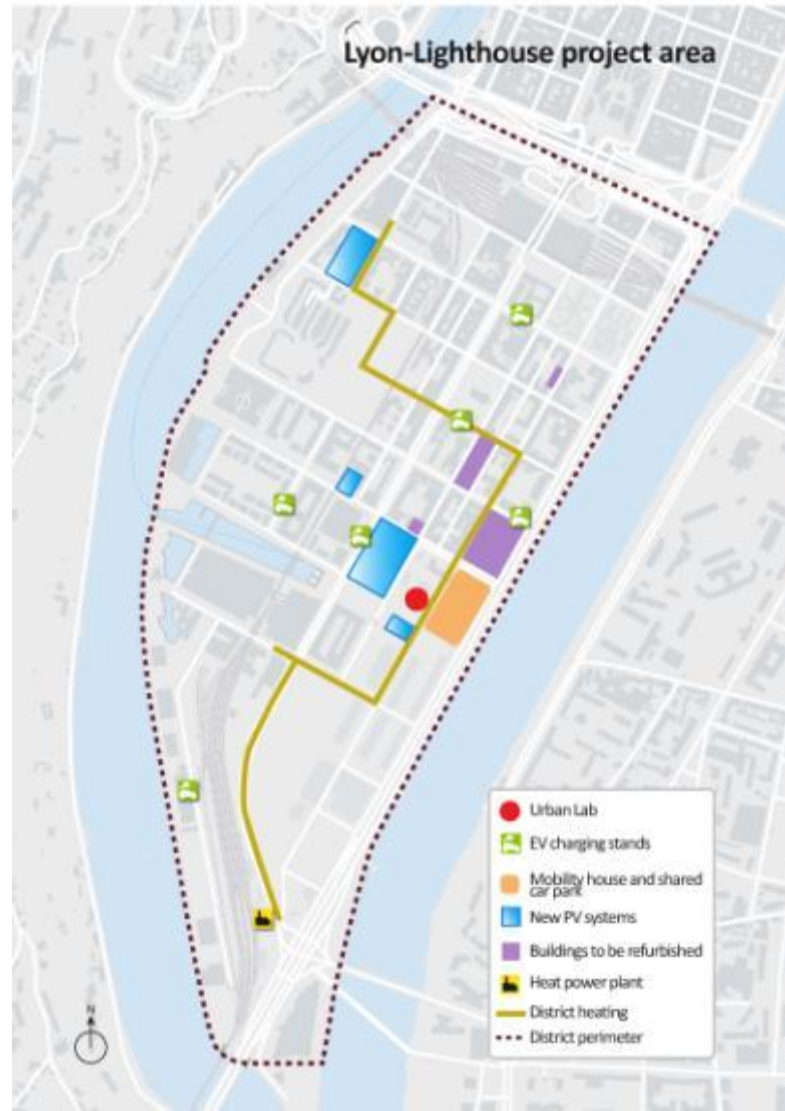


E-mobility



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Lyon





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Projects in Lyon (1)

1. Citizen/stakeholder engagement: SPL Expo and ElectrYc /ElectrYclub:

- Urban living lab and expo @ SPL to encourage dialogue and co-design the smart / sustainable city
- ElectrYc /ElectrYclub (Tuba, Métropole de Lyon, Enedis, SPL, ALEC)
 - ElectrYc - a smartphone app tested during a 6 month period, to raise awareness regarding electricity production and consumption
 - ElectrYclub – a Lyon Confluence resident's association who tested the ElectrYc app. Tomorrow they will test new services in mobility, applications, building management systems, etc.





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Projects in Lyon (1)

2. Low-energy districts

- 35,000 m² to be refurbished (public housing (Cité Perrache, Cité Migot), residential and commercial real estate, Halle Gerard, etc.)
- All buildings to be equipped with smart meters connected to “datagrandlyon” to analyse energy performance through the Community Management System (CMS)
- District heating (in place since 2016), a growing number of connected buildings linked to data platform and CMS to supervise operations of district heating
- 2 new photovoltaic installations : Chanfray Gym Hall (206 kWc), and A3 plot (430 kWc).





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Projects in Lyon (2)

3. Integrated infrastructure and connected district

- Deployment of new CMS - open, interoperable, non-vendor locked-in integrated and cross-cutting ICT solution based on dynamic data collected through smart meters from district heating, photovoltaic installations, refurbished buildings, shared EV, new buildings with Building Energy Management Systems, Linky

4. Sustainable mobility

- 4 EV charging stations (systems Bluely and CNR)
- 16 electric vehicles
- 2 autonomous electric shuttles « Navly », all connected to CMS to assess energy consumption

5. Contribution to monitoring & evaluation & replication

- A monitoring and evaluation process to ensure the proper quality of data needed.
- And replication when best practices can be shared





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Power



Logistics



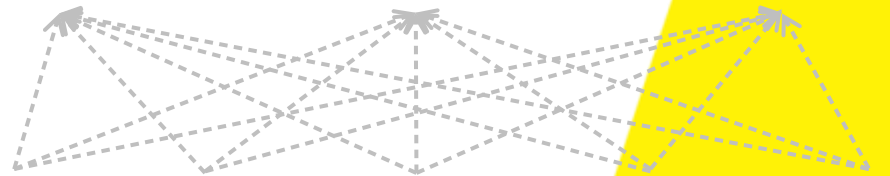
Heat



Mobility



Lighting





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Retours d'expériences

Avantages

- **Intégration de l'éco-système d'acteurs internationaux**, visite et séminaires dans les pays des différents partenaires
- **Fédération d'acteurs locaux** sur une thématique pour mener un projet
- **Benchmark** de divers expériences sur les plateforme de données citadines
- **Visibilité internationale**
- **Opportunité de développer et tester des solutions** durables du point de vue techniques et financier (vision long terme)
- **Financement** pour tester des projets d'expérimentation (financement temps homme et équipement)

Inconvénients

- **Processus administratifs** (reporting) très lourds, qui implique des moyens dédiés à l'administration, pour rendre visible les avancements
- **Financement d'un AMO** pour la coordination des partenaires
- **Ne pas sous-estimer le temps** nécessaire pour monter le projet
 - Trouver les partenaires
 - Trouver terrain d'entente
 - Rédiger la candidature et formalités
 - Environ 3 mois pour Smarter Together



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THANK YOU!

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@SmarterH2020



SmarterTogetherProject



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Annexes

Demonstration areas

Lyon

- Lyon-Confluence
- 1,5 km²
- City centre, former industrial site
- 7,500 inhabitants (16,000 expected by 2025)

Munich

- Neuaubing-Westkreuz/Freiham
- 7 km²
- Urban fringe
- 30,000 inhabitants (50,000 expected by 2030)

Vienna

- Simmering NW
- 1,5 km²
- Outer district, mixed
- 21,300 inhabitants



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Refurbishment

Refurbishment of housing > **150,000 m²**

- **Lyon**

35,000 m²

550 dwellings

Social housing blocks & jointly owned buildings

- **Munich**

42,000 m²

595 dwellings

Shared ownership residential estates

- **Vienna**

75,000 m²

632 dwellings

Social housing blocks & 2 secondary schools



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District heating and renewables

District heating and renewables: **17MW of new capacity**

- **Lyon**

Cogeneration Heat Power (wood-gas fired)
2MWe/4MWth
Building-integrated photovoltaic panel

- **Munich**

Geothermal Heat Plant
10MW
Decentralised private photovoltaic systems

- **Vienna**

Waste heat from data centre
1MW
Solar thermal on district heating & Photovoltaic systems



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E-mobility

E-mobility solutions: **80 e-vehicles & 60 charging stations**

- **Lyon**

Mobility house
15 electric vehicles
Car-sharing system

- **Munich**

30 electric vehicles (cars, cargo pedelecs, e-trikes)
Integrated city/mobility application

- **Vienna**

Mobility point
35 electric vehicles (cars, e-vans, e-forklifts, e-bikes)
Vienna Mobility Card



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Replication areas

- **Santiago de Compostela**

Historical city center (UNESCO World Heritage Site since 1985)

Focus: Sustainable mobility & low-energy district

- **Venice**

Inland part: 53.000 m² (public owned)

Focus: Sustainable Mobility Plan, district heating system & photovoltaic power plant & building of 72 apartments

- **Sofia**

Central district

Focus: Energy efficiency and heat energy & improvement of public infrastructures and transport