



SMARTER TOGETHER

Smart and Inclusive
Solutions for a Better
Life in Urban Districts

EIP-SCC Action Cluster

Sustainable District & Built Environment Workshop

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.fr



SMARTER TOGETHER



European
Commission

Horizon 2020
European Union funding
for Research & Innovation

Partners

2016 to 2020

- Lighthouse city
- Follower city
- ★ Lighthouse city 2014

Observer cities :
Kyiv (Ukraine)
Yokohama (Japan)



Lyon Confluence



GRAND LYON
la métropole



TOSHIBA

ENEDIS
L'ELECTRICITE EN RESEAU



Landeshauptstadt
München



bettervest
nachhaltig • effizient • rentabel

GS Partners

SIEMENS



StoDt Wien
Wien ist anders.

bwsg
besser wohnen seit Generationen



kelag
Wärme



Post
ÖSTERREICHISCHE POST AG

Fraunhofer

AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY

energycities

GOPA.com

University of St.Gallen



Algoe
consultants





**SMARTER
TOGETHER**



**Citizen
engagement**



**District
heating and
renewable
energy**



**Holistic
refurbishment**



Smart data



E-mobility



SMARTER
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150,000 m² to be
ecorefurbished



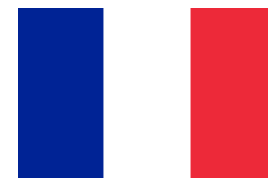
Vienna
(Simmering
North-West)



Munich (Neuaubing-
Westkreuz district)



Lyon (Confluence area)





**SMARTER
TOGETHER**

**150,000 m² to
be eco-refurbished**

Vienna: 75,000 m²

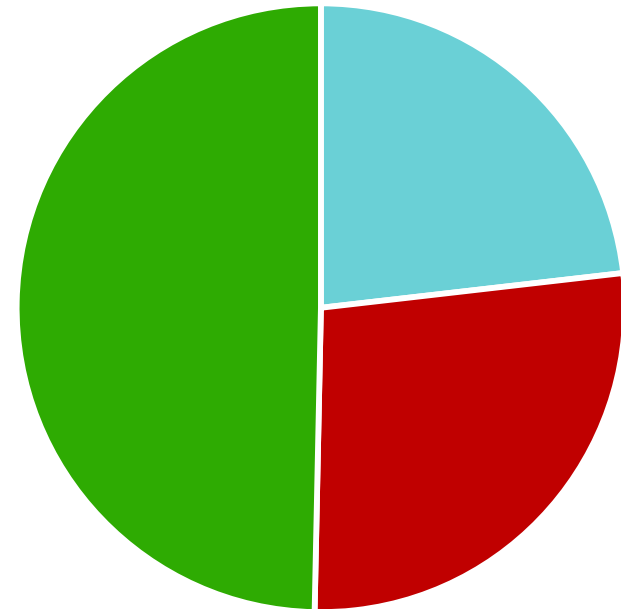
public/social housings
public equipments (school, gymnasium)

Lyon: 35,000 m²

social housings operators
private groups of owners
public equipment (office spaces)

Munich: 41,000 m²

private groups of owners





Vienna: 75,000 m² to be ecorefurbished



53,500 m² (500 flats)
+ 7,200 m² of new built area



8,800 m² (100 flats)



8,800 m² (school)



Munich: 41,000 m² to be ecorefurbished



1,700 m² (21 flats)



620 m² (8 flats)



750 m² (12 flats)



23,000 m² (300 flats)



12,700 m²
(150 flats & 40 retail units)



Lyon: 35,000 m² to be ecorefurbished



1,400 m² (14 flats)



4,700 m²
(office spaces)



1,500 m²
(23 flats)



14,000 m² (250 flats)



2,000 m² (32 flats)



3,000 m² (35 flats)



9,000 m² (160 flats)



2,300 m² (28 flats)



1,400 m²
(25 flats)



2,500 m² (34 flats)

Ecorefurbishment + data collection & analysis



**Citizen
engagement**



**District
heating and
renewable
energy**



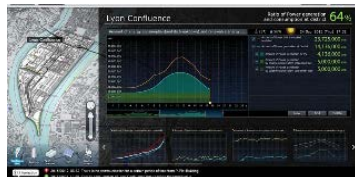
**Holistic
refurbishment**



Smart data



E-mobility



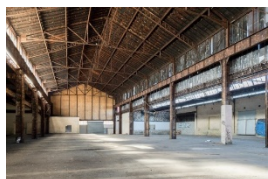
Data visualisation on the CMS
(Community Management
System) inter-operable
& non vendor-locked tool



Data collection and storage
on the Lyon Metropolis Data platform

open API (Application Programming Interfaces)

Data sources from eco-refurbishment



Refurbished buildings
(with instrumentation)



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District
heating
system



épices



Photovoltaic
production



enedis
L'ELECTRICITE EN RESEAU

Electric
smart
meters

Performance of ecorefubished buildings (aggregated data)

For common areas: time step 10 minutes

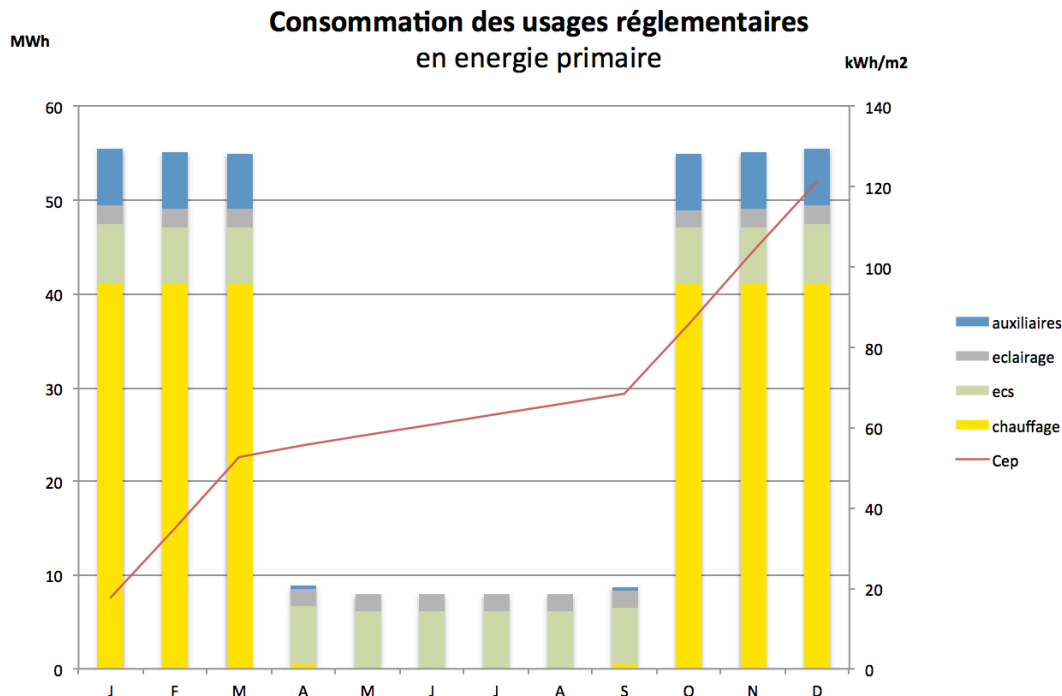
- heating consumption
- hot water consumption
- electric consumption

For one quarter of the housings: time step 10 minutes

- internal temperature of the housing

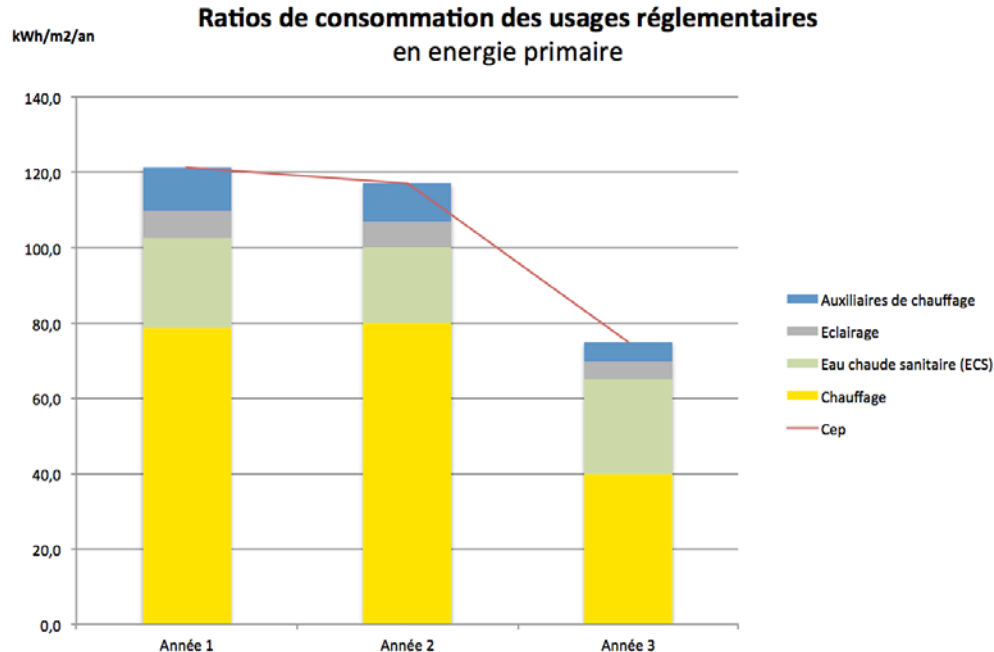
Performance of ecorefubished buildings (aggregated data)

- Time period displayed: yearly
- Displayed values: monthly



Performance of ecorefubished buildings (aggregated data)

- Time period displayed: several years
- Displayed values: yearly



Energy consumption of an ecorefubished housing

For common areas (time step 10 minutes)

- heating consumption
- hot water consumption
- electric consumption

For each housing (time step 10 minutes)

- hot water consumption
- electric consumption
- internal temperature of the housing

Performance
of
eco-refurbished
buildings

Eco-refurbished
buildings
(individual
consumptions)

Energy consumption
& production for the
Lyon-Confluence
area (Zero carbon
Action Plan)

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la métropole
TOSHIBA



Community Management System
(application/service "viewer")



Lyon Metropolis Data Platform
(data collection and storage)

Data sources from eco-refurbishment



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Thanks for your attention!



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