



EIP Smart Cities and Communities

Action Cluster Meeting
Sustainable Districts and Built Environment

House of Dutch Provinces

November 22nd, 2016

Brussels



- 1. Citizens**
- 2. Positive Energy Blocks**
- 3. Retrofitting To Passive / Deep Retrofitting**
- 4. Small Giants**
- 5. Renewables production and Storage**
- 6. ICT: Smart Grid management**
- 7. EU policies Framework**
- 8. Water Management and Greening the Cities**

What is a Positive Energy Block ?

A **Positive Energy Block (PEB)** is a group of at least 3 connected and multifunctional buildings that produce annually more energy than they require...

...in terms of lighting, heating, cooling and ventilation.

OBJECTIVE

To launch 100 PEB projects by 2020.

At least 1 PEB per Member State
50% in “Small Giants” (<150.000 inhabitants)

Focus: mixed & complementary usage of buildings
ICT for design & management
local renewable energy production
new & retrofitted buildings
public and private actors



Financing: exploring Smart Specialisation Strategy (S3) at regional level, EIB, Private investors...



Location: Identification specific to each city with preference given to central area for demonstration purposes

Towards PEBs: the example of HIKARI in LYON (France)

Photographic credit:

*HIKARI designed by Kengo
Kuma and Associates*



Field Visit
of the Positive Energy
Block of HIKARI
In Lyon Confluence
8 November 2016

NEXT buildings

Introduction: a real case in Lyon



A block integrated in a district:

The Lyon-Confluence urban project

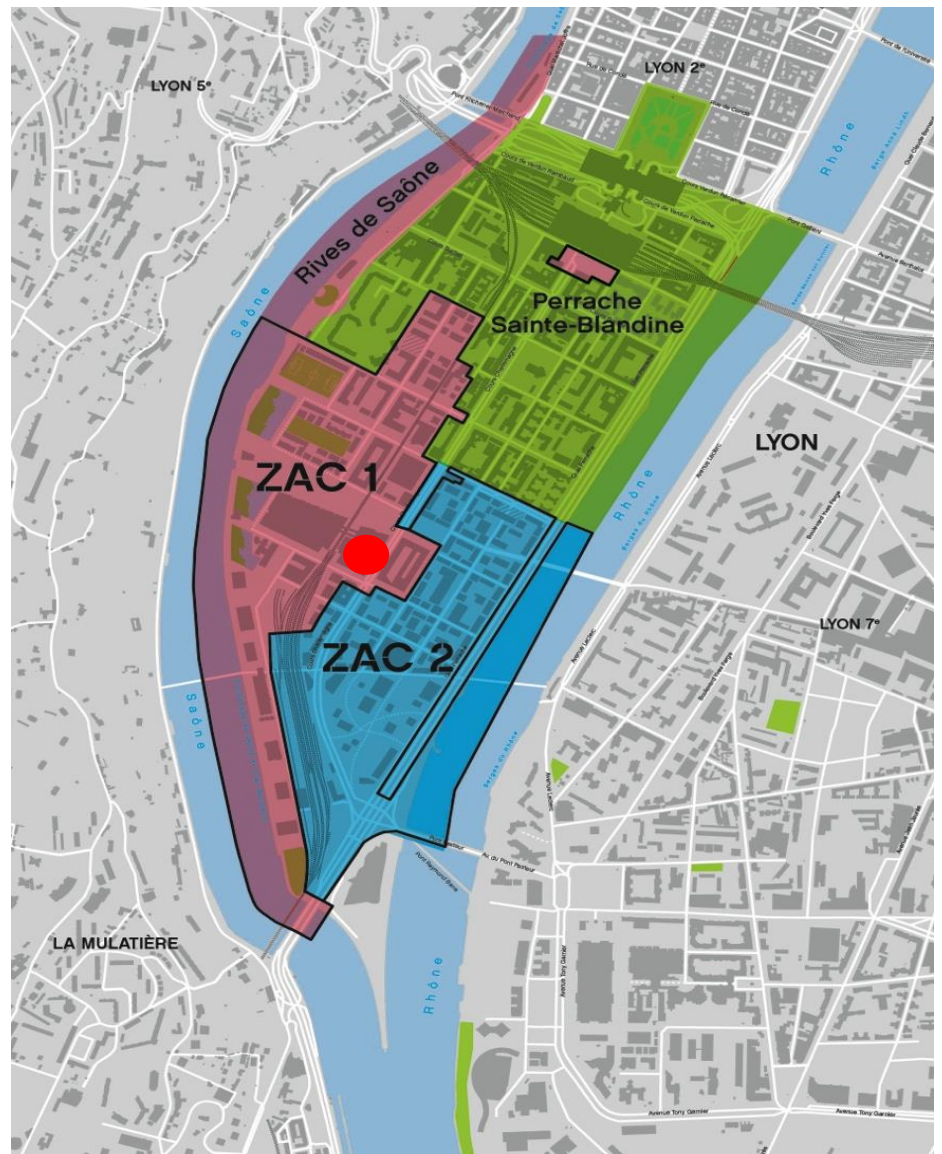
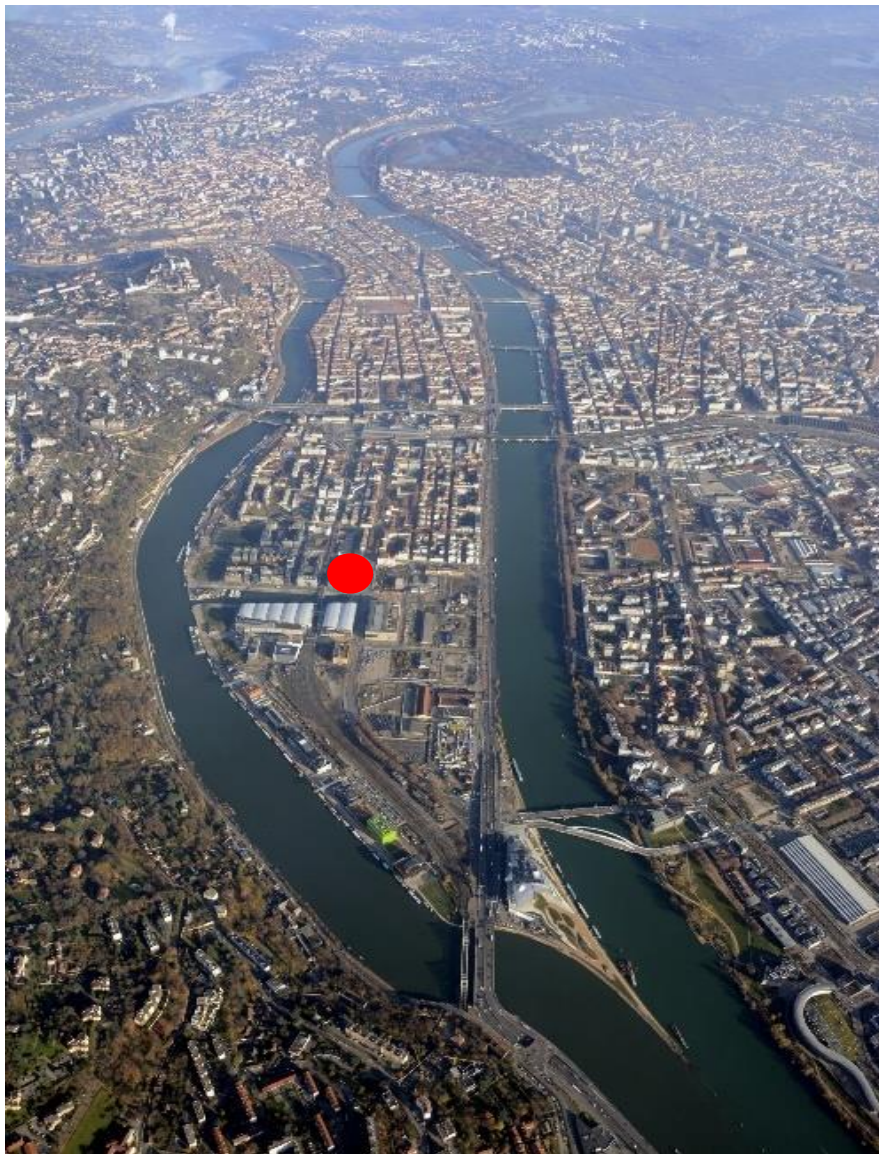
- 150 hectares (70 renewed)
- 1,000,000 m² net floor area to be built
- 20,000 residents (7,000 in 2000)
- 25,000 jobs (7,000 in 2000)

Existing neighbourhood

Phase 1: 2003-2018

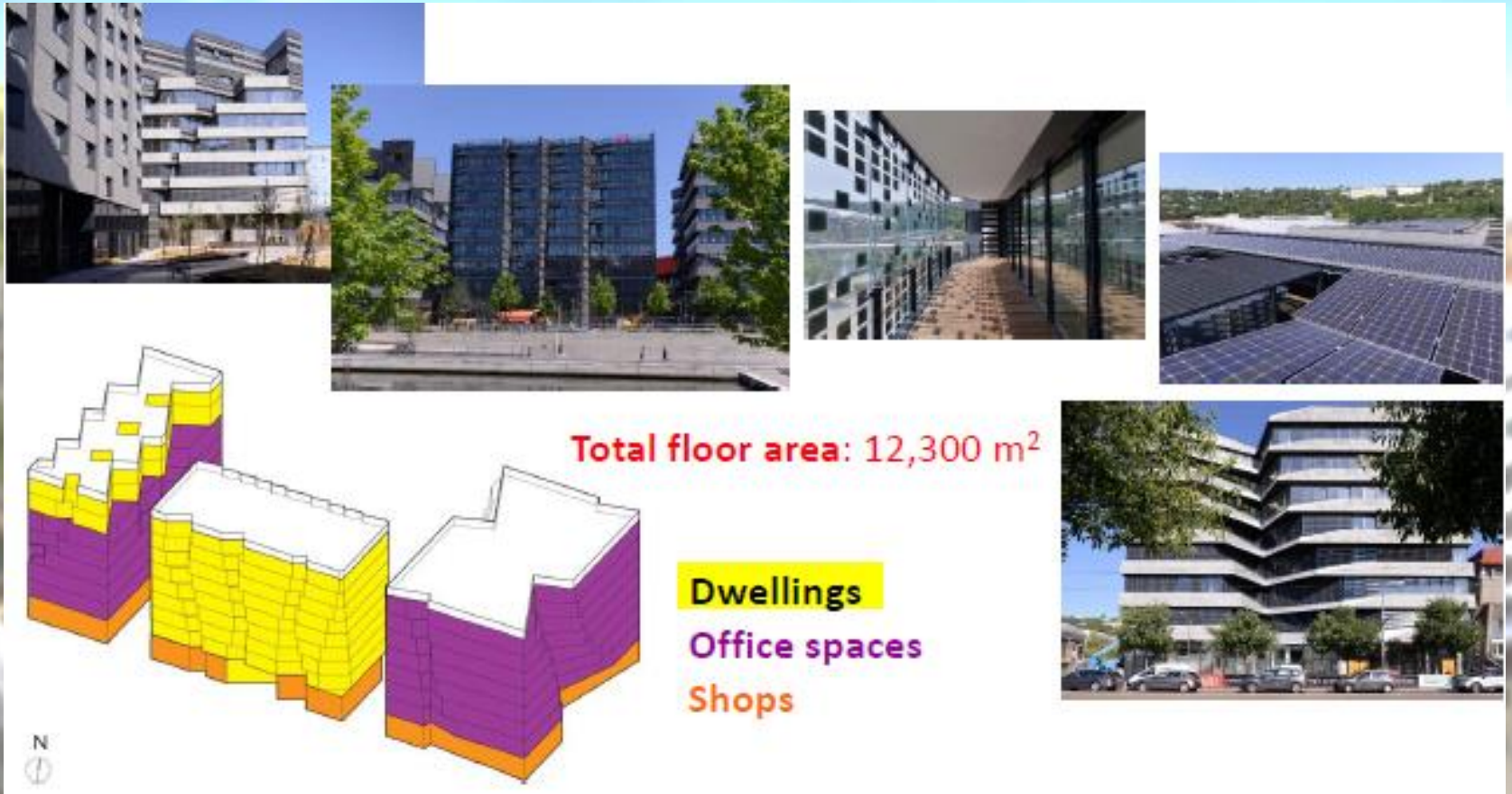
Phase 2: 2012-2030

Commissioning of Hikari: september 2015





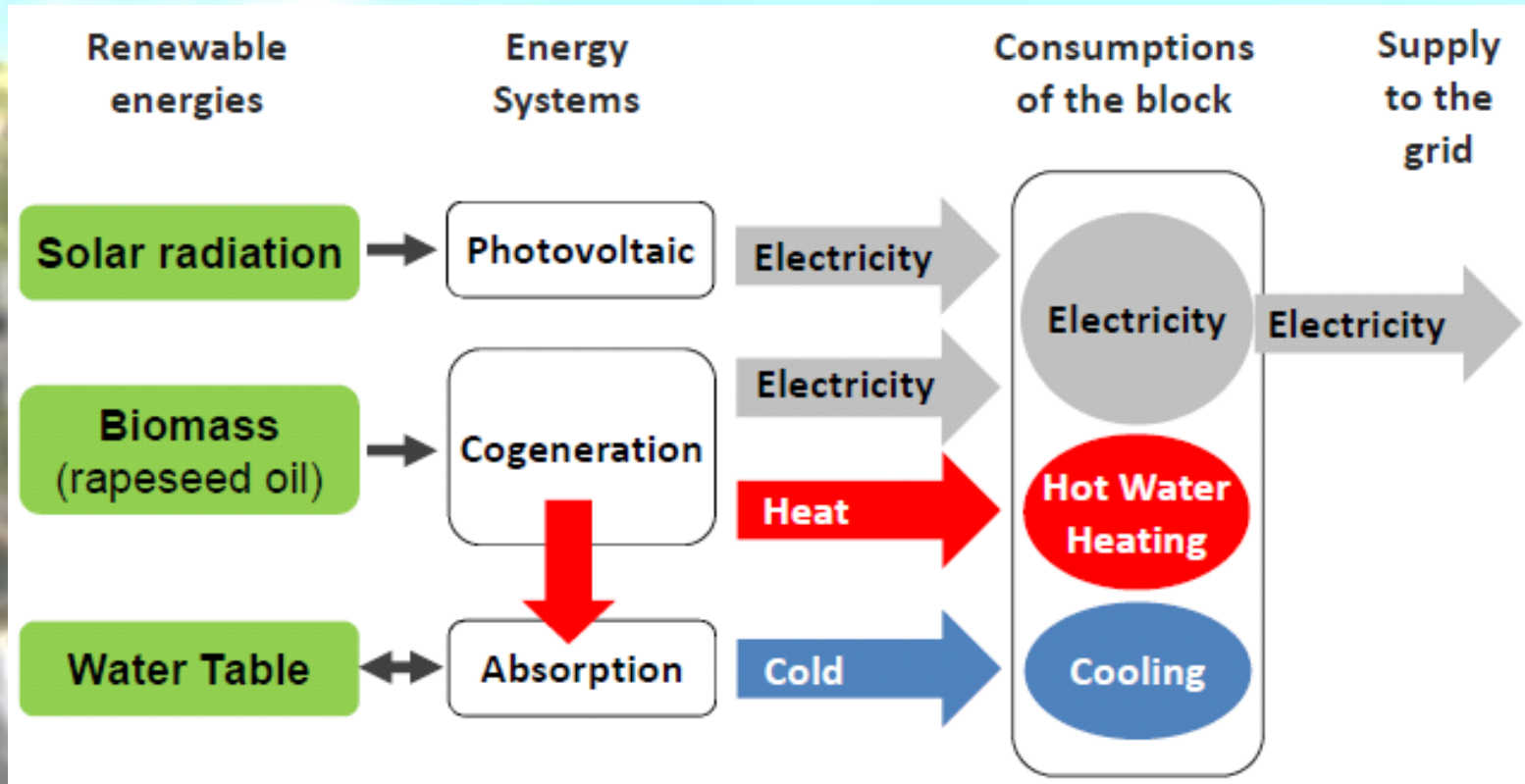
Hikari: a mix-use block



Introduction: a real case in Lyon



Hikari: a positive energy block



Introduction: a real case in Lyon



Hikari: a positive energy balance

Energy production of Hikari
1.485 GWh of primary energy



■ Electricity (cogeneration) ■ Electricity (photovoltaic)

+2.8 MWh (0,2%)

Energy consumption of Hikari
1.482 GWh of primary energy



■ Electricity ■ Rapeseed oil ■ Gas



















ENERGY ?

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TECHNOLOGY !

(+economy and sociology...)

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CITIZENS...





THANK YOU!

<https://eu-smartcities.eu>

Contact: sustainabledistricts@eu.smartcities.eu

Follow us:





Objectives

- Get ready for the General Assembly
- Awareness rising
- Sharing our background and discussing way forward

Agenda

- 2:00 Welcome and objectives of the day (Eckhart)
- 2:10 Presentation of 'topics and collaborations' charts to work with (Eckhart)
- 2:40 Latest news: Focus areas and Areas of collaboration (Initiative leads)
- 3:10 Collaboration and workplan - initiative needs to be satisfied by other initiatives, how and when
- 4:10 Agreement on the framework for a common workplan
- 4:45 Discussion on the evaluation* and wrap up

