

3rd Online Mini Workshops
Series

Renovation Wave: Enablers and Accelerators for Ambition

1st Webinar

Digital is the New Green: How will the ICT sector help roll out the Renovation Wave

5th of October 2020
(16:00-17:15 CEST)
Via GoToMeeting



For more information:
eva.bardinelli@euroace.org

Moderated by:



Adrian Joyce
EuroACE Secretary General



Instructions

- You are kindly asked to remain muted
- No cameras for the whole duration of the webinar
- Only speakers and moderator will stay unmuted
- A 20-25 minutes Q&A session will follow the presentation
- Ahead and during the Q&A session, questions will have to be sent to “Everyone” in the GoToMeeting chat box.
- Questions should be as concise as possible
- The moderator will group questions and then address them to the speakers
- If time does not allow to cover all questions, they will be forwarded to the speaker for later response
- The PowerPoint presentation and questions will be shared with you in due course

EuroACE – Energy Efficient Buildings

- The European Alliance of Companies for Energy Efficiency in Buildings
- Formed in 1998 by Europe's leading companies involved with the manufacture, distribution and installation of energy saving goods and services
- A business association working together with the European institutions to help Europe move towards an efficient use of energy in buildings (new and renovated)



EuroACE – Energy Efficient Buildings

** More than 200,000 employees & more than 900 production facilities and office locations in the EU **

Our specificity: our cross-sector representativeness

We represent all energy efficient technologies

>>> heating & cooling equipment, insulation, lighting, maintenance regimes and controls, ventilation equipment & windows



EuroACE – Energy Efficient Buildings

We believe that improving the energy efficiency of buildings, especially renovating existing buildings, is the most cost-effective method of:

- Creating employment and securing economic growth
- Alleviating energy poverty on the long-term
- Providing people with comfortable and healthy homes
- Meeting carbon reduction targets
- Achieving energy security



EuroACE – Renovate Europe Campaign



EU-wide political communications campaign
Focuses exclusively on ambitious energy renovation of the building stock, motivating EU and national institutions to take action
45 partners, including 17 at national level
High political support with the Champions Together for Renovation

#PrioritisePeople
#AccelerateRenovation



Introduction



Julie Kjestrup
EuroACE President



“The Energy Efficiency Indicator, tracking investments in energy efficiency and smart buildings technologies”



Clay Nesler
Vice President, Global Energy and
Sustainability, Johnson Controls



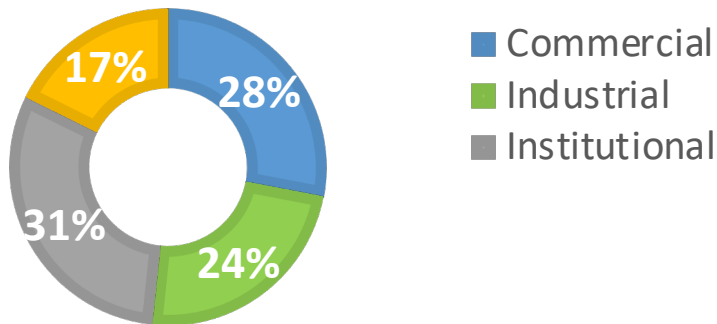
Energy Efficiency Indicator

Europe Regional Survey Highlights

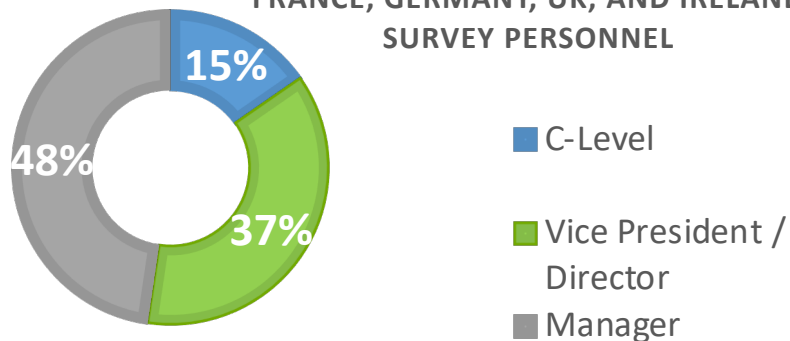
2019

The 2019 Energy Efficiency Indicator Study surveyed 1,400 energy and facility management executives from ten countries, 300 from France, Germany, UK, and Ireland

FRANCE, GERMANY, UK, AND IRELAND
SURVEY SECTORS



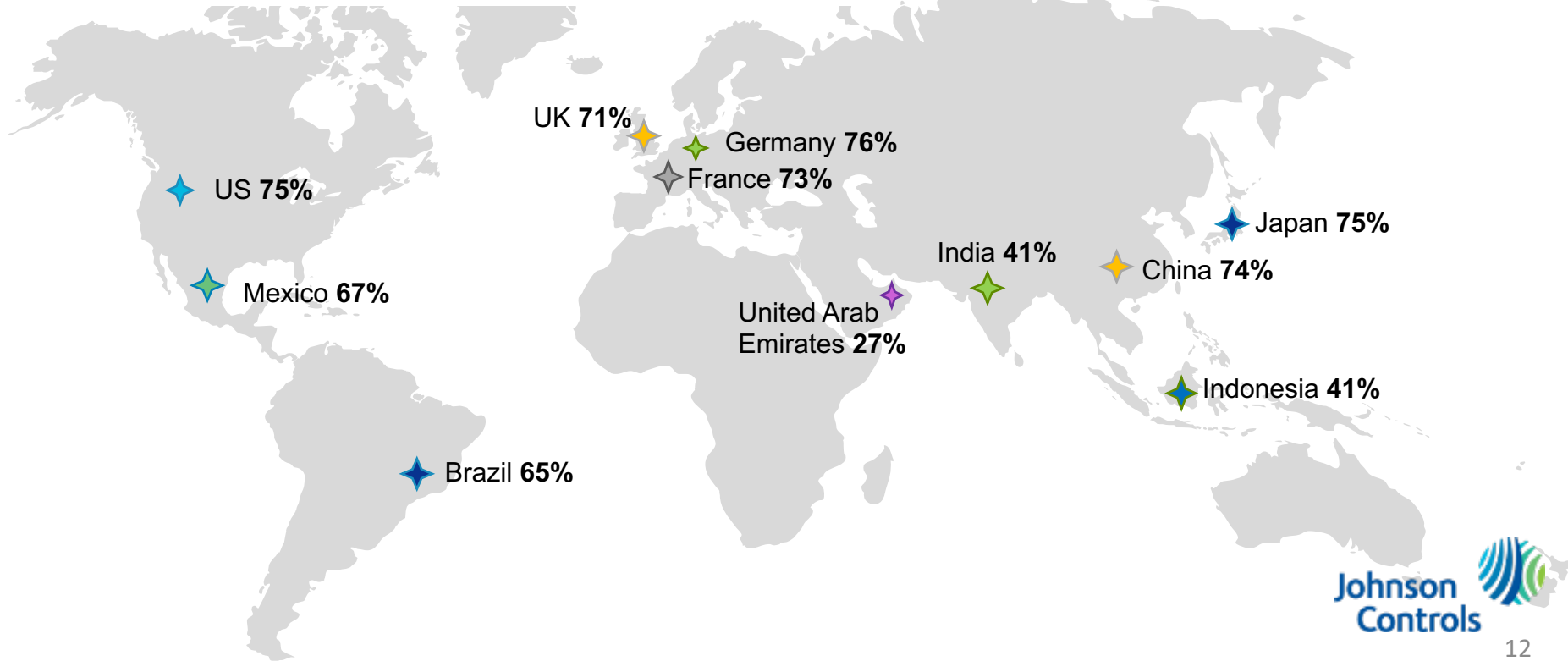
FRANCE, GERMANY, UK, AND IRELAND
SURVEY PERSONNEL



- Brazil
- China
- France
- Germany
- India
- Indonesia
- Japan
- Mexico
- UK/Ireland
- United Arab Emirates
- United States

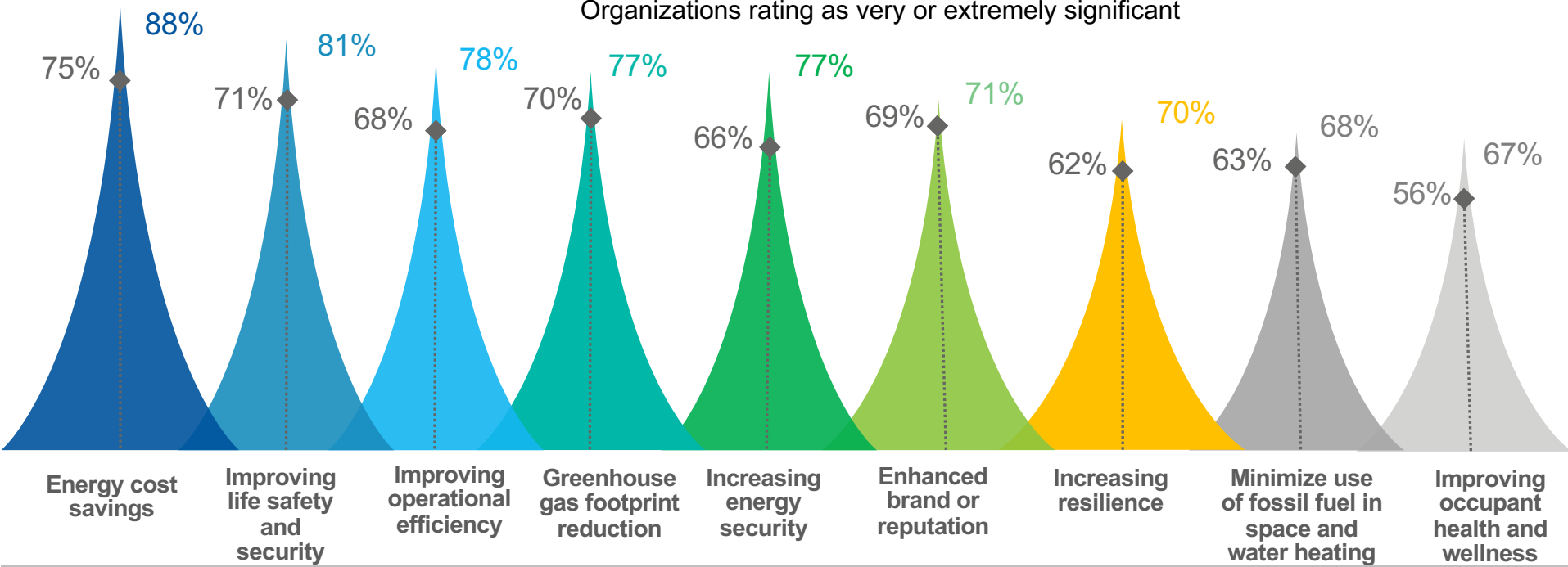
Investment in energy efficiency, renewable energy, and smart building technology is expected to increase globally

Organizations increasing investment in energy efficiency, renewable energy or smart building technology over the next 12 months



Energy cost savings is the greatest driver of energy efficiency investments regionally and globally

Organizations rating as very or extremely significant



▲ Europe

◆ Global

Renovation-related investments in Europe

Organizations that invested in the following measures in the past 12 months

Building controls improvements

72%

Heating, ventilation, and air conditioning (HVAC) improvements

71%

Upgraded building controls before end of life

42%

Replacement of fossil fuel space / water heating with heat pump technology

37%

Replacement of HVAC equipment before end of life

36%

Building envelope improvements

24%

Building management system and controls installations in Europe

Organizations that invested in the following measures in the past 12 months

Standalone controls / thermostats

65%

On-site building management system

57%

Enterprise-wide building management system

52%

On-site integrated building management system

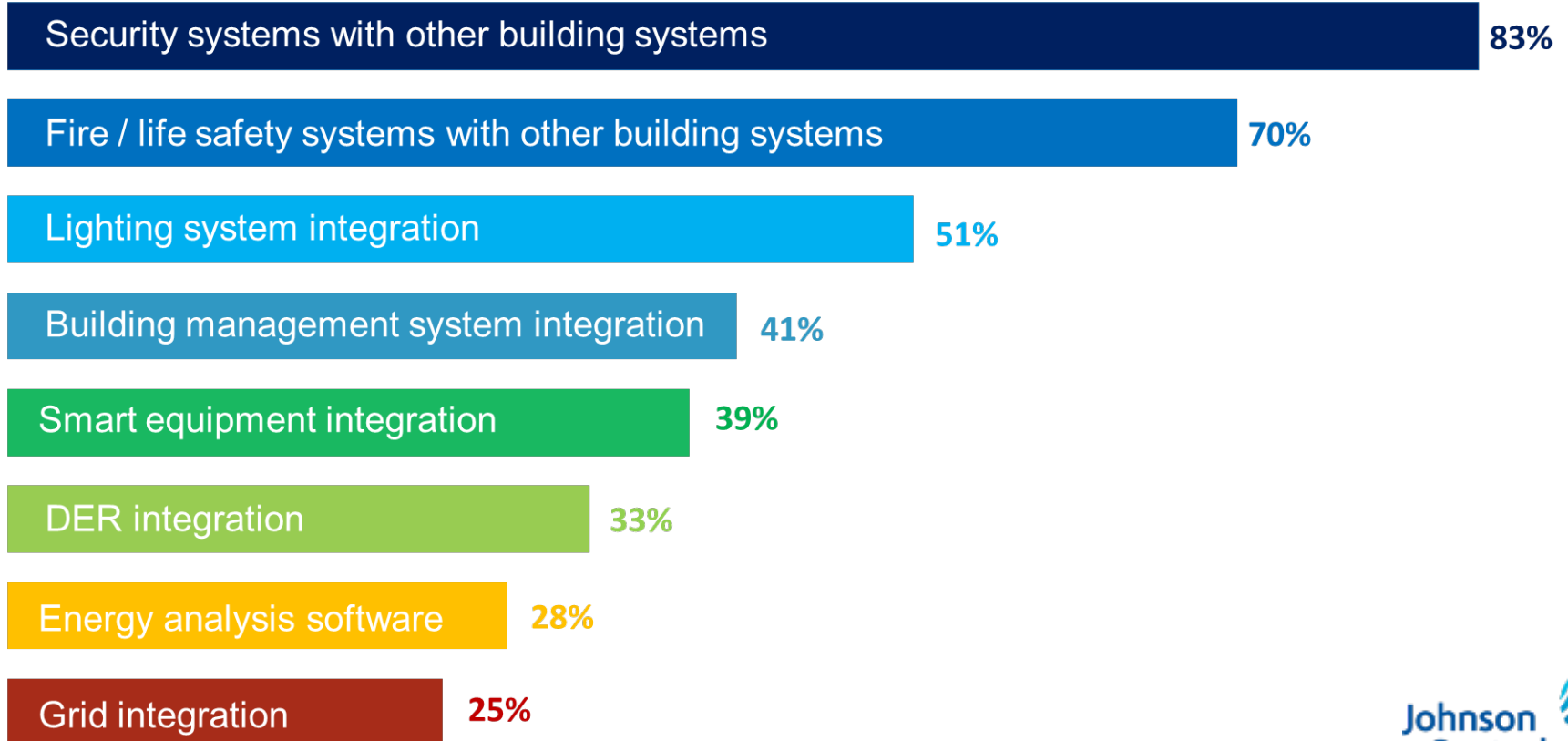
40%

Cloud-based building system applications

30%

Systems integration investments in Europe

Organizations that invested in the following measures in the past 12 months



Uncertainty regarding savings/performance was rated as the top barrier to energy efficiency investments regionally

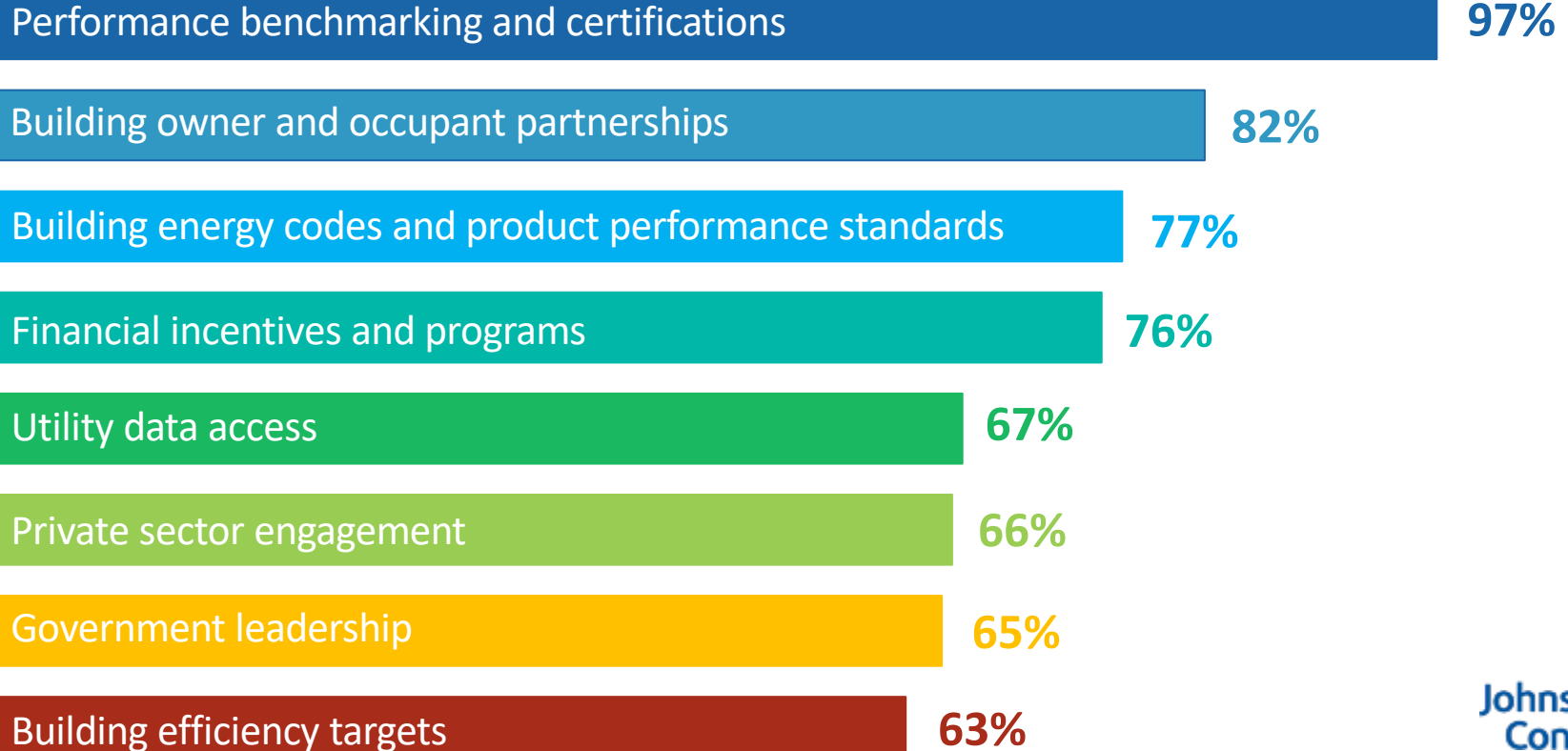


▲ Europe

◆ Global

Performance benchmarking and certifications are viewed as the most important policy for improving energy efficiency in buildings

Organizations in Europe rating as very or extremely significant





Energy Efficiency Indicator

For more information, please visit:

<https://www.johnsoncontrols.com/insights/2020/featured-story/2019-energy-efficiency-indicator>



2019

“Digital mapping tools in support of the Renovation Wave: IMOPE geo-service “



Jonathan Villot
Co-Founder, IMOPE -URBS





U R B S

Urban Retrofit Business Services



www.urbs.fr
contact@urbs.fr



Lauréat Prix Innovation
Bercy - IMT



Jonathan VILLOT Ph.D



- Since 2019: **Co-founder** of U.R.B.S.
- Since 2014 : **Scientific manager** of the Advanced Master in Energy Efficiency in Buildings Renovation
- Since 2012: **Tenured Assistant Professor** at Mines Saint-Etienne

- **Two facts**

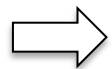
- To attend climate objectives we must massify the renovation of building stock
- The intention is there but the results not → Theory VS reality

- **Why ? One explanation !**

- The majority of public action is driven by communication and sensibilization (Radio, TV spot, incentive, ...)
- Or no segmentation is proposed. We have the same message for all. But we have a sum of individuality. Not a homogeneous population (building and people)
- Only a few parts of the population is touch by sensibilization and a major part is not aware of financial aids

Conclusion: Incentive is not sufficient and not efficient in its current declination

- **Stop « wait-and-see » ! Be proactive**
 - If you can have information at building scale (address) for all the stock, you can adapt your strategy by segment and contact directly the people with a first proposition relevant to their situation.
- **How to do that ?**
 - Regroup all private and public data in the respect of **GDPR** at the scale of the buildings (households)
 - Make simple access to information to all actors of a territory from the decision-maker to field actors.



Our solution





2015

- ✓ Development of IMOPE and test on the first territory
 - Finance by ANRU in a project focus on sustainable city



2016

- ✓ First prototype and first presentation of the results
 - Strong interest from many public actors
 - Launch of the entrepreneurial project



2017

- ✓ Challenge Data City PARIS
 - Communication / requests / enhances reputation
 - Industrialization accelerator



2018 – 2020

- ✓ U.R.B.S. is officially created
 - Scaling: Today we are operational on more than 75 territories (1 200 000 people)

DATA FOR ENERGY TRANSITION

- **Helping and supporting smart cities in :**
 - Sustainability
 - Energy efficiency
- **Improving their knowledge of :**
 - Buildings
 - Households

- **Big data and analytics solution**
 - Data mining : key indicators and data intelligency
 - Machine learning : improving data with models and algorithms
- **Customized Web Geo Services**
 - Intuitive and user-friendly
 - Multiple actors

- **Data easy to read and manipulate**
 - Centralize and share information
 - Increase individual and collective knowledge
- **An optimized business process**
 - Manage an entire territory
 - Follow action plans with dynamic assessment
- **Facilitated and active implementation**
 - Identify and target priority buildings and households
 - Scale and consolidate renovation actions
 - Propose purchasing group to massify the renovation of identical buildings

- **Working with first network of academic incubators of first group of A+ Schools of Engineering in France**



- **Partner with the leader of Smart Grid in Europe**



- **Operational on more than 75 territories (1 200 000 people)**



Jonathan VILLOT

- Energy Efficiency Expert – Co-founder U.R.B.S.
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- jonathanvillot@urbs.fr

And also on   

Web Site

- www.imope.fr

“How the EU Digital Policy can help the Renovation Wave”

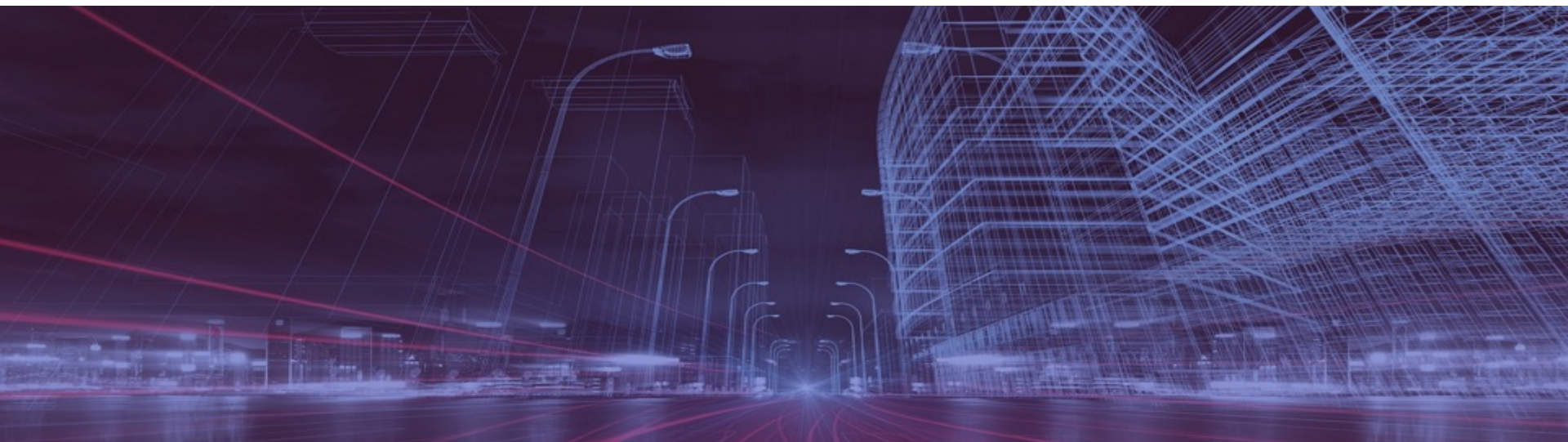


Ilektra Papadaki
Policy Officer, DG GROW (C.1)



How can digitalization contribute to the Renovation Wave?

Ilektra PAPADAKI, Policy Officer, European Commission



A climate neutral Europe by 2050



Who will benefit from the EU's digital strategy?



EVERY EUROPEAN

Technology improves every citizen's daily life.



BUSINESSES

Businesses start, grow, innovate and compete on fair terms.



THE PLANET

Digital technologies help the EU reach climate neutrality.

What will we do?

Technology that works for people

A fair and competitive digital economy



An open, democratic and sustainable society

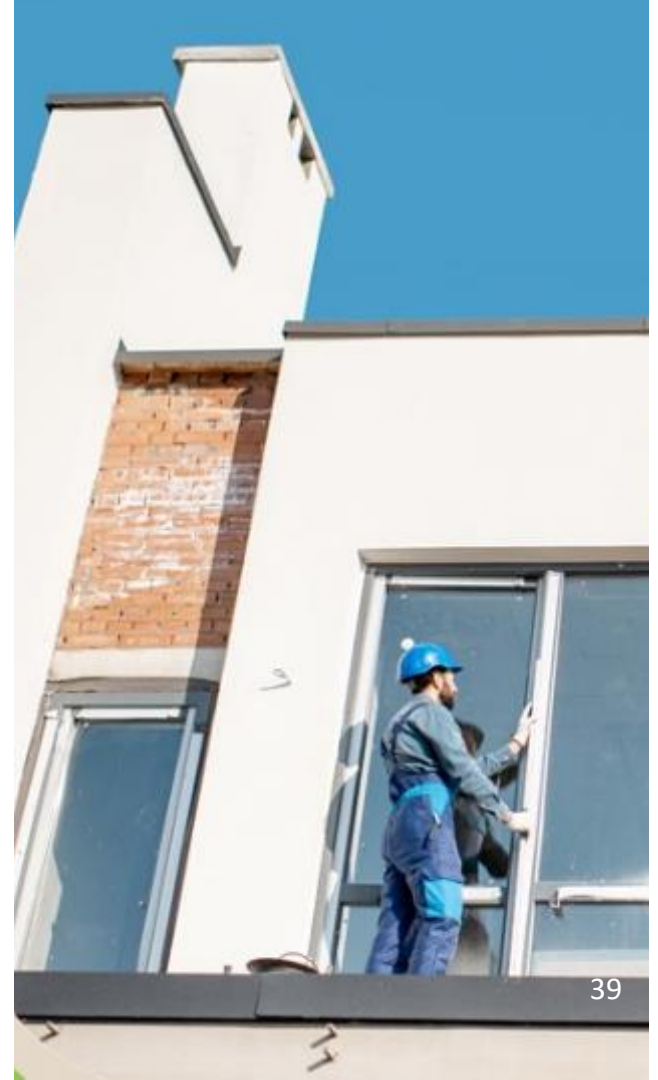
EU fit for the digital age



“Renovation Wave”

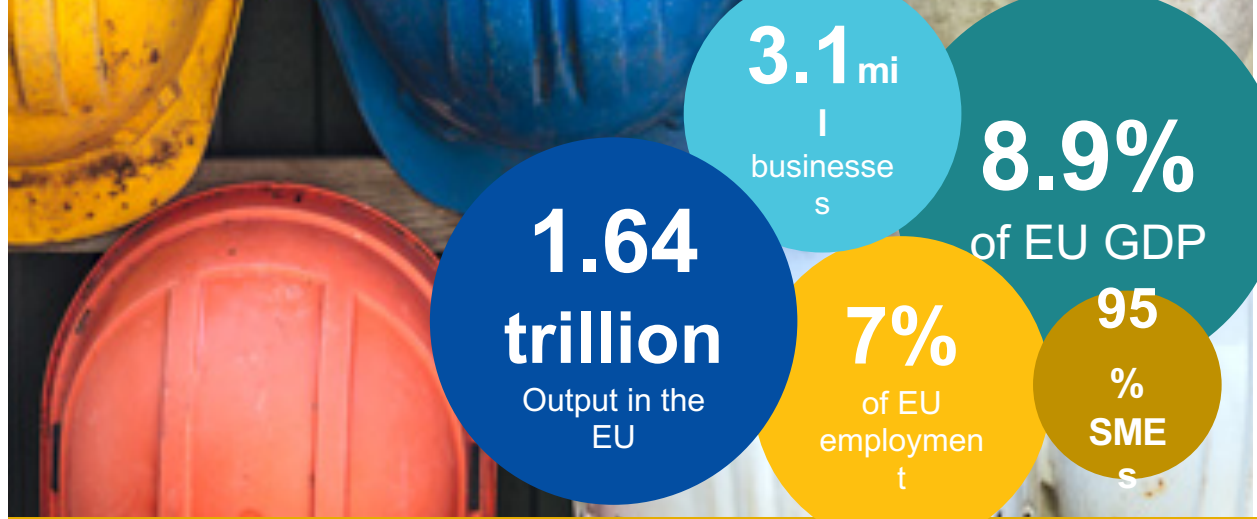
Green and Digital Transition, Resilience

- ✓ Create demand for construction activities in green terms
- ✓ Support and prepare the construction sector to deliver
- ✓ Digitalise the construction sector as well as the processes
- ✓ Minimise the use of resources, move towards a circular economy
- ✓ Support for the weakest groups and social infrastructure



Construction 2020

Strategy for the sustainable competitiveness
of the construction sector and its enterprises
(2012)



Thematic Objectives



Digitalisation and Innovation



Skills



Resource Efficiency

[BIM Task Group](#), [EU industrial platform for construction](#), [Digitalisation of construction SMEs](#), [Buildings Digital Logbook](#)

[Blueprint for sectoral cooperation as part of the Skills Alliance](#), [Build Up Skills](#), [Apprenticeship pledges for construction](#), Health and Safety at work.

[Level\(s\)](#), [Eco design](#), [Circular Economy Principles for Buildings' Design](#), [EU Construction and Demolition Waste Protocol and Guidelines](#)

Every thematic objective is supported by a **stakeholder thematic group meetings** and the **High Level Forum**.
The **European Construction Sector Observatory** collects and analyses useful information for the construction sector in thematic, national and EU level.



Digitalisation of construction

Digital Building
Logbook



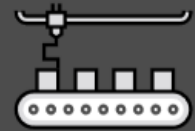
Building Information
Modelling (BIM)



Digital
Platforms



Construction Specific
Digital Technologies



Modernising the
processes

Supporting the
sector

1

Digital Building Logbooks



All data, information and documents for a building in one place



A dynamic tool that keeps a record of all events in the life of a building



Transparency, trust, informed decision-making and exchange of information



A secure tool that allows data owners to have control over them

Industrial Strategy for Europe

European Data Strategy

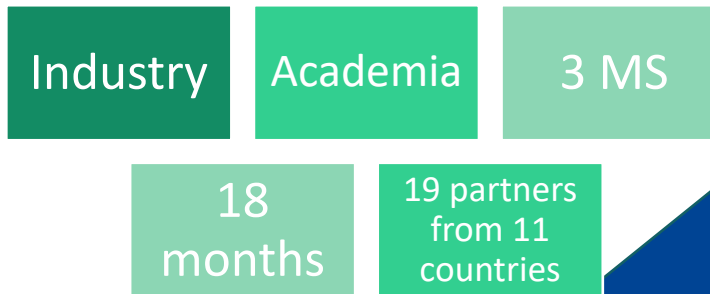
Circular Economy Action Plan

Renovation Wave

DIGITAL

GREEN

2 Innovation



The DigiPLACE consortium is working towards setting a **Reference Architecture Framework for Digital Platforms of Construction**, focusing further on the following areas:

- common language, interoperability, standards;
- regulations, public services;
- data and knowledge sharing;
- environmental performance;
- business, market and collaboration.



Horizon Europe is currently under negotiations with Member States

3

BIM in Public Procurement



BIM is not obligatory, but it is suggested in the EU Directive for Public Procurement in 2014

For public works contracts and design contests, Member States may require the use of specific electronic tools, such as of building information electronic modelling tools or similar.

The Commission is encouraging the use of BIM through “soft-policy” and close collaboration with the EU BIM Task Group

Handbook for the introduction of BIM in Public Procurement available at 21 languages

Training of 250 public procurers in BIM

Ad-hoc support to 6 MS through Structural Reform Funds

EU Methodology for Cost Benefit Analysis for the use of BIM in individual projects

>30%

From the money spend in construction are public

250.000

public authorities in the EU procure for construction

BIM becomes the norm for public procurement in construction.

BIM facilitates the digitalization of permits and other administrative procedures, as well as different construction operations, such as renovation.



WEDNESDAY 14 OCTOBER

Communication and Action Plan
“Renovation Wave” initiative

TUESDAY 17 NOVEMBER

Digital Building Logbook
Stakeholder workshop



THURSDAY 3 DECEMBER

Construction 2020
Thematic Group Meeting
Innovation and Digitalisation



Thank you!

Ilektra PAPADAKI

Ilektra.PAPADAKI@ec.europa.eu



Useful links

- Construction and built environment https://ec.europa.eu/growth/sectors/construction/competitiveness_en
- European Construction Sector Observatory https://ec.europa.eu/growth/sectors/construction/observatory_en
- EU BIM Task Group www.eubim.eu
- DigiPLACE Project- Towards a Framework for a Digital Platform for Construction
<https://www.digiplaceproject.eu/>
- Renovation Wave
https://ec.europa.eu/info/news/preparing-future-renovation-wave-initiative-have-your-say-2020-jun-12_en
- Digital Innovation Hubs <https://ec.europa.eu/digital-single-market/en/digital-innovation-hubs>
- Practical handbook for investing in DIHs https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=66604
- Structural reform funds https://ec.europa.eu/info/funding-tenders/funding-opportunities/funding-programmes/overview-funding-programmes/structural-reform-support-programme-srsp_en



Q&A Session

Please be patient while **Adrian Joyce** reads your questions to the speakers



Conclusions



Julie Kjestrup
EuroACE President



Thank you!

