

## WEBINAR SERIES

Future-proof EPBD: Let's deliver beyond the Renovation Wave!

### FIRST WEBINAR

A “deep” thinking around Minimum Energy Performance Standards

5 May 2021, 10:00 - 11:15 CET



# Moderation and Guidance:



**Adrian Joyce**  
EuroACE Secretary General

# Guidance

- 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 main presentation
- Ahead of, 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 and specify to whom they are directed
- 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



# About EuroACE

15 Member Companies,  
Cross-sector representation:



More than 220,000 employees

More than 1,100 production facilities  
and office locations in the EU





# About EuroACE

Improving the energy efficiency of buildings and reducing their energy demand is the **most cost-effective** method of:

- Creating employment and securing economic growth
- Providing Europeans with comfortable and healthy homes
- Meeting carbon reduction targets
- Achieving energy security







# RENOVATE EUROPE

- EU-wide political communications campaign
- Focuses exclusively on ambitious energy *renovation* of the building stock, motivating EU and national institutions to take action
- 47 partners, including 18 at national level
- High political support with the *Champions Together for Renovation*

**#PrioritisePeople**  
**#AccelerateRenovation**



## Showcasing best practices...


- All information about the exhibition available at <https://www.renovate-europe.eu/reday/reday-2019/online-resources/>





# Today's discussion

**We will look into Minimum Energy Performance Standards in regard to:**

- 
- 1) Introducing MEPS via the EPBD: where to start?**
  - 2) How to design and implement MEPS? A deep dive into best practices and examples**
  - 3) One-Stop-Shops as embedded framework to support MEPS: the ORFEE model**



# Introducing MEPS via the EPBD: where to start?



Jonathan Volt

Project Manager, Buildings Performance Institute Europe



---

# Introducing MEPS via the EPBD

## Where to start?

---

05/05/2021

Jonathan Volt

EuroACE webinar







## THE ROAD TO CLIMATE-NEUTRALITY

ARE NATIONAL LONG-TERM RENOVATION STRATEGIES FIT FOR 2050?

- A review of EU's Member States 2020 LTRS (September 2020)  
>>> **compliance analysis**
- The road to climate neutrality: are national LTRS fit for 2050?  
(March 2021)  
>>> **ambition analysis**



# LTRS AMBITION ANALYSIS

Country/ region	2050 Decarbonisation objective: Reduction in CO <sub>2</sub> emissions	Highly energy-efficient building stock objective: Reduction in energy use by 2050
Belgium – Flanders	<b>Non-residential: 100%</b> <b>Residential: 74%</b>	<b>Non-residential: 33%</b> <b>Residential: 70%</b>
<b>Czechia</b>	<b>40%</b>	<b>23.5%</b>
<b>Estonia</b>	<b>89%</b>	<b>59%</b>
<b>Finland</b>	<b>90%</b>	<b>55%</b>
<b>France</b>	<b>94%</b>	<b>41%</b>
<b>Germany</b>	<b>No target set for 2050</b>	<b>No target set for 2050</b>
<b>Netherlands</b>	<b>95%</b>	<b>Not specified</b>
<b>Spain</b>	<b>98.8%</b>	<b>Non-residential: 36%</b> <b>Residential: 37%</b>

## Assessment Benchmarks:

90% decarbonisation  
(c.f. EPBD wording)

50% energy demand reduction  
(based on BPIE modelling)





## What is a minimum performance standard?

Minimum performance standard is a regulation requiring buildings to meet a certain performance standard by a specific time or according to natural trigger points in the building's lifecycle (e.g. property sale). The standard is typically based on energy performance standards (kWh/m<sup>2</sup>/year) but can also incorporate broader aspects (e.g. climate performance standards (CO<sub>2</sub>/m<sup>2</sup>/year), whole-life carbon, indoor environmental quality aspects and wider environmental, social and governance factors). In Europe, the Energy Performance Certificate is commonly used as a proxy for the minimum performance threshold.

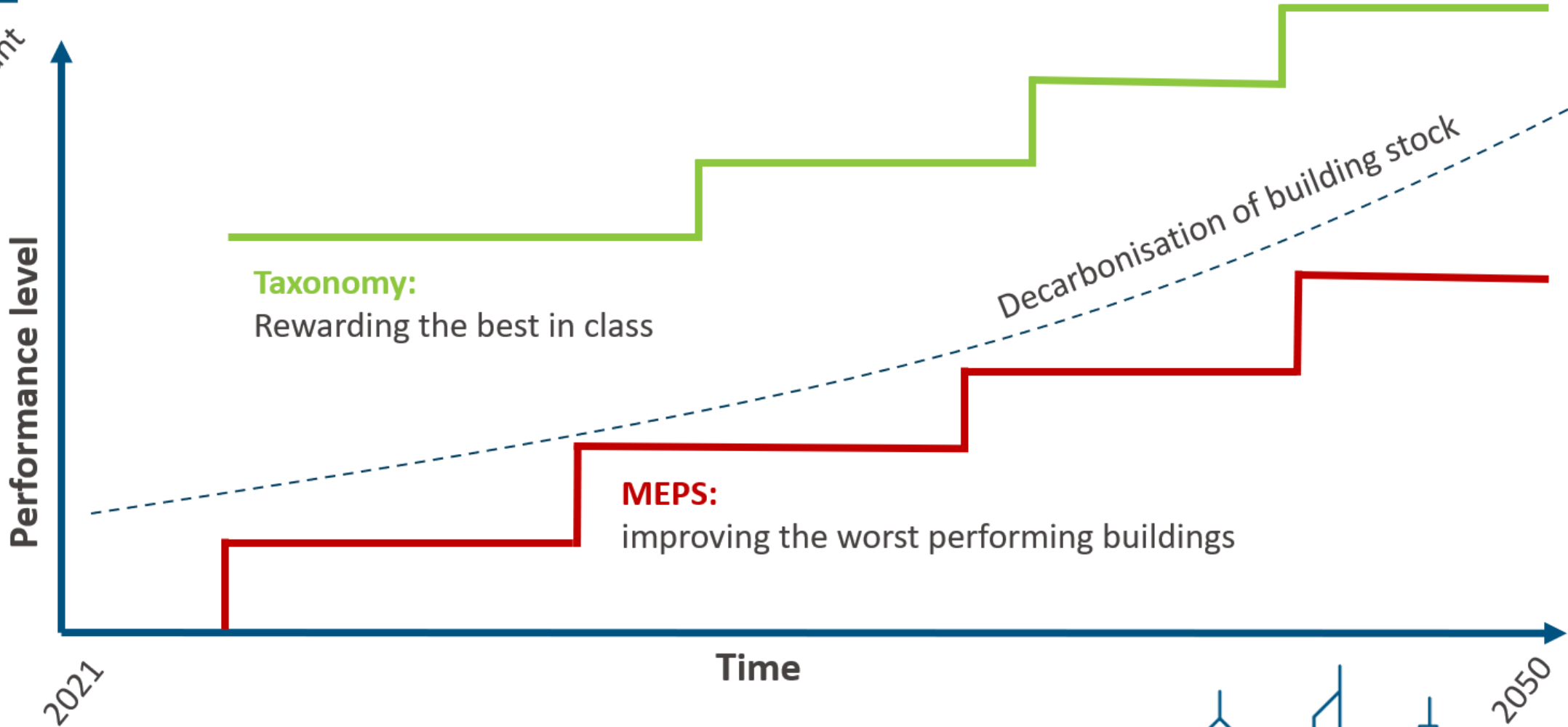
So it is Art 7 of the EPBD?





# MEPS ROLE IN DECARBONISING THE BUILDING STOCK

2050-compliant



**Taxonomy:**  
Rewarding the best in class

**MEPS:**  
improving the worst performing buildings

Decarbonisation of building stock

2021

Time

2050







# MEPS & THE LTRS

2050-compliant

Performance level

EPBD revision

2030 milestone

2040 milestone

Judgement day

**Taxonomy:**  
Rewarding the best in class

**MEPS:**  
improving the worst performing buildings

Decarbonisation of building stock

2021

Time

2050





# INTRODUCING MEPS VIA THE EPBD

## Where to start?

- The starting point should be to **define** what is “highly energy efficient and decarbonised building stock” and backtrack how we get there by 2050
- The LTRS should be the main instrument for the Member States to **identify how to best introduce MEPS** (identifying the worst-performing buildings is already required under clause D of Article 2a of the EPBD)
- MEPS should be designed to **directly support the LTRS objectives** and milestones
- Embedding MEPS in the LTRS thinking will make it easier to link the standard to a **wider policy ecosystem** (one-stop-shops, BRPs, financing, etc.)
- The LTRS reporting allows the EU and Member States to regularly **monitor progress** and calibrate policy measures accordingly







# BUILDINGS PERFORMANCE INSTITUTE EUROPE

Thank you...

**Jonathan Volt**  
Project Manager  
Jonathan.volt@bpie.eu  
+49 176 2498 2638

[www.bpie.eu](http://www.bpie.eu)

Follow us:



# How to design and implement MEPS? A deep dive into best practices and examples



Louise Sunderland  
Senior Advisor, Regulatory Assistance Project

22 March 2021

# Learning from examples of minimum energy performance standards

EuroACE webinar, A “deep” thinking around Minimum Energy Performance Standards, 5<sup>th</sup> May 10.00-11.15 CET

---

Louise Sunderland  
Senior Advisor  
Regulatory Assistance Project (RAP)<sup>®</sup>

---

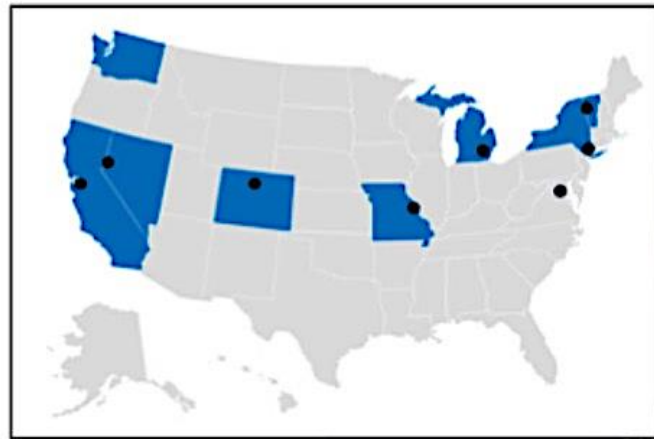
Rue de la Science 23  
B 1040 Brussels  
Belgium


---

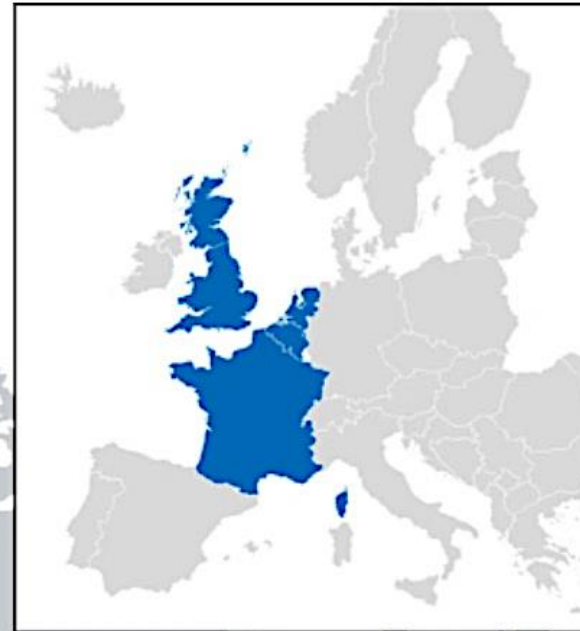
+44 7989 356644  
[lsunderland@raponline.org](mailto:lsunderland@raponline.org)  
raponline.org



# A policy innovation being adopted across the world



-  **Boulder, Colorado**
- Burlington, Vermont**
- Berkeley, California**
- Ann Arbor, Michigan**
- Washington DC**
- Reno, Nevada**
- New York City, New York**
- Washington State**
- St Louis, Missouri**



-  **The Netherlands**
- France**
- England and Wales**
- Scotland**
- Flanders, Belgium**
- Brussels Capital, Belgium**



-  **New Zealand**
- Victoria, Australia**



---

# Models of MEPS

Single  
standard

Progressive  
standard

Deep  
standard

Trigger point  
only

Measure-  
based

Stock average  
model

Renovation  
target model

---

# Models of MEPS

## England and Wales

Privately rented buildings must be EPC E by 2020 for homes and 2023 for non-domestic.

## The Netherlands

Offices must be EPC C by 2023

Single standard

Progressive standard

Deep standard

Trigger point only

Measure-based

Stock average model

Renovation target model



---

# Models of MEPS

## Scotland

Privately rented homes must be

- EPC 'E' from 2021
- EPC D from 2022 (new tenancies)
- EPC D from 2025 (all tenancies)

Single standard

Progressive standard

Deep standard

Trigger point only

Measure-based

Stock average model

Renovation target model

---

# Models of MEPS

## French citizen convention of climate

- 'F' and 'G' EPC residential buildings must meet 'B' standard by 2030
- 'D' and 'E' to meet 'B' standard by 2040

Single  
standard

Progressive  
standard

Deep  
standard

Trigger point  
only

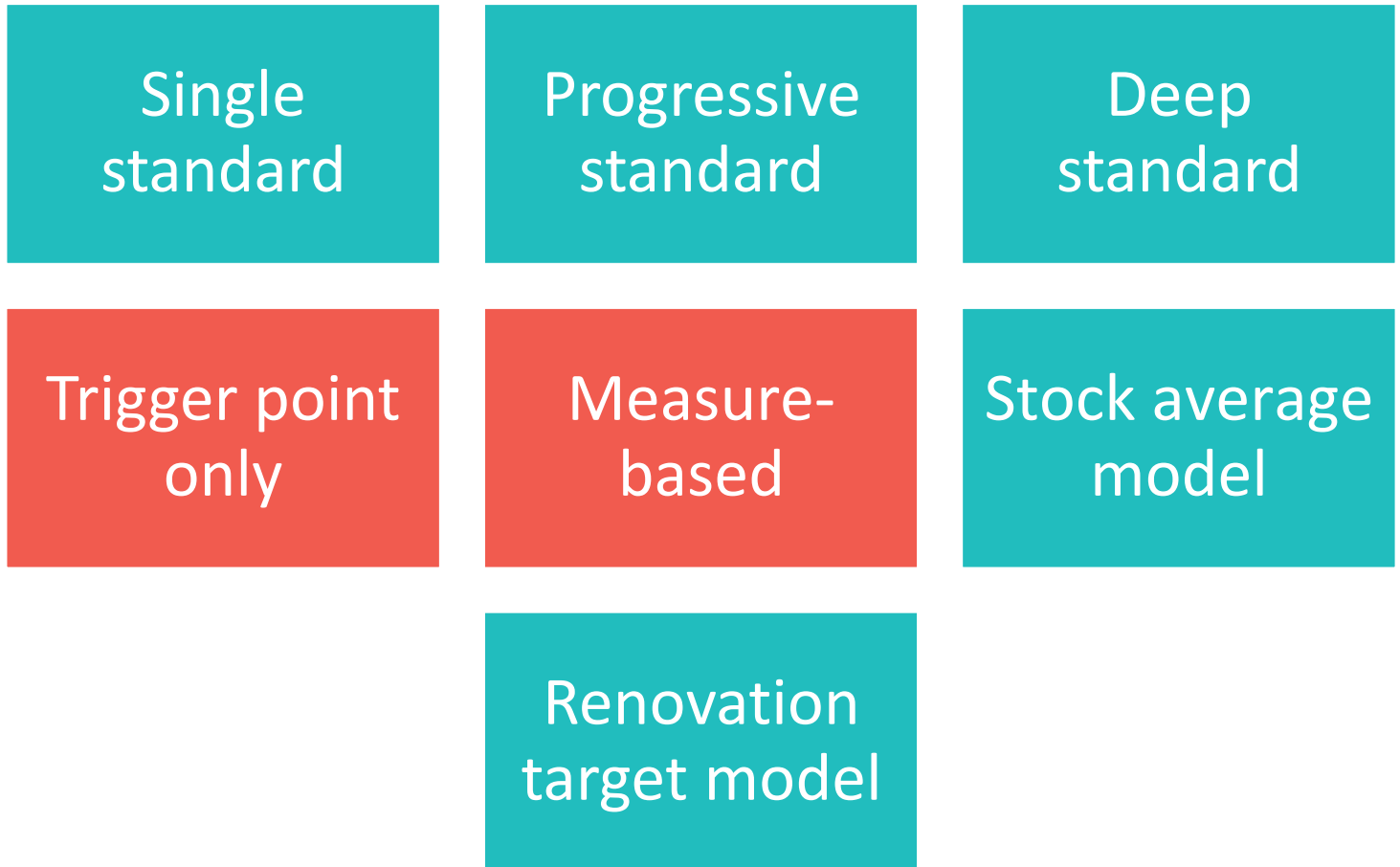
Measure-  
based

Stock average  
model

Renovation  
target model

---

# Models of MEPS





---

# Models of MEPS

## Cities in United States

Buildings below the average energy or carbon performance of the target stock must make improvements. Multiple compliance pathways available. Benchmark is revised every 4 years.

Single  
standard

Progressive  
standard

Deep  
standard

Trigger point  
only

Measure-  
based

Stock average  
model

Renovation  
target model

---

# Models of MEPS

## Article 5, Energy Efficiency Directive

3% of floor area of the central government buildings to be renovated each year

Single standard

Progressive standard

Deep standard

Trigger point only

Measure-based

Stock average model

Renovation target model

---

# What does experience teach us?

- MEPS are a flexible tool that are designed to meet a variety of national priorities



---

# What does experience teach us?

- MEPS are a flexible tool that are designed to meet a variety of national priorities
- MEPS are based on solid stock data or building assessment tools

---

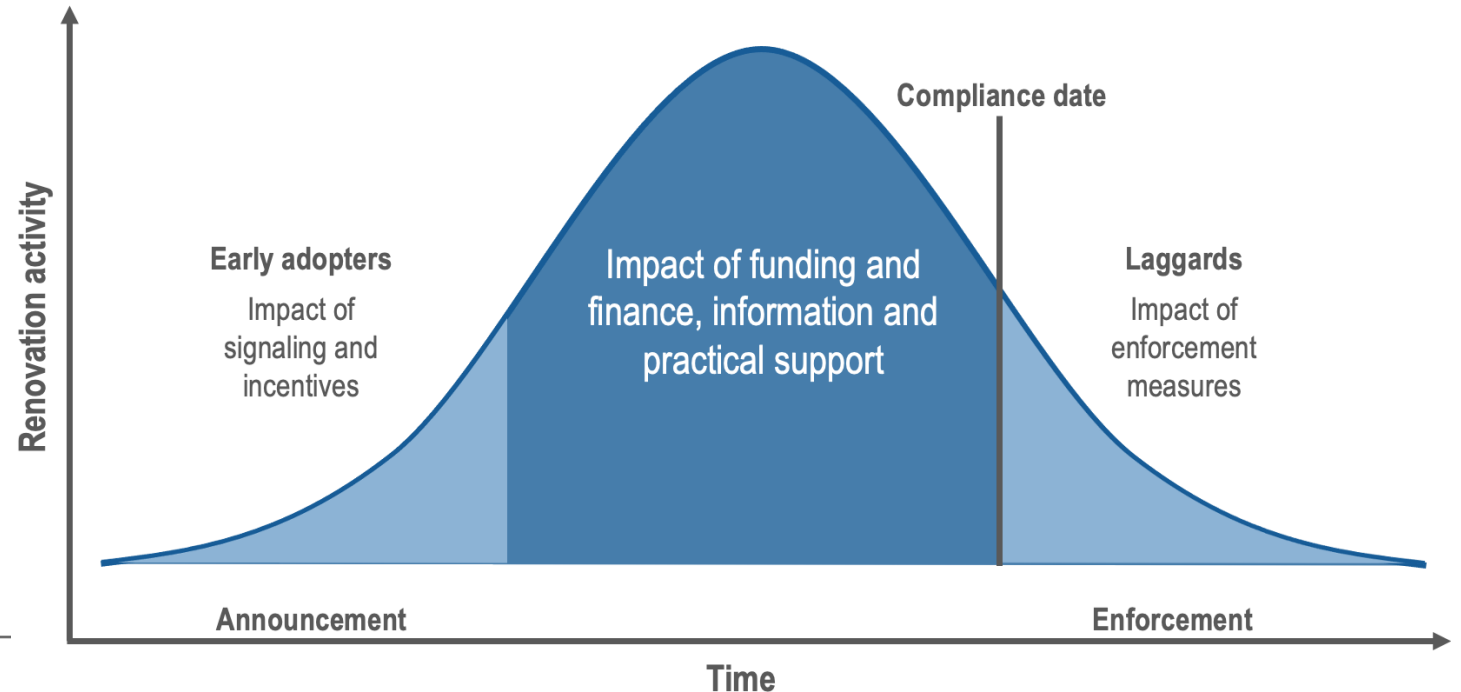
# What does experience teach us?

- MEPS are a flexible tool that are designed to meet a variety of national priorities
- MEPS are based on solid stock data or building assessment tools
- Need for ambition from outset for effectiveness and to avoid lock-in

---

# What does experience teach us?

- MEPS are a flexible tool that are designed to meet a variety of national priorities
- MEPS are based on solid stock data or building assessment tools
- Need for ambition from outset for effectiveness and to avoid lock-in
- Long-term signalling





---

# What does experience teach us?

- MEPS are a flexible tool that are designed to meet a variety of national priorities
- MEPS are based on solid stock data or building assessment tools
- Need for ambition from outset for effectiveness and to avoid lock-in
- Long-term signalling
- Clarity and simplicity of design are important

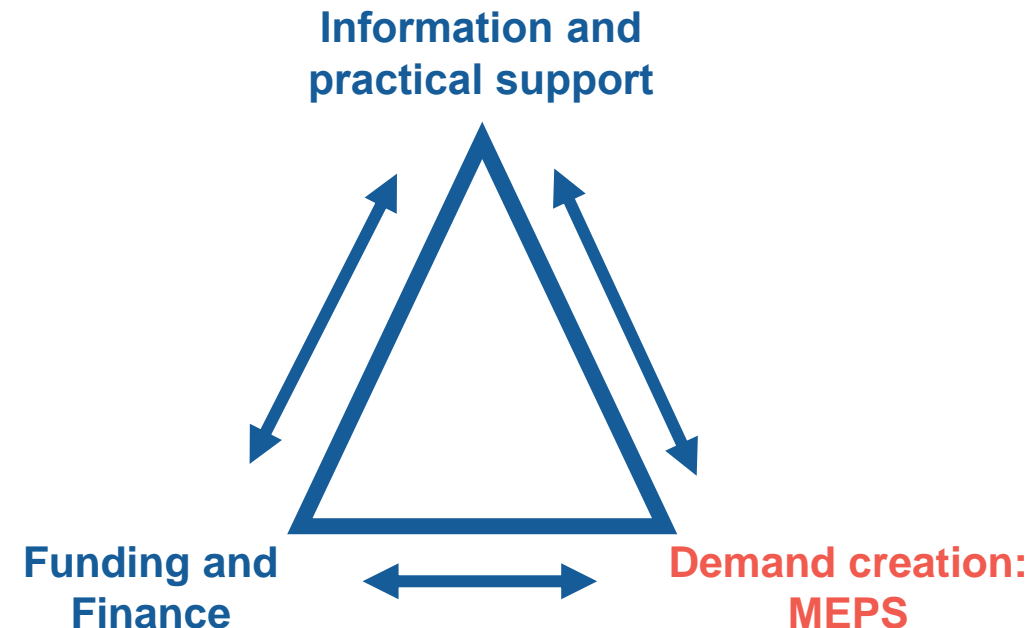
*The more complex the legislation, the less clear and the more difficult to enforce.*

*Difficulty reaching the standard should lead to increased support, not an exemption.*

---

# What does experience teach us?

- MEPS are a flexible tool that are designed to meet a variety of national priorities
- MEPS are based on solid stock data or building assessment tools
- Need for ambition from outset for effectiveness and to avoid lock-in
- Long-term signalling is a key feature of MEPS
- Clarity and simplicity of design are important
- **Last but not least!** MEPS are firmly embedded in the renovation framework (which includes outreach and enforcement).



# Contact



**Louise Sunderland**

Senior Advisor

[lsunderland@raponline.org](mailto:lsunderland@raponline.org)

+44 7989 356644

[www.raponline.org](http://www.raponline.org)

# About RAP

The Regulatory Assistance Project (RAP)<sup>®</sup> is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at [raponline.org](https://raponline.org)



# One-Stop-Shops as embedded framework to support MEPS: the ORFEE model



Françoise Réfabert  
Managing Director, Energies Demain

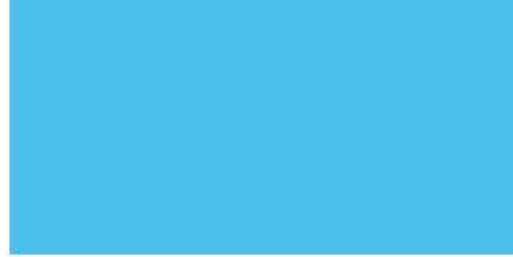
EuroACE | Renovate Europe

ORFEE

One-stop shops  
and  
implementation of  
minimum Energy  
Performance  
Standards



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894478

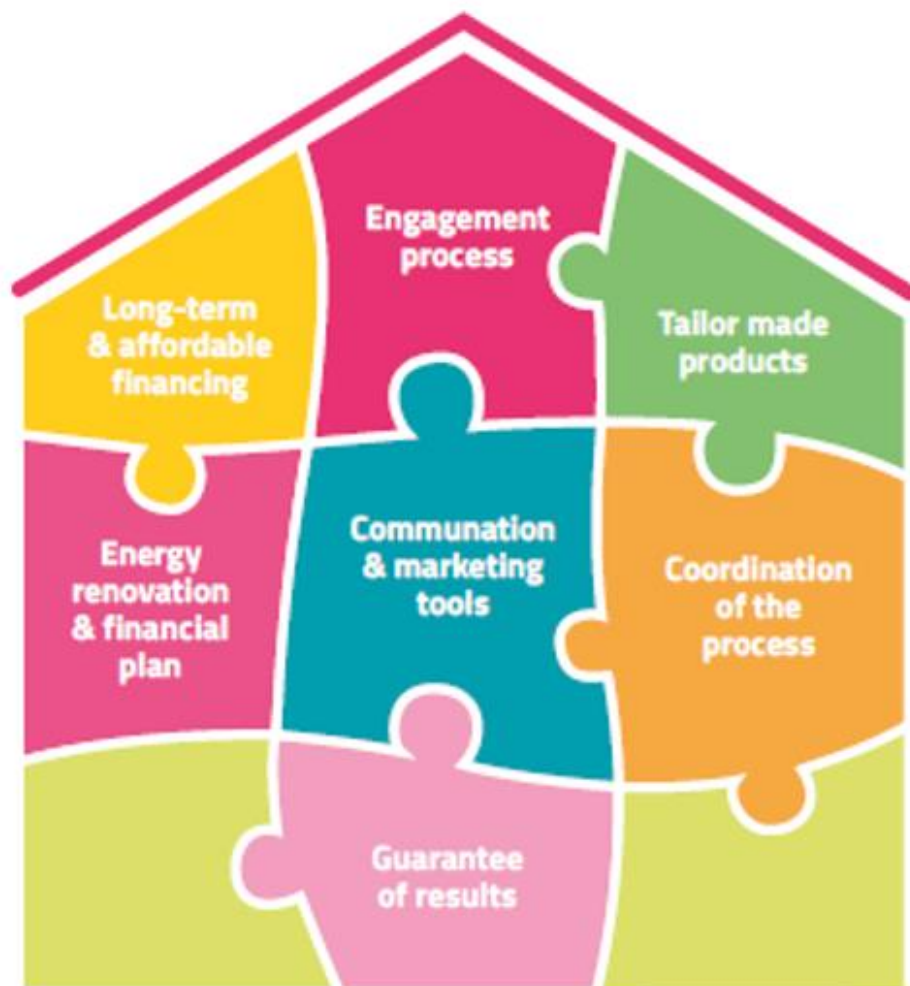


# What are One-stop shops for energy renovations?



- **H2020 2018 : INNOVATE project to upgrade or develop and roll-out integrated energy efficiency service packages in 11 target territories in the EU**
- **H2020 2020 : Build the Office for Renovations and Financing for EE, a resource center to strengthen third-party financing companies**

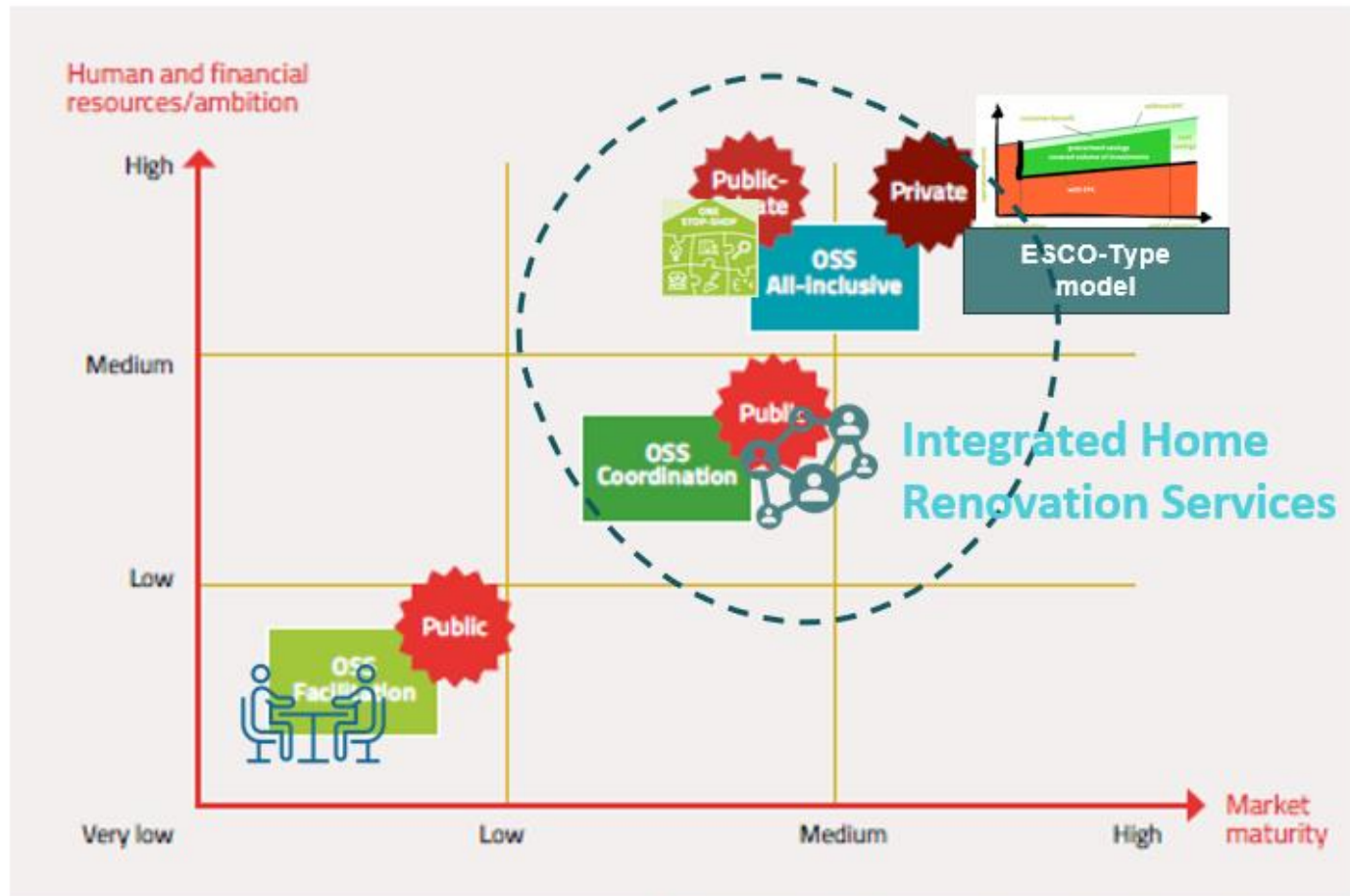
## What are the key components of such services?



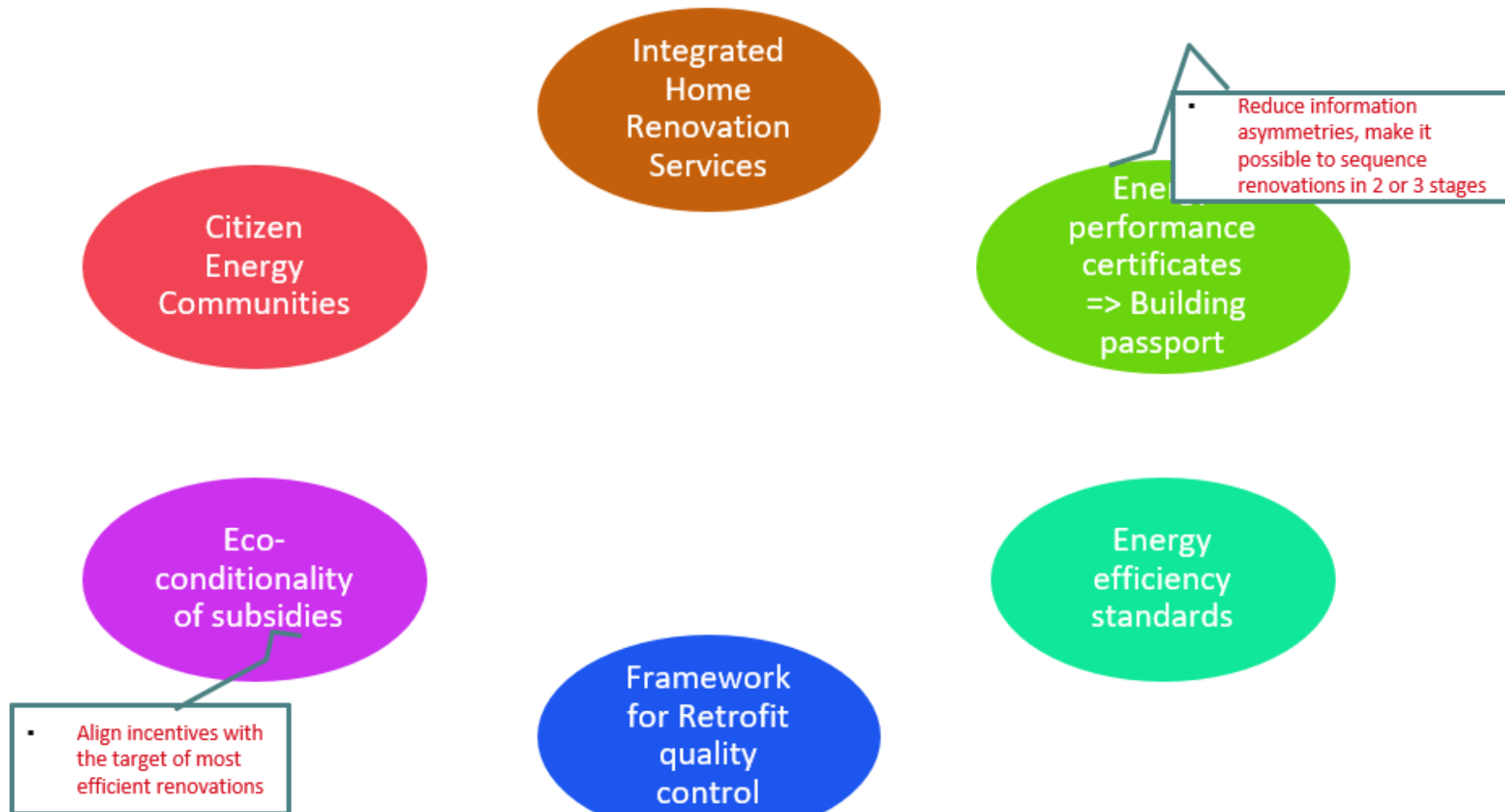
- **H2020 2018 : objective of INNOVATE project is to upgrade or develop and roll-out integrated energy efficiency service packages in 11 target territories in the EU**



# Different business models for One-stop Shops?



# Integrate OSS with other tools driven by public sector



# Third-party financing companies in France

- Typical integrated home renovation services



**H2020 Project:  
Building the  
Office for Renovations and  
Financing for Energy  
Efficiency**

**The resource center to  
strengthen third-party  
financing companies**

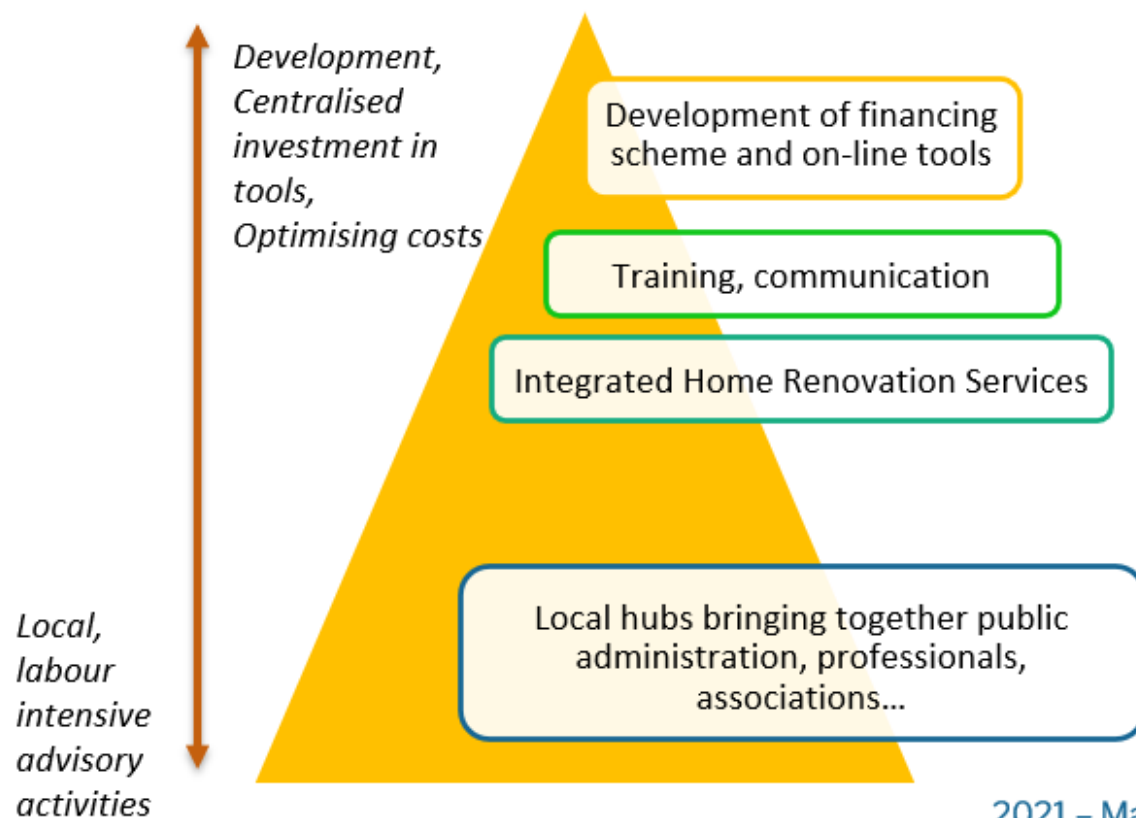


# Building an enabling environment

- ORFEE aims:

issuing quality guarantees for the homeowners after the completion of energy retrofits

strengthening the financial structure of third-party financing companies







Thank you for your attention

[Francoise.refabert@energie-demain.com](mailto:Francoise.refabert@energie-demain.com)

+33(0)6 70 79 19 99

# Q&A Session

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



# Conclusions



**Adrian Joyce**  
EuroACE Secretary General

# Thank You For Your Attention!

@\_EuroACE

[www.euroace.org](http://www.euroace.org)