



---

# MINIMUM STANDARDS MAXIMUM IMPACT

## HOW TO DESIGN FAIR AND EFFECTIVE MINIMUM ENERGY PERFORMANCE STANDARDS

---

05 Oct 2023

Dr. Sibyl Steuwer

online





## What are MEPS?

EPBD proposal COM(2021) 802 final

- ▶ ‘Minimum energy performance standards’ means rules that require existing buildings
  - to meet an energy performance requirement as part of a wide renovation plan for a building stock or
  - at a trigger point on the market (sale or rent),
  - in a period of time or
  - by a specific date, thereby triggering renovation of existing buildings;



# FIVE DESIGN PRINCIPLES

For fair and effective MEPS schemes

1



Address the  
**WORST-  
PERFORMING  
BUILDINGS FIRST**  
so that people see  
an immediate and  
meaningful impact.

2



Be aligned with the  
**OWNER'S ABILITY  
TO INVEST.**

3



**MAKE  
REQUIREMENTS  
BINDING AND  
FORESEEABLE**  
to accelerate  
innovation in the  
energy renovation  
supply chain.

4



Have an  
**EFFECTIVE  
COMPLIANCE  
SUPPORT AND  
ENFORCEMENT  
SYSTEM.**

5



**DEFINE**  
regular and  
frequent  
**MILESTONES.**

# FIVE DESIGN PRINCIPLES

For fair and effective MEPS schemes

1



Address the  
**WORST-  
PERFORMING  
BUILDINGS FIRST**  
so that people see  
an immediate and  
meaningful impact.

2



Be aligned with the  
**OWNER'S ABILITY  
TO INVEST.**

3



**MAKE  
REQUIREMENTS  
BINDING AND  
FORESEEABLE**  
to accelerate  
innovation in the  
energy renovation  
supply chain.

4



Have an  
**EFFECTIVE  
COMPLIANCE  
SUPPORT AND  
ENFORCEMENT  
SYSTEM.**

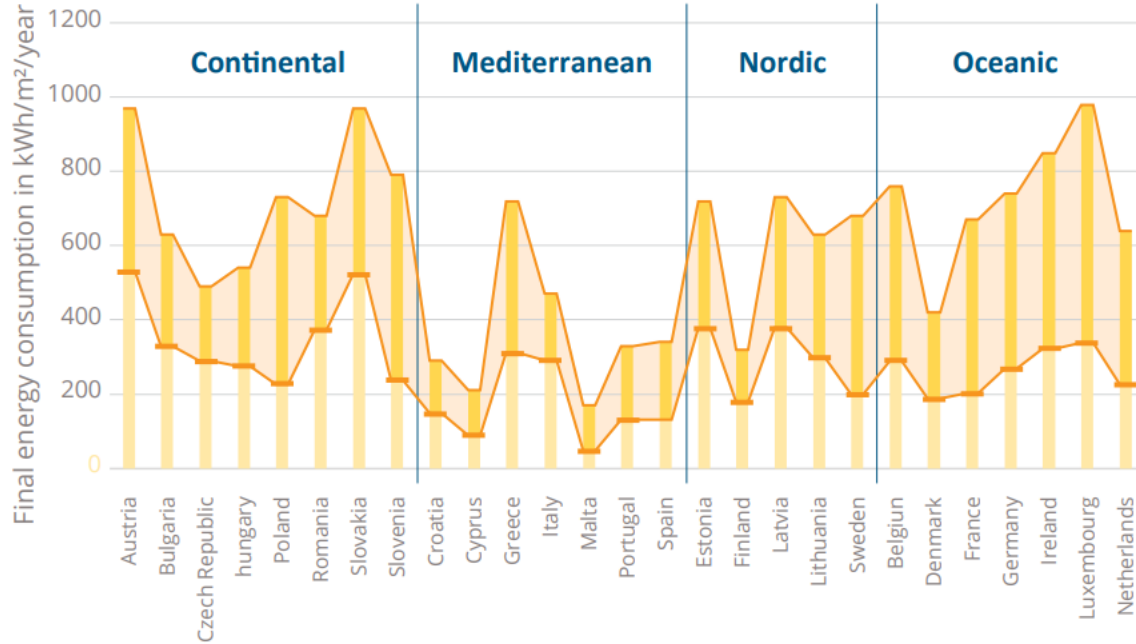
5



**DEFINE**  
regular and  
frequent  
**MILESTONES.**

# 15% worst performing floor area - low hanging fruits

**Figure 1:** Overview of worst-performing 15% of residential buildings based on the floor area in EU Member States sorted by climatic zones. Source: Statistical data from EPCs; Hotmaps 2020



# FIVE DESIGN PRINCIPLES

For fair and effective MEPS schemes

1



Address the  
**WORST-  
PERFORMING  
BUILDINGS FIRST**  
so that people see  
an immediate and  
meaningful impact.

2



Be aligned with the  
**OWNER'S ABILITY  
TO INVEST.**

3



**MAKE  
REQUIREMENTS  
BINDING AND  
FORESEEABLE**  
to accelerate  
innovation in the  
energy renovation  
supply chain.

4



Have an  
**EFFECTIVE  
COMPLIANCE  
SUPPORT AND  
ENFORCEMENT  
SYSTEM.**

5



**DEFINE**  
regular and  
frequent  
**MILESTONES.**

# Residential buildings matter

Figure 2: Distribution of EU residential building stock per kWh/m<sup>2</sup>/year and construction period<sup>5</sup>

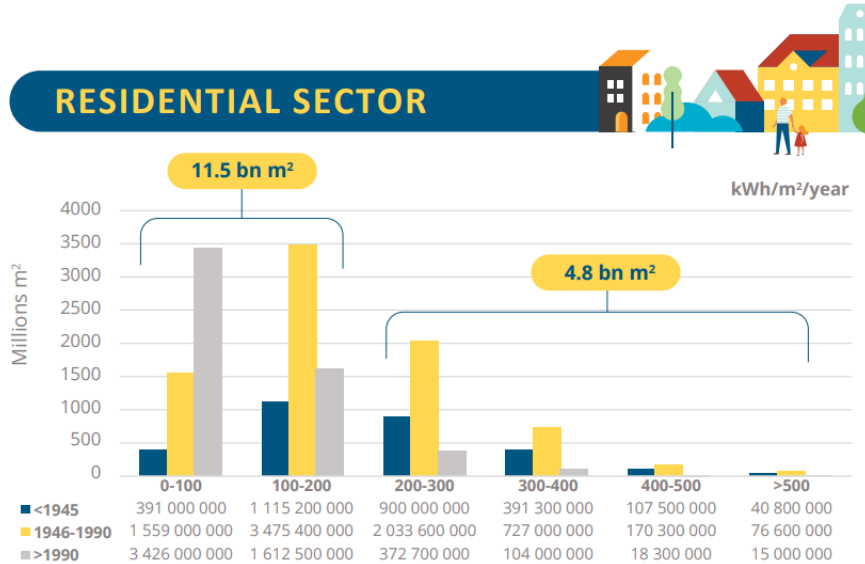
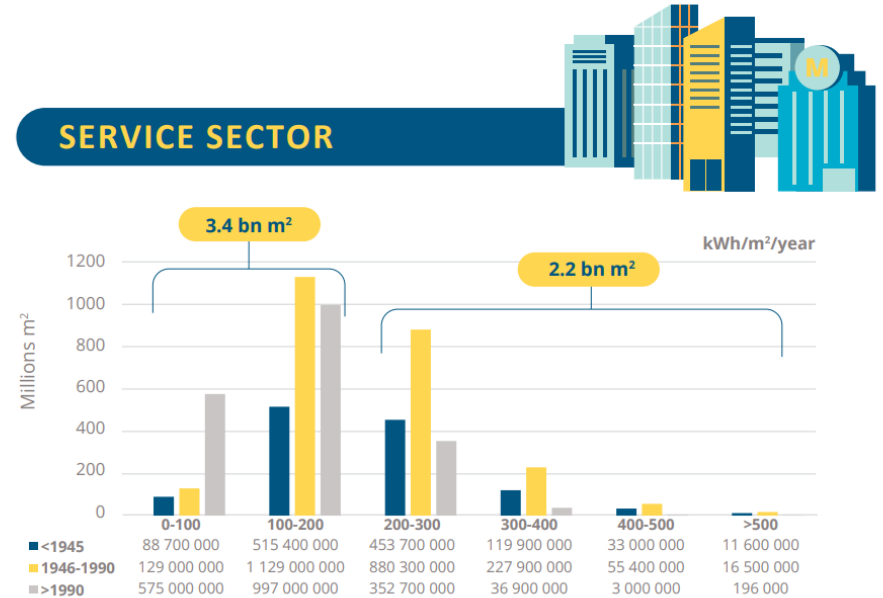
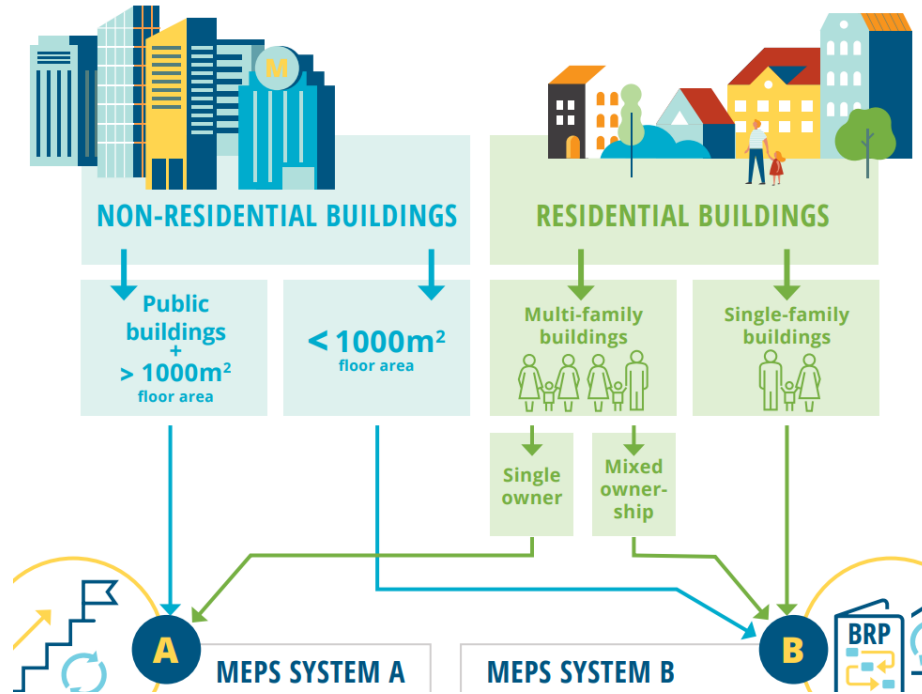


Figure 3: Distribution of EU non-residential building stock per kWh/m<sup>2</sup>/year and construction period<sup>6</sup>



# Applying design principles - covering all buildings





# FIVE DESIGN PRINCIPLES

For fair and effective MEPS schemes

1



Address the  
**WORST-  
PERFORMING  
BUILDINGS FIRST**  
so that people see  
an immediate and  
meaningful impact.

2



Be aligned with the  
**OWNER'S ABILITY  
TO INVEST.**

3



**MAKE  
REQUIREMENTS  
BINDING AND  
FORESEEABLE**  
to accelerate  
innovation in the  
energy renovation  
supply chain.

4



Have an  
**EFFECTIVE  
COMPLIANCE  
SUPPORT AND  
ENFORCEMENT  
SYSTEM.**

5



**DEFINE**  
regular and  
frequent  
**MILESTONES.**

# FIVE DESIGN PRINCIPLES

For fair and effective MEPS schemes

1



Address the  
**WORST-  
PERFORMING  
BUILDINGS FIRST**  
so that people see  
an immediate and  
meaningful impact.

2



Be aligned with the  
**OWNER'S ABILITY  
TO INVEST.**

3



**MAKE  
REQUIREMENTS  
BINDING AND  
FORESEEABLE**  
to accelerate  
innovation in the  
energy renovation  
supply chain.

4



Have an  
**EFFECTIVE  
COMPLIANCE  
SUPPORT AND  
ENFORCEMENT  
SYSTEM.**

5



**DEFINE**  
regular and  
frequent  
**MILESTONES.**

# FIVE DESIGN PRINCIPLES

For fair and effective MEPS schemes

1



Address the **WORST-PERFORMING BUILDINGS FIRST** so that people see an immediate and meaningful impact.

2



Be aligned with the **OWNER'S ABILITY TO INVEST.**

3



**MAKE REQUIREMENTS BINDING AND FORESEEABLE** to accelerate innovation in the energy renovation supply chain.

4



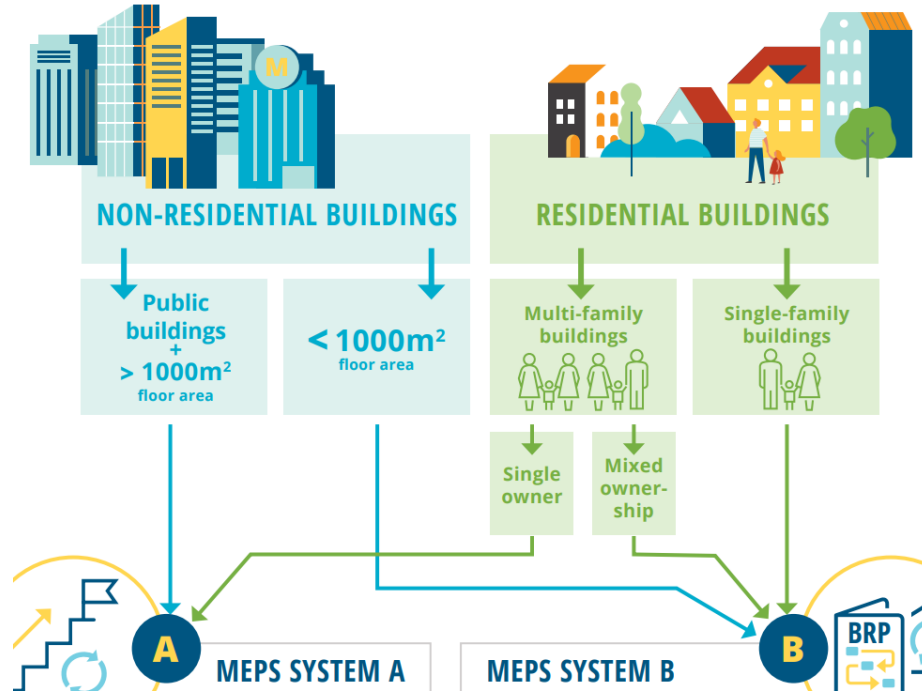
Have an **EFFECTIVE COMPLIANCE SUPPORT AND ENFORCEMENT SYSTEM.**

5



**DEFINE** regular and frequent **MILESTONES.**

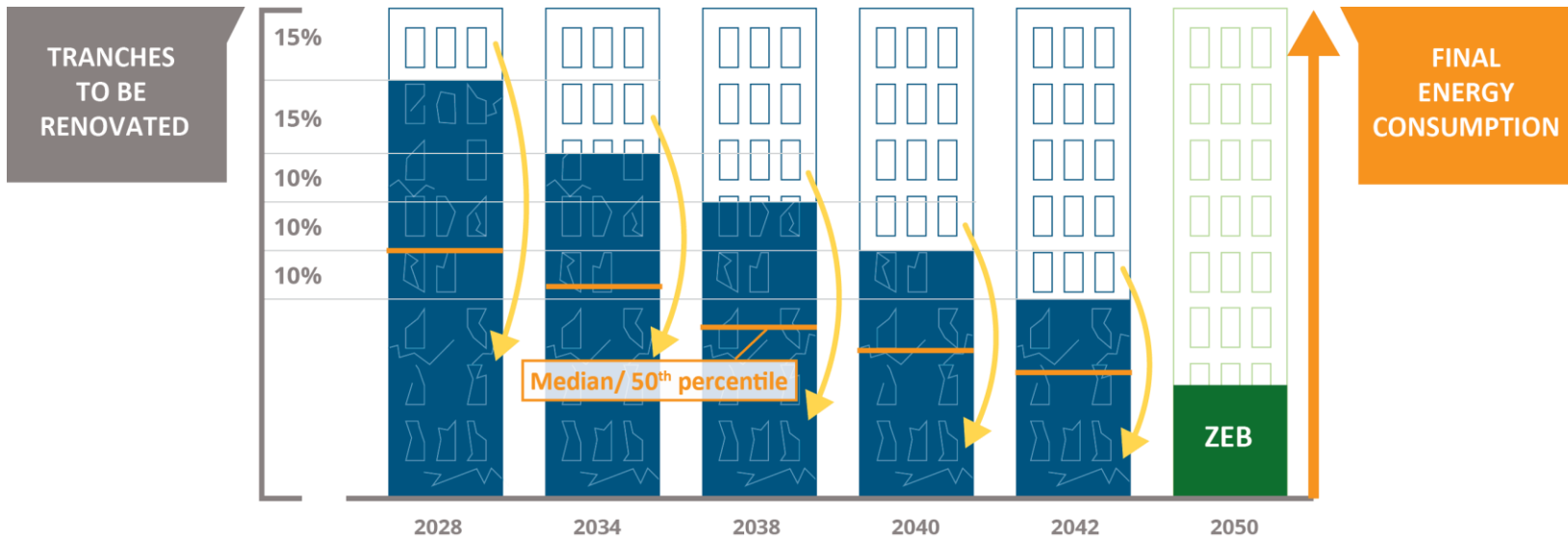
# Applying design principles - covering all buildings





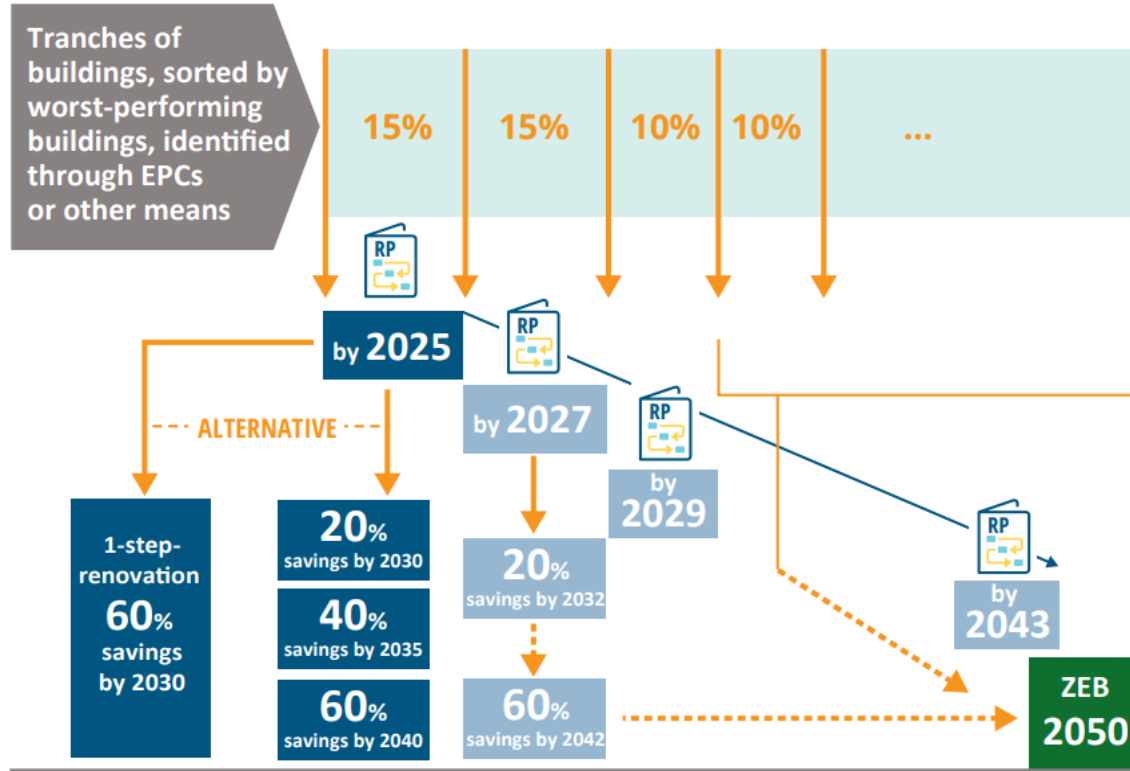
# MEPS SYSTEM A

Creating a dynamic scheme towards 2050-readiness



# MEPS SYSTEM B

## Informed investment decisions





# Overcoming challenges in implementation

## Financing

- ▶ Financial support schemes should be designed to support MEPS compliance ahead of the deadline, acting as an early indicator of future standards, as in the following example which uses national EPC classes as benchmarks:
  - **Before 2026:** grant to cover 15% of renovation costs if renovated up to level D, 25% if up to level C, 30% if up to level B and 45% if up to level A.
  - **Before 2029:** 15% of renovation costs if renovated up to level C, 25% if up to level B, 35%, if up to level A.
  - **Before 2036:** 15% of renovation costs up to level B, 25% up to level A.
  - **Before 2042:** 15% of renovation costs up to level A.



## Recommendations

### For fair and effective MEPS

- ▶ MEPS should apply to all building typologies, with an initial focus on worst-performing buildings.
- ▶ To harness energy saving potential of worst-performing buildings, MEPS should be applied to both residential and non-residential buildings.
- ▶ The EPBD revision should include these 5 design principles and should avoid introducing exemptions which could lead to undermining the MEPS system.
- ▶ However, MEPS can still be designed flexibly at Member States level
- ▶ Any MEPS scheme put into place must be implemented within a comprehensive ecosystem of supporting policy instruments tailored to the needs of the different target groups.



Read the full report



<https://www.bpie.eu/publication/minimum-standards-maximum-impact-how-to-design-fair-and-effective-minimum-energy-performance-standards/>

---

**Dr. Sibyl Steuwer**

Head of BPIE Berlin

[sibyl.steuwer@bpie.eu](mailto:sibyl.steuwer@bpie.eu)

+49(30)24020773

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

Follow us:

