

DECARBONIZATION OF BUILDINGS

BETWEEN ENERGY EFFICIENCY, RENEWABLES AND ETS2

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WELCOME & INTRODUCTION

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NEW EUROPEAN LEGISLATION FOR THE DECARBONIZATION OF BUILDINGS

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AGENDA

- › From the Renovation Wave to the final “Fit for 55” legislation
- › ETS 2 for the buildings’ sector
- › Interaction of the legislation/implementation in the Member States
- › Outlook on the next steps for buildings’ decarbonization
- › Future policy puzzle – How to combine EE/RES policy and EU ETS II best?
 - › Major steps for MS in EPBD transposition: MEPS and trajectories
 - › Big Picture and Interaction of measures
 - › Advantages of a multidimensional instrument mix

FROM THE RENOVATION WAVE TO THE FINAL "FIT FOR 55" LEGISLATION



Overview: Buildings' decarbonization

Energy Performance of Buildings Directive: (EPBD)

New legislation for new and existing buildings

- National building renovation plans
- Minimum energy performance standards/trajectories for progressive renovation ("MEPS")
- Zero-emission buildings (ZEB)
- Solar energy in buildings
- Energy performance certificates

Energy Efficiency Directive: (EED)

Energy efficiency target and energy efficiency first principle

- Reduction of energy consumption of at least 11,7 % in 2030

Exemplary role of public bodies' buildings

- Renovation of at least 3 % of buildings owned by public bodies each year

Heating and cooling assessment and planning

- local plans

Renewable Energy Directive: (RED)

Renewables target

- Share of renewables of at least 42,5 % in 2030

Renewables in buildings

- New indicative EU target (at least 49 % renewables in 2030)
- National shares and measures

Heating and cooling

- Increase share of renewables by at least 0,8 to 1,1 percentage points as an annual average

ETS 2 for the buildings' sector:

A new, separate emissions trading system

- European "cap and trade" system for emissions from buildings, road transport and additional sectors

- fully operational in 2027

In combination with Social Climate Fund

- (also) support for buildings' efficiency and renewables in buildings

ETS 2 FOR THE BUILDINGS' SECTOR



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A NEW, SEPARATE EMISSIONS TRADING SYSTEM

› NEW SECTORS:

- › **Buildings**, road transport and additional sectors (Art. 30a, Annex III ETS Directive)
- › “Upstream” approach, i.e. the distributors of combustibles/fuels are obligated (Art. 30b, Annex III ETS Directive)

› CAP AND TRADE SYSTEM (Art. 30c para. 1-3 ETS Directive)

- › By 1.1.2025, determination of the **total quantity** for 2027 based on historical data
- › subsequent annual determination based on actual emissions

Cap will amount to
1 036 288 784
allowances for
2027.

GRADUAL INTRODUCTION

- › **2025:** Obligation to monitor ETS 2 emissions by distributors (Art. 30f para. 2 ETS Directive)
- › **2026:** Obligation to report (Art. 30f para. 2 ETS Directive)
- › **From 2027: Auctions** (Art. 30d para. 1, para. 2, Art. 30k para. 2 lit. b ETS Directive)
 - › ETS 2 will be delayed to 2028 if energy prices are deemed exceptionally high

INTERACTION OF THE LEGISLATION/IMPLEMENTATION IN THE MEMBER STATES



New efficiency and renewables legislation for buildings' decarbonization

SUPPLY

- Energy efficiency target, *Art. 4 EED*
- Renewables target, *Art. 3 RED*
- Renewables in buildings, *Art. 15a RED*
- Heating/cooling, *Art. 25 f. EED, Art. 23 RED*
- Nat. building renovation plans, *Art. 3 EPBD*
- Energy perf. certificates, *Art. 19 ff. EPBD*
- ZEB, *Art. 11 EPBD*
- Exemplary role (3%), *Art. 6 EED*

BUILDING STOCK

- Solar energy in buildings, *Art. 10 EPBD*

- Energy efficiency target, *Art. 4 EED*
- Nat. building renovation plans, *Art. 3 EPBD*
- Energy perf. certificates, *Art. 19 ff. EPBD*
- "MEPS", *Art. 9 EPBD*
- ZEB, *Art. 11 EPBD*
- Exemplary role (3%), *Art. 6 EED*

Renewables:
Building/Grid

Infrastructure for
sustainable
mobility,
Art. 14 EPBD

In addition to EPBD, EED, RED: GHG reduction via ETS 2 with a price signal

Alleviating energy poverty, *Art. 24 EED*

Financing instruments and measures, *Art. 17 EPBD*

EU LEVEL →		Efficiency		Renewables		
IMPLEMENTATION		SUPPLY	BUILDING STOCK	SUPPLY	BUILDING STOCK	
	Union targets with national measures	<ul style="list-style-type: none"> Energy efficiency target <i>Art. 4 EED</i> 		<ul style="list-style-type: none"> Renewables target <i>Art. 3 RED</i> Renewables in buildings <i>Art. 15a RED</i> 		
	Planning and general obligations for the MS	<ul style="list-style-type: none"> Heating/cooling (Assessment/Planning) <i>Art. 25 f. EED</i> 	<ul style="list-style-type: none"> Nat. building renovation plans <i>Art. 3 EPBD</i> Energy perf. certificates <i>Art. 19 ff. EPBD</i> 	<ul style="list-style-type: none"> Nat. building renovation plans <i>Art. 3 EPBD</i> Energy perf. certificates <i>Art. 19 ff. EPBD</i> 		
	Targets and direct obligations for the MS		<ul style="list-style-type: none"> “MEPS” <i>Art. 9 EPBD</i> 	<ul style="list-style-type: none"> Renewables in heating/cooling <i>Art. 23 RED</i> 	<ul style="list-style-type: none"> Solar energy in buildings <i>Art. 10 EPBD</i> 	<ul style="list-style-type: none"> Alleviating energy poverty, <i>Art. 24 EED</i> Financing instruments and measures, <i>Art. 17 EPBD</i> ZEB, <i>Art. 11 EPBD</i> Exemplary role (3%), <i>Art. 6 EED</i>

SUPPLY

BUILDING STOCK

SUPPLY

BUILDING STOCK

Union targets with national measures

- Energy efficiency target
Art. 4 EED

- Renewables target
Art. 3 RED
- Renewables in buildings
Art. 15a RED

Planning and general obligations for the MS

- Heating/cooling (Assessment/Planning)
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- “MEPS”
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IMPLEMENTATION

OUTLOOK ON THE NEXT STEPS FOR THE BUILDINGS' DECARBONIZATION



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CONCLUSION: THE EUROPEAN LEGAL FRAMEWORK PROVIDES FOR NEW/STRICTER LEGISLATION FOR EXISTING AND NEW BUILDINGS

› **BUT: There is (more or less) room for the MS regarding the implementation in their national legislation:**

- › EPBD contains a 24 months deadline until May 2026 by which EU countries must incorporate its provisions into their national legislation (Art. 33 EPBD)
- › Furthermore, there are other deadlines, e.g. MEPS in Art. 9 EPBD must be met until 2030/2033 (non-residential buildings) and 2030/2035 (residential buildings)
- › Some MS may already be able to achieve the new targets in the buildings' sector (partially) with existing instruments (e.g., funding etc.)

FUTURE POLICY PUZZLE HOW TO COMBINE EE/RES POLICY AND EU ETS II BEST?



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MAJOR STEPS FOR MS IN EPBD TRANSPOSITION: MEPS AND TRAJECTORIES IN NBRP

Draft **nBRP** by December 2025

- › Definition of **MEPS** for non-residential buildings
 - › Individual buildings are addressed
 - › Threshold defined at -16% of PE by 2030 and -26% by 2033
- › Establish a **trajectory** for progressive renovation of residential buildings (by May 2026)
 - › Average PE of residential stock needs decrease by 16% by 2030 and by 20-22% by 2035
 - › At least 55% of decrease coming from worst-performing residential buildings (defined as 43% WPB)

BIG PICTURE: MAIN CHARACTERISTICS OF REGULATORY POLICY AND ETS II

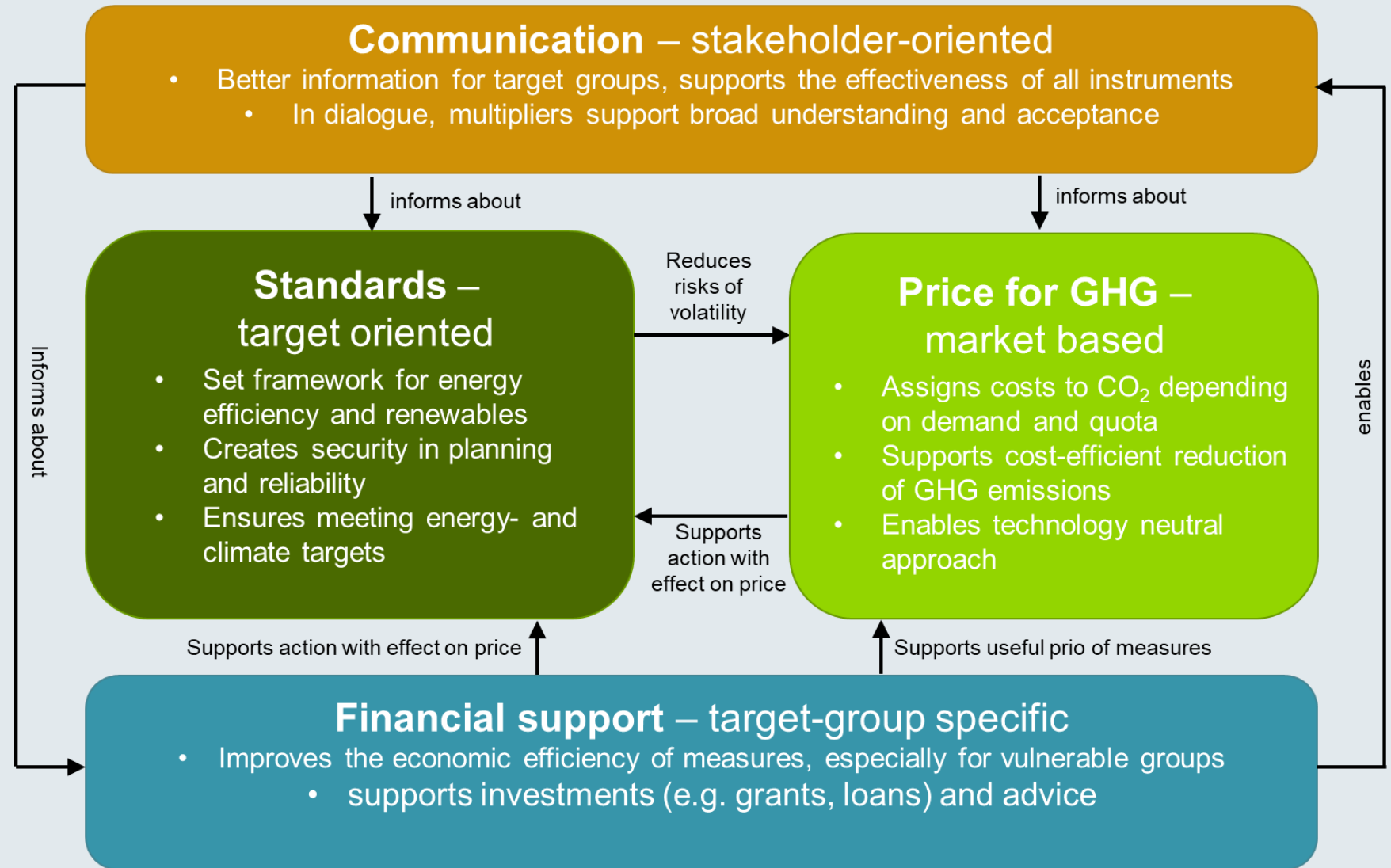
› Regulatory Policy

- › Provides **clear framework**, boundaries and standards
- › **Reliability** and security in planning
- › Ensures compliance with **energy and climate targets**

› ETS II

- › **Efficient market instrument** for identification of decarbonization options
- › Provides **flexible pricing** based on demand and cap
- › Enables **technology neutrality**

INTERACTION OF MEASURES



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ADVANTAGES OF A MULTIDIMENSIONAL INSTRUMENT MIX

- › The national CO₂ price for buildings only sends **insufficient price signals**
- › European emissions trading for buildings **should be prepared now**
- › **Price jumps** can slow down the **steering effect** of emissions trading
- › A cost-efficient and socially acceptable transformation path needs a **strategic, reliable mix of instruments**
- › The EU Building Directive sets a **new framework**

ADVANTAGES OF A MULTIDIMENSIONAL INSTRUMENT MIX

It's all about the mix: clear perspectives for owners, users, industry, trades and the climate

- › ... the **motivation of building owners**
- › ... the **strengthening of local implementation** capacities and the economy
- › ... the **cost-efficient achievement** of climate targets
- › ... the **economical use of budgetary resources**

The combination of **CO₂ price** with the **consistent implementation of renovation paths** for buildings with the lowest overall efficiency (WPB), **targeted funding** and **information** enables the building stock to develop in a way that is compatible with the goals. This creates clear perspectives for the building industry and minimizes investments in non-future proof measures.

PANEL DISCUSSION

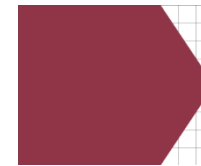
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THANK YOU FOR YOUR ATTENTION!



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