

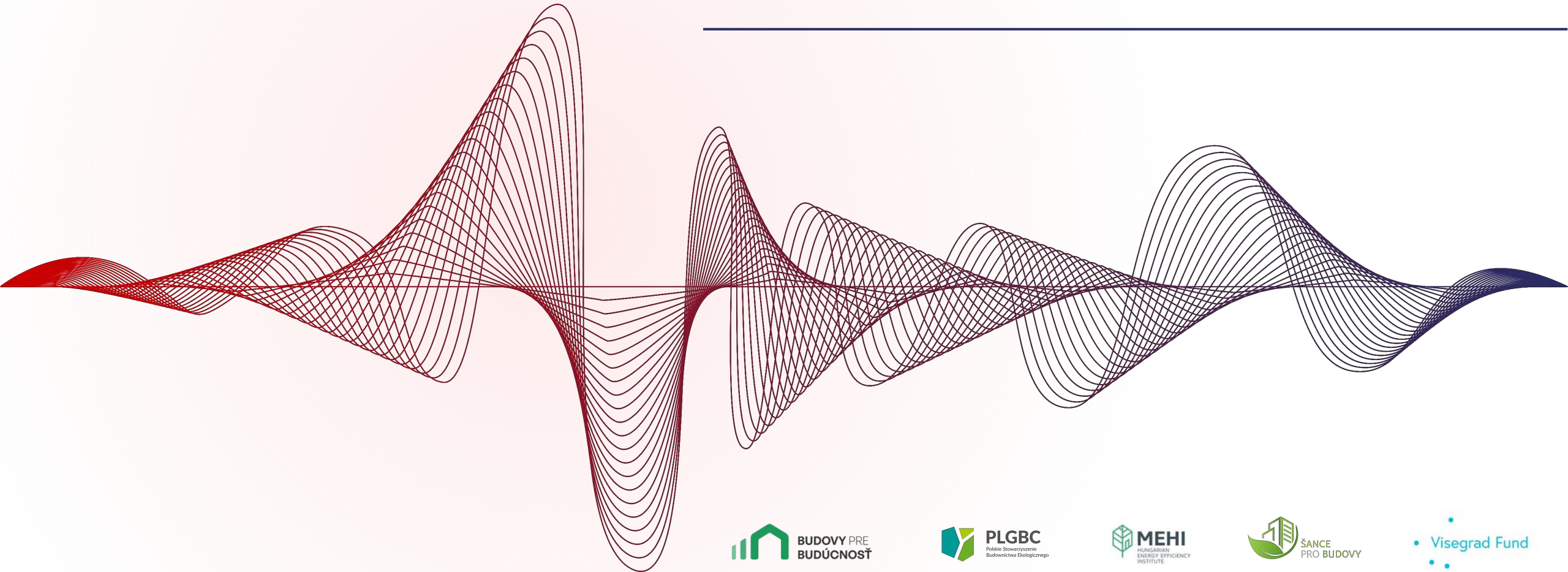


PRIORITIZING ENERGY RENOVATION
IN THE CEE COUNTRIES

Selecting good practice policy examples

Online workshop #1

27.11.2024.



Agenda for today

- 9:00 – 9:20 Introduction of the project. The four EPBD themes will be presented and the exercise of selecting good policy examples explained.
- 9:20 - 10:10 Collection of good practices (#1-2)
- Financing of energy renovations (25 min)
 - Mitigating information barriers (25 min)
- 10:10 – 11:00 Collection of good practices (#3-4)
- Whole-life carbon (25 min)
 - Decarbonization of heating (25 min)

About the project

PERCEE– Prioritizing Energy Renovation in the CEE countries

- The project aims at implementing an ambitious EPBD by collecting **good policy examples** (measures, programs, program elements) of building renovation from the CEE region.
- The CEE region is not typically at the forefront of exemplary renovation policies and programs, still, some good practices are already in place, worth sharing and upscaling.
- The project aims to present good practices, be those on the **local, regional or national level**, and **make recommendations** for expanding or upscaling.
- Output is expected to take the form of **four policy briefs on four major EPBD topics**, combined into one report. 3 online webinars are planned where we showcase the results to a wider set of local, regional and EU stakeholders.

We have selected four main EPBD themes

- Financing of building renovations (theme leader: Ch4B)
- Mitigating information barriers (B4F)
- Whole-life carbon (PGBC)
- Heating decarbonization (MEHI)

One organization is responsible for each policy brief, but each organization contributes with good examples to each of the main themes.

Why these?

- We have chosen four broad themes based on where we saw a potential to collect as many good practices as possible from all four countries and also based on the organizations' own preferences and experience.
- We have provided some sub-themes to give inspiration and scope for good practice examples. We have also extended the possibilities by allowing examples to be taken from either the national or local level.

Can we fill the matrix with policy good practices?

	National	Regional	Local
Financing of energy renovations			
Mitigating information barriers, technical assistance			
Whole Life Carbon requirements			
Decarbonization of heating			

Reflections/feedback on the selection of the EPBD topics?

What constitutes a good practice?

Topic#1

Financing of energy renovations (Ch4B)

EPBD and EED provisions on financing building renovations:

- Member States are required to develop comprehensive NBRPs that outline strategies for decarbonizing their building stock by 2050.
- These must include measures to address financing barriers and leverage both public and private investment.
- The plans should prioritize measures that empower vulnerable households and alleviate energy poverty.
- Forms of financial support: subsidies and grants, tax breaks, soft loans, financial advisory services
- Leverage private investments through innovative financial solutions, and by providing access to relevant data, such as EPCs

Financing energy renovations

national

regional

local

Wide use of public subsidies

Green saving scheme
(Cz)

Innovative private financing schemes
(ESCO, on-bill financing, PPP, EEOS)

EEOS (HUN)

Local renovation financing programs

City level MFH
renovation grant
(HUN: Debrecen,
Ajka)

Subsidized loan, guarantee
Energy efficiency fund



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Chance for Buildings Czech Republic Green Saving /New Green Saving

Marta Gellová



Since 2009

4,33 bil. Euro

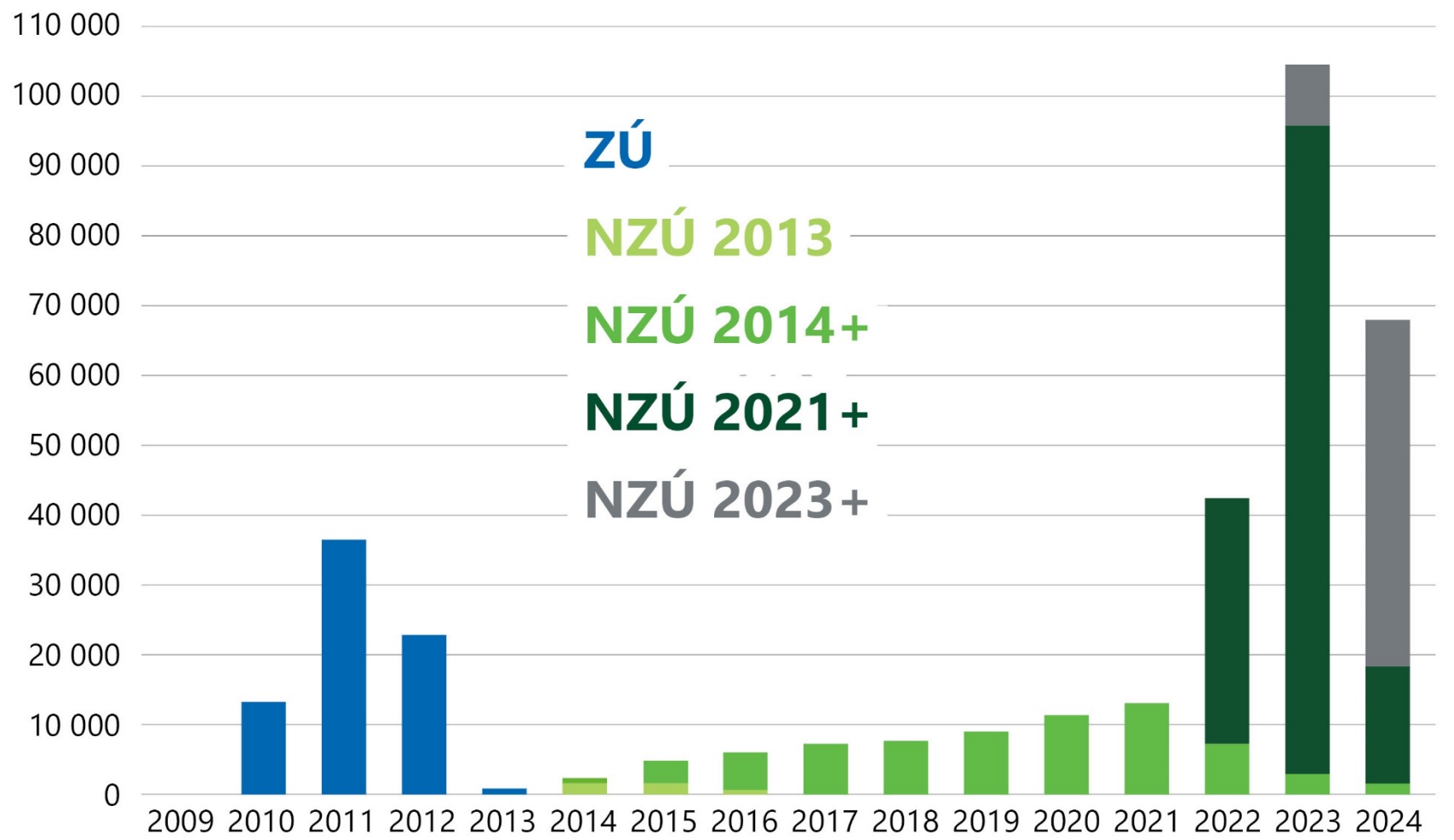
Was spent on
household energy
savings



Applications
paid between

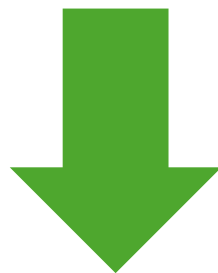
2009
and
2024

435,658 households reimbursed since 2009



With the support of the programmet here was insulated

153 000 Family houses



= 10,5 %

occupied family houses in the Czech Republic

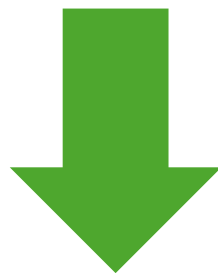


**With the
support of the
programme
there was
insulated**

**322 000
households in
total**

9 400

buildings



170 000

residential units



Long-term impacts of the programme

**Zelená
úsporám**

nová

zelená

úsporám

It has become one of the tools to meet the climate goals of the Czechia and the EU

It has contributed to improving the quality of life of the Czech population (modernisation of buildings and reduced energy costs)

Set standards for sustainable housing. It is an example of an effective financial instrument and an inspiration for other European countries

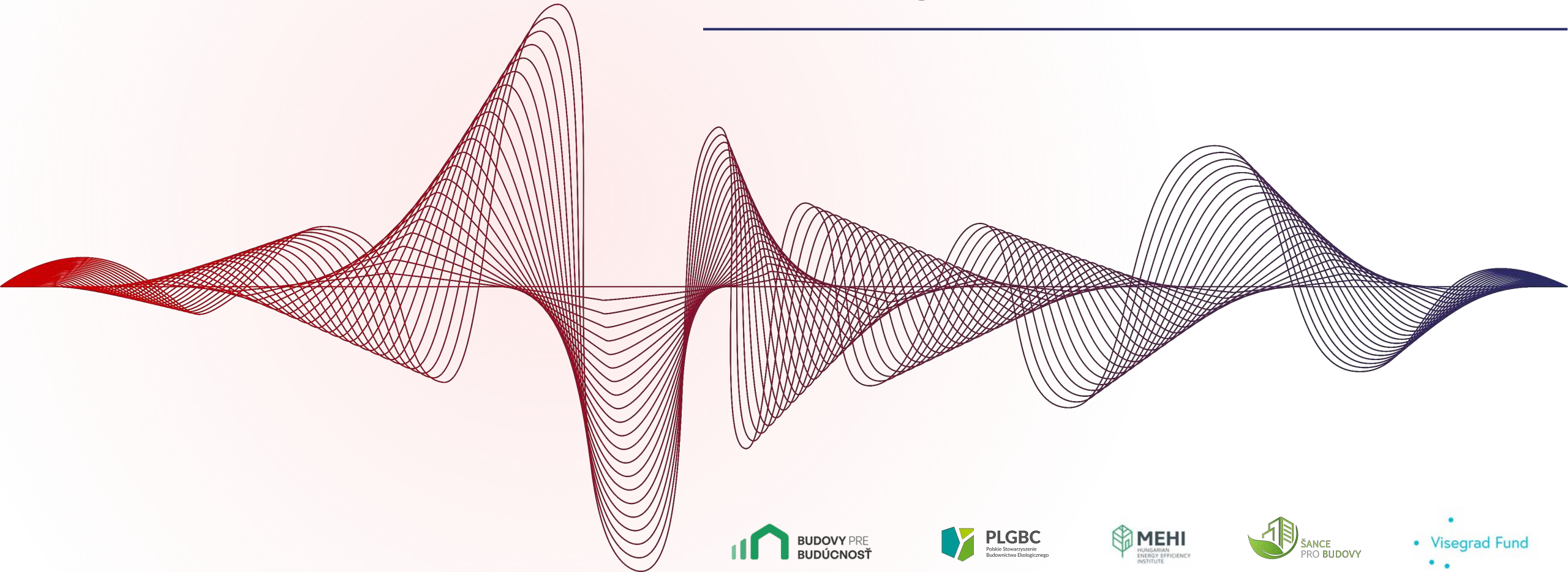
Topic#2

Mitigating information barriers, enhancing technical assistance (Ch4B)



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Mitigating Information Barriers and Enhancing Technical Assistance



EPBD revision

The revision of the Energy Performance of Buildings Directive (EPBD) introduces ambitious goals for energy efficiency and building decarbonization, requiring **robust frameworks to address information and technical barriers**.

Effective implementation is key to supporting households and businesses in navigating renovation processes and accessing financial and technical support.

KEY CHALLENGES

1. Lack of Accessible Information

- Limited public awareness about energy efficiency measures and available incentives.
- Insufficient knowledge about renovation processes, creating barriers for homeowners.

2. Gaps in Technical Assistance

- A shortage of qualified experts (e.g., project designers, auditors, and certifiers).
- Limited holistic support for households, particularly in underserved regions.

3. Lack of Sufficient Funding and Market Instability

- Inconsistent support programs and “start-stop” funding cycles disrupt planning.

The purpose of the Policy brief is to collect good practices and in cooperation with stakeholders across sectors to define policy recommendations for overcoming the existing challenges and barriers.

To do this, our methodology will include 🙌

- Survey among SFH owners (SK)
- Survey among the regional and self-governing authorities (SK)
- Consultation with the Slovak Environment Agency (SK)
- Mapping of good practices in the CEE region (V4 countries)

Policy recommendations 🙋 leading to those expected outcomes

- Increased uptake of energy-efficient renovations.
- Reduced administrative burden for households.
- Growth in skilled labour for energy efficiency projects.
- Alignment with EPBD goals for decarbonization and improved building performance.

Mitigating information barriers, enhancing technical assistance	national	regional	local
Energy Performance Certificates	Hungary has a relatively good working scheme		
Renovation passports	No mandatory policies in place		Building level (individual) good examples, as illustrations
One stop shops, Integrated Home Renovation Services	RenoPont (Hun)		
Other (?) e.g.local advisory services			

Topic#3

Whole life carbon (PGBC)



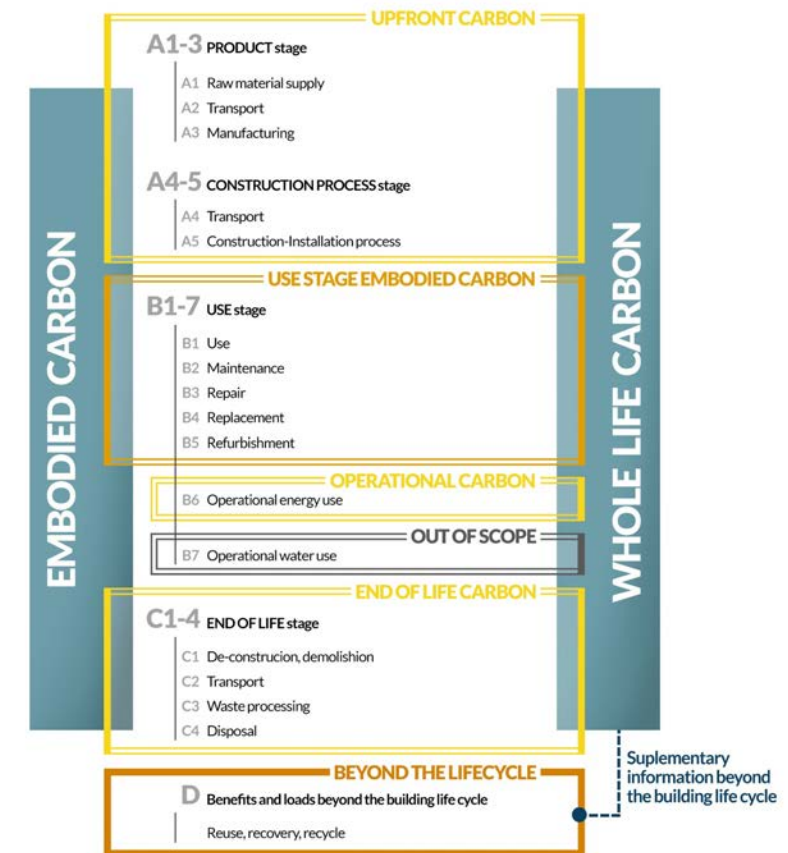
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EPBD 2024 policy brief - life cycle GWP



GWP - ESTIMATING THE CARBON FOOTPRINT OF BUILDINGS

1. Methodology for estimating the carbon footprint of buildings - Life Cycle Assessment (LCA)
 1. A - upfront carbon - product and construction processes
 2. B - embodied carbon in use phase and operational carbon
 3. C – end-of-life carbon
2. Level(s) - Life cycle Global Warming Potential (GWP)
3. Review of GWP estimation regulations in European countries (e.g. Denmark, Sweden, France, Noorway)
 - databases of specific and generic EPDs
 - emission factors for selected phases: e.g., transportation, construction phase, servicing
 - scope of LCA analyses
 - range of applicable requirements for building elements
4. Case study
5. Summary - recommendations



Whole Life Carbon requirements

- By 31/12/2025 - **EU Framework** for national calculation of lifecycle global warming potential
- By 01/01/2027 - National **roadmaps**, detailing the introduction of limit values on total cumulative life cycle global warming potential for all new buildings
- From 01/01/2028, Member States must ensure that the life cycle GWP is **calculated and disclosed** through the energy performance certificate for **all new large buildings** (useful floor area >1,000m²).
- From 01/01/2030, **all new buildings** should comply with the ZEB standard, have their life cycle GWP **calculated and disclosed** through the EPC, **and comply with the limit values** on total cumulative life cycle GWP set at national level.
- Design features of WLC regulation:
 - Scope: which type of buildings apply the WLC regulations to?
 - Life cycle modules: construction (A1-A5), use (B1-B7), end-of life (C1-C4), beyond-end of life-phase (D)
 - WLC metric: kgCO₂ eq/m²/year, EUR/m²/year?
 - Data sources: generic datasets or product-specific data?
 - Building Reference Area: what is the reference unit? (GFA, HFA)
 - Calculation tool?

Whole life carbon

national

regional

local

Green procurement policies

Lifecycle Assessment
integration in the building
design process

Embodied (upfront) carbon
regulation – e.g. EPDs,
national datasets

Regulation of end-of-life
carbon – Circular economy in
construction

Other? e.g. Skills and
awareness development

Topic#4

Heating decarbonization (MEHI)

Topic#4

Heating decarbonization (MEHI)

The revised EPBD requirements aim at decarbonizing heating in buildings:

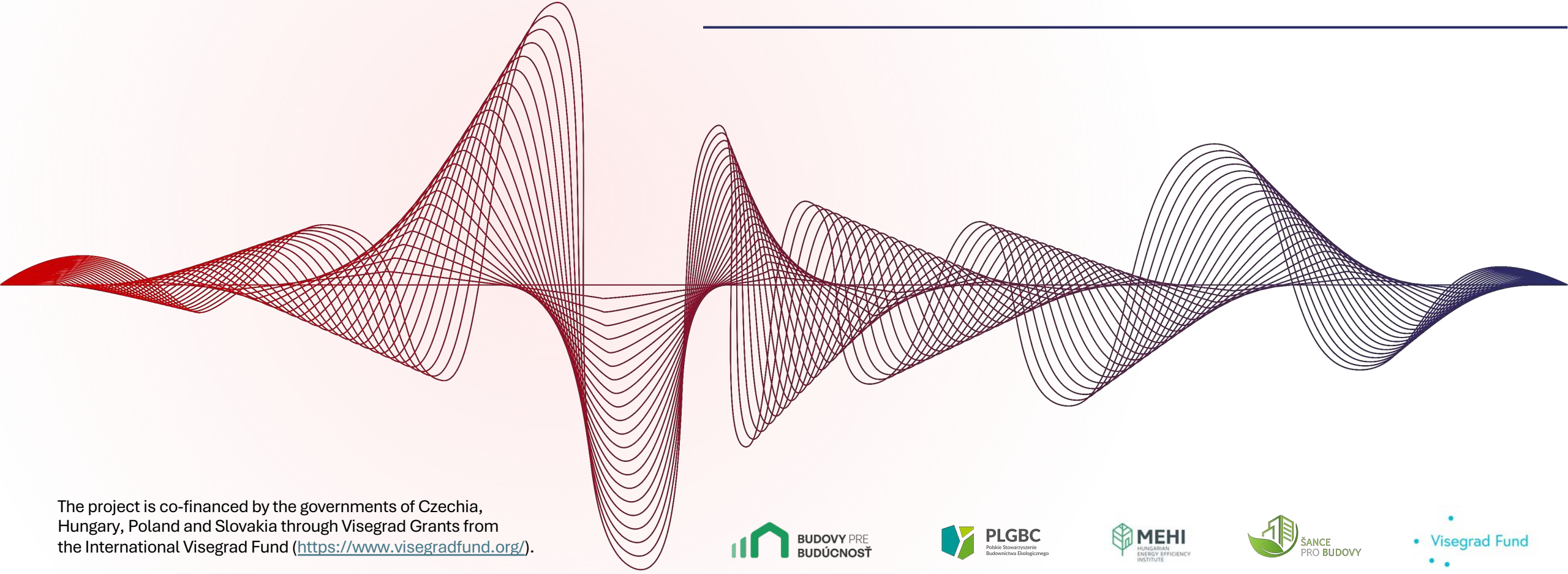
1. **Minimum energy performance standards** for new and existing buildings, including heating systems
 - + Encourage the use of energy-efficient heating technologies and systems
2. **ZEB (and NZEB):** stringent requirements for heating systems, often necessitating the use of RES or highly efficient systems.
3. The Renovation Wave mandates a significant **increase in the renovation rate** of existing buildings and prioritizes deep renovations that involve upgrading heating systems to highly efficient or renewable alternatives.
4. **Decarbonization Targets:** ambitious targets for reducing greenhouse gas emissions from buildings, including those related to heating and cooling, encourage the use of RES and energy-efficient technologies to achieve these targets.
5. **Financial Support and Incentives** to promote building renovations and the adoption of low-carbon heating technologies, including subsidies, tax breaks, and low-interest loans.

Heating decarbonization	national	regional	local
Measures supporting heat pump roll-out (up-front costs)			
Fossil fuel based subsidies terminated			
Operational costs: favorable regulation in place for clean heating (e.g gas-electricity ratio)	Special electricity tariff for HPs (HUN)		
Phase-out of fossil-based H&C			
Assistance for city heat mapping, H&C plans			
Decarbonization of district heating	State support for geothermal DH (HUN)		



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Thank you!



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