

Federal Ministry for Economic Affairs and Climate Action



on the basis of a decision by the German Bundestag

# SUstainable Building Renovation – Forming the Future (SURF)

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Deutsche Umwelthilfe





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#### **1. Introduction and overview of the SURF Project:**

- Deutsche Umwelthilfe (DUH), Ae3R and Energiaklub implement the SURF project, funded by the European Climate Initiative (EUKI), to stimulate deep and sustainable building renovations by empowering municipal actors to foster and implement sustainable renovation projects.
- The SURF-EUKI initiative focuses on enhancing sustainable renovations across municipalities in Central and Eastern Europe, particularly Romania and Hungary.
- Our goal: support municipalities in overcoming barriers to energy-efficient, cost-effective renovations in public buildings.





#### **ENERGIAKLUB** CLIMATE POLICY INSTITUTE APPLIED COMMUNICATIONS



# How did the EUKI SURF project contributed to the transformational process?

#### EUKI SURF...

- …stimulates deep and sustainable building renovation
- ...helps to ensure sustainability of building materials and their life-cycle GHG emissions
- Infocuses on municipal professionals and local decisionmakers, since most renovation activities take place at the local level











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**Key Notes** 

#### Embodied Carbon, LCA, and LCC:

- Embodied Carbon: Refers to emissions associated with the production and use of building materials.
- Life Cycle Assessment (LCA): Evaluates environmental impacts across the building's lifespan.
- Life Cycle Costing (LCC): Analyzes total costs, integrating operational and maintenance expenses. These concepts, while vital, remain underutilized in the region, presenting a knowledge gap that SURF aims to address.





# "Circular Buildings" training





"Circular Buildings"

Module 1 Life Cycle Assessment (LCA) and climate-friendly building materials





Module 2 Financing options for sustainable building renovation projects





Module 3 GPP: How to integrate "green" criteria into public procurement procedure for buildings?





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#### 2. The Key Role of the Building Sector in Mitigation Efforts

- The Building Sector's Impact:
  - Responsible for a significant percentage of global greenhouse gas emissions.
  - Renovation presents a critical opportunity for reducing carbon footprints in existing infrastructure.



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## **3.** Challenges in Romania and Hungary

- Common Challenges:
  - Lack of awareness about Life Cycle Assessment (LCA) and Life Cycle Costing (LCC).
  - Insufficient resources and technical knowledge at the municipal level.
  - Financial constraints limiting ambitious renovation projects.
- Regional Specifics:
  - Romanian municipalities often face administrative inefficiencies.
  - Hungarian municipalities struggle with integrating embodied carbon considerations into planning.



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# 4. Opportunities and Lessons Learned

- **Opportunities:** 
  - EU funding programs and policy frameworks (e.g., European Green Deal).
  - Building local capacity for implementing sustainable renovation projects.
- Lessons Learned from Events:
  - Successful workshops revealed the value of peer-to-peer learning.
  - Stakeholders emphasized the need for practical, actionable tools.



#### 5. Supporting documents for local stakeholders

- Three factsheets
  - on climate-friendly building materials

includes a good practice example of CLEVER Cities project (by-products of rice cultivation as sustainable insulation material)

on financing sustainable building renovations

*includes a good practice example of Green, Social and Sustainable Bond Framework for Region Île-de-France* 

- on green public procurement in the building sector and integration of environmental aspects in public procurement (good practice tbd)
- Sustainability checklist
- Green Public Procurement guidelines for buildings





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## **6. Key Insights for Municipalities**

- Embodied Carbon Considerations:
  - Promote awareness about the importance of reducing embodied carbon.
- Practical Steps:
  - Use the checklist and guidelines to align projects with sustainability goals.
- Policy Advocacy:
  - Encourage governments to adopt policies that incentivize sustainable renovation practices.



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#### 7. Conclusions

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- Renovation is a powerful tool for decarbonization and sustainable development.
- Through collaboration, shared knowledge, and innovative tools like those developed by the SURF project, municipalities can lead the way in creating a sustainable future.