



# RENOINVEST

sustainable renovation of buildings

## Key identified issues hindering sustainable renovation in the public and the private sector in participating countries

SABINA JORDAN, ZAG  
SUSANNE FORMANEK, Renowave.at  
DÉNES BULKAI, ARCHENERG

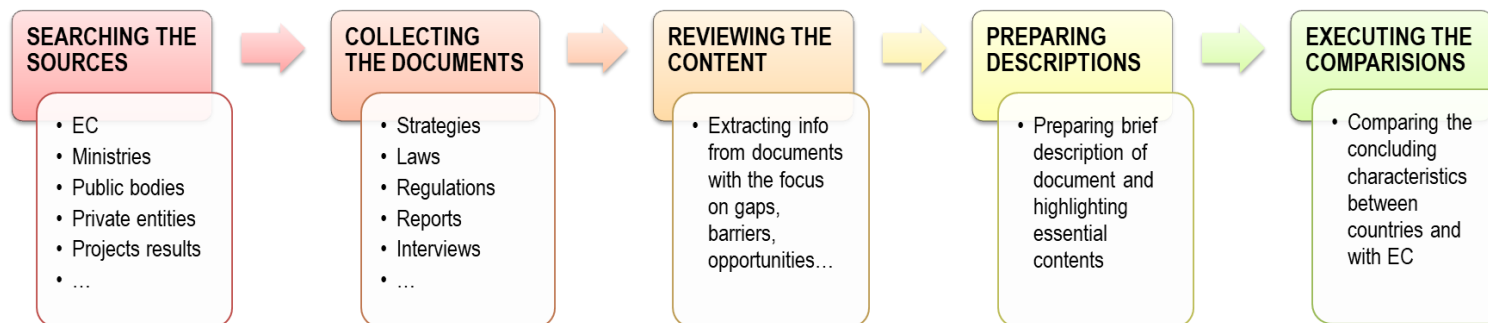
1<sup>st</sup> International Round Table, April 18<sup>th</sup> 2024, G. Radgona, SI



Roundtables enhancing smart Investments in sustainable Renovation of buildings  
LIFE22-CET-RENOINVEST

## Policy context and market capacities for sustainable building renovations in Austria, Hungary and Slovenia

- Objective and aim: gather all information relevant for the financing processes of sustainable building renovation (EE, RES, other sustainable aspects )
- Focus: to identify barriers, gaps, obstacles, weaknesses, prospects, perspectives, etc. – anything that is important for develop smart financial opportunities
- Step by step methodology: searching, collecting, reviewing, writing, comparing...



### DESK RESEARCH:

Policies and legislation related to measures to increase the sustainability aspects of the existing building stock.

Involves acts, strategic documents, rules, etc. that may affect the technical part of the renovation and can influence the investments and funding processes in private and public building sector.

Include results of projects, of initiatives, of discussions or interviews with relevant stakeholders, financial obligations and requirements, sustainable investments, different modus of investments,

# Introduction (2)

## EU context

- European Green Deal and Renovation Wave action
- European Green Deal Investment Plan
- Just Transition Mechanism, Fit for 55
- Directives: EPBD
- Level(s)
- Construction Products Regulation (CPR)
- Ecodesign for Sustainable Products Regulation (ESPR)
- Green public procurement
- R&D projects: FinEERGo-Dom, SMAFIN, SMARTER Finance for Families, Smarter Together, F-PI, CitizEE, Be-Smart, RenoHUB, Refine, SUPER-i....
- Promotions: Renovate Europe, SEI Forums,...

### EU MATERIAL:

Policies, legislation, studies, projects.... that can DIRECTLY or INDIRECTLY influence the EU member states.

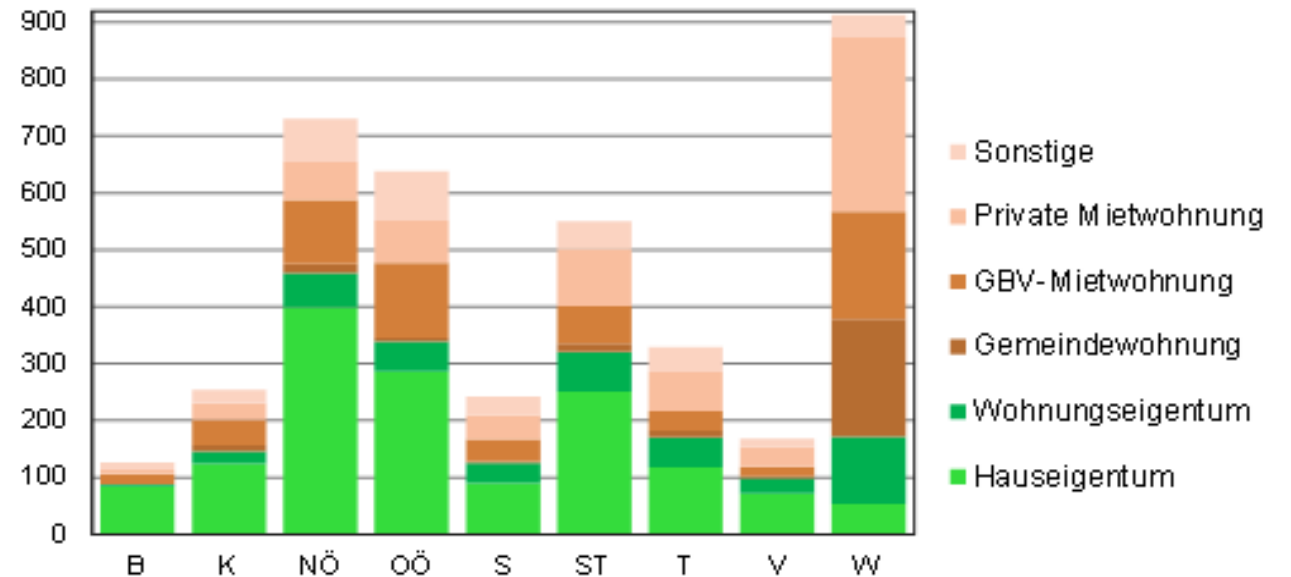


# Issues in Austria (1)

## What is hindering sustainable renovation in the public and the private sector:

- Implementation of individual measures instead of integrated overall concepts. Around 50% of the building stock is still in urgent need of renovation from an energy point of view!
- High costs and unaffordable planning, building and living

Quelle: IIBW nach ÖNACE 2020, Quelle: Statistik Austria, Mikrozensus 2019



- How can the construction industry and HVAC sector expand their capacities?

## What is hindering sustainable renovation in the public and the private sector:

- Legal barriers - > Housing and tenancy laws
  - Burdens and challenges for residents
  - There is a lack of standardized technical solutions (prefabrication)
  - Digitalization, standardization and industrial production are not yet have not yet arrived in the refurbishment of existing buildings
  - Many contact persons and therefore complex organizational effort
  - Insufficient considerations and offers in economic and ecological terms
- Given the current standard refurbishment processes, techniques and costs and the very low prices for fossil fuels and electricity, the solutions currently available are not sufficient to mobilize the refurbishment market.
- Around 13% of main residences in Austria were built before 1919.
  - 57% between 1919 and 1990 and the remaining 30% in the last thirty years.
  - The housing stock is growing by around 1% per year.

# Issues in Austria (3)

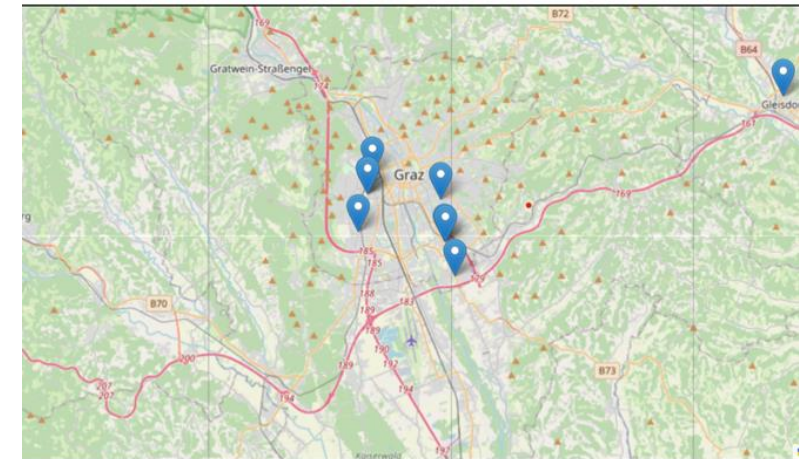
## Experiences with one-stop-shop:

- Many individual subsidies make the funding system confusing
- "Förderalismus" in Austria
- Interdisciplinarity, also in the team
- inadequate funding, only 50% for innovations one stop shop
- lack of support from relevant stakeholders
- challenges in data collection and analysis,
- Acceptance in the renovation sector
- Many player, a lot of Know-How - > how to link them?

## **RENOWAVE.AT**

PROJEKTSUCHE PROJEKTLISTE

### INNOVATIONS DATENBANK



sanierung Graz –



ECR Energy City Graz –  
Reinighaus: Urbane Strategien



Smart Mainstreaming



## Experiences with one-stop-shop:

- Challenges in the implementation of smart city and smart region projects,
- INNOVATION VERSUS LOBBY
- Difficulties in communication and awareness-raising
- resource limitations
- Elections and waiting time



Barriers hindering sustainable renovation in the public sector:

- **Municipalities have very limited own resources**, at least far from the volume necessary for the retrofits needed and according to the **'status law of municipalities'** taking a loan would require state guarantee; therefore, municipalities do not seek market based/private financing, they usually wait for the grant programs,
- **There is a great potential in off-balance sheet ESCOs/EPCs; however, these are very underdeveloped in Hungary at present due to**
  - Lack of appropriate legal definitions, contract templates,
  - Lack of well-defined business models,
  - Lack of a well-documented and transparent technical description/definition of most investment measures and their effect on energy savings, which should be the basis for an EPC,
  - Lack of experience on how to procure ESCO/EPC type services in compliance with the prescribed public procurement rules,
  - Lack of appropriate expertise, human resources and financial sources necessary for the technical, legal and financial preparation and management of complex projects



# Issues in Hungary (2)

Barriers hindering sustainable renovation in the private sector:

- **Lack of databases with appropriate technical data**, which could support retrofits by defining technical description of investment measures and their effect on energy savings.
- **Lack of basic data on present energy consumption of condominiums (for different building types)**, and how to measure them. Lack of transparent data on investment costs related to the elements of a retrofit. Lack of technical, legal and financial knowledge of joint representatives of the condominiums.
- The **condominium is not a legal entity**, whereas the building itself has a fragmented ownership structure. This translates into a long and complicated decision-making process with numerous potential conflicts.
- **There is a need for a quorum-based agreement to engage investments on common parts of the building**. This could be a major obstacle as decisions are often blocked due to the different financial situation of the individual owners.

# Issues in Hungary (3)

- **Condominiums would need technical, legal and financial planning and advice in the preparation phase, management and technical control of the investment itself**, which cost money and are part of the investment project. Due to the differential financial position of the individual homeowners, some of them cannot afford or are not willing to finance these costs.
- **Condominiums cannot reclaim VAT**, regarding the extremely high level of VAT (27 %), which unnecessarily increases investment costs of a retrofit.
- **In the industrial/commercial segments there is a clear retrofit wave** to curb increasing energy bills. An increasing number of energy efficiency projects are implemented under market conditions/with private financing.
- **The National Bank of Hungary has taken the initiative in Hungary in boosting green finance**: several programs have been opened like the green bonds, green home loans programs, the Green Preferential Capital Requirement program, etc.
- **Green loans and green bonds** are well exploited by the commercial real estate developers and some industrial companies.

# Issues in Hungary (4)

- **Investments enabling market-based return must be financed under market conditions;** whereas grants and subsidies should be focused on investments with low, or near to zero return.
- **The use of grants and subsidies** should enable leveraging more private financing into energy efficiency thus increasing the volume of retrofits.
- From June 2024 a new home renovation programme will be available **for energy modernization of family houses** connected to gas supply and built before 1990.
- With a co-payment of HUF one million from own resource, a **maximum subsidy of HUF 6 million (€15.4k)** can be used, half of which is an interest-free loan, and the other half is a non-refundable subsidy. The interest-free loan must be repaid within eight years.
- The state program can be used for the replacement of doors and windows, the modernization of the hot water system, the thermal insulation of buildings and the replacement of gas boilers.
- It is a very important expectation that as a result of all these investments, **a 30 percent reduction in energy consumption** will be achieved for the affected properties

## What is hindering sustainable renovation in the public and the private sector:

- Lack of framework for promotion and financing the sustainable renovations (considering also seismic and fire safety, radon, and hazardous materials)
- Not enough support to small/medium Energy Service Companies (ESCOs)
- Lack of guarantee schemes, rebate schemes for EE in the public sector
- Lack of promotion of comprehensive social, economic, and environmental development, including culture, natural heritage, sustainable tourism, and urban safety
- Lack of support and promotion of educational programs and skills

### BASIC ISSUE

NO real definition what is sustainable building renovation

NO financing plan for sustainable building renovation



## What is hindering sustainable renovation in the public and the private sector:

- Not enough support for basic EE measures in households, particularly for vulnerable groups
- Lack of specific legislation pertaining to the financing of building renovations
- Lack of any kind of financial support to other aspects of sustainability
- Some specifics:
  - Eco-design requirements - mandatory only to energy-consuming products, e.g.: refrigerator, dishwasher, etc., not to construction products.
  - Rules on tax relief for investments in the digital and green transition - are very specific and in case of wood they only applies to supporting structure.

### Financial support to other aspects of sustainability

- To industry for providing LCA for construction products to get the EPDs
- To industry for assuring tests and certificates as regard the VOCs and SVOCs for construction products
- For faster and deeper digitalization process (construction industry, projects preparation, construction process, monitoring...)

## Experiences with one-stop-shop:

- Eco Fund role:
  - Finances measures to boost EE, promote RES, and develop NZEB
  - Grants various EE and RES measures, not solely to building renovations
  - Supports low-income households
  - “ZERO project”, providing energy consultations and implementing free or low-cost EE measures
  - “ZERO 500 project”, using Cohesion funds for EE and RES measures in single- or two-dwelling buildings.
  - Disadvantages
    - Not always enough financial resources
    - Sometimes very long waiting time
    - Documentation must be prepared in advance
    - Specific solutions must be used (from the list)

### Support to low-income households

As a support to them the Eco Fund gives incentives covering 100 % of eligible costs for energy renovations of multi-apartment buildings and replacing old solid fuel heating equipment.



**EKO SKLAD**

SLOVENSKI OKOLJSKI  
JAVNI SKLAD



## Experiences with one-stop-shop:

- Local energy agencies, LEAs, covering public sector, industry, households 7):
  - *Lokalna energetska agencija za Pomurje,*
  - *Energetska agencija za Podravje,*
  - *Energetska agencija za Savinjsko, Šaleško in Koroško,*
  - *Lokalna energetska agencija Spodnje Podravje,*
  - *Goriška lokalna energetska agencija,*
  - *Lokalna energetska agencija Dolenjske, Posavja in Bele Krajine,*
  - *Lokalna energetska agencija Gorenjske.*
- The role is energy consulting, optimization regarding EE and RES
- Do not cover the whole Slovenia – no agency in Ljubljana
- Not enough resources - low performance
- New research project (starts soon)
  - The aim to develop one-stop-shop model
    - Based on existing LEAs - establish (upgrade) in real one-stop-shops
    - Focus on help to citizens: experts will give advice (technical and financial possibilities) and follow the process till implementation
    - Plans to work on promotion of EE and RES, but also thermal comfort
    - Will develop 3 pilot models of one-stop-shop model

### **PUBLIC SECTOR**

- LEK in SECAP
- Energy audits
- Energy accounting
- Energy certificates
- Energy management and renovation of buildings
- Preparation of EE and RES documentation
- Education and promotion of EE and RES

### **INDUSTRY**

- Energy audits
- Energy accounting
- Energy certificates
- Energy management and renovation of buildings
- Preparation of EE and RES documentation
- Education and promotion of EE and RES

### **HOUSEHOLDS**

- Energy audits
- Energy renovations
- Energy certificates
- Education and promotion of EE and RES
- Energy consulting

# CONCLUSION (1)

No agreed definition on what exactly are sustainable renovation measures, metrics and what are the criteria.

High costs for implementation of appropriate technical solutions.

Lack of business models.

Individual measures approach instead of integrated overall concept approach.

Legal insufficiency (technical and also for financing of building renovations) and legal barriers (e.g. tenant laws, cult.heritage).

Inadequate funding and lack of resources, appropriate expertise and experiences.

## **FACTS:**

Currently 75% of the European building stock is energy inefficient.

Current renovation rate is between 0.4% and 1.2% - which is not sufficient to achieve the decarbonization targets set for the 2050.

EU has increased the amount of public funds in loans and grants available for EE as the Recovery and Resilience Facility which presents an opportunity to accelerate renovation in EU.

To meet the objectives of the EU and fasten this transition we need to further unlock private financing, in particular for sustainable investments in renovations.

# CONCLUSION (2)

Not enough intensive digitalization, standardization and prefabrication (industrial production).

No general and comprehensive process management of the investment (technical, legal and financial planning, advice in the preparation phase, help and technical control).

Lack of appropriate educational and skills gaining programs.

Awareness of population is still too low.

**General barrier** to the use of private financing for sustainable renovations is the lack of an understanding on the subject among the government, public sector, private sector, and financial sector.





**RENOINVEST**  
sustainable renovation of buildings

**Thank you for your attention!**

**AUSTRIA:** SUSANNE FORMANEK, susanne.formanek@renowave.at, Renowave

**HUNGARY:** ILDIKO ADAMECZ RAJ, ildiko.raj@gmail.com, ARCHENERG

**SLOVENIA:** SABINA JORDAN, sabina.jordan@zag.si, ZAG



<https://www.archenerg.eu/en/renoinvest>



@renoinvest\_eu



RENOINVEST EU PROJECT