



RENOINVEST
sustainable renovation of buildings

RENOINVEST project introduction

Date: 31.03.2025.

Name: Dorottya Hujber, coordinator

Event: 2nd International Roundtable



Co-funded by
the European Union

Roundtables enhancing smart Investments in sustainable Renovation of buildings project



Duration: 2. October 2023 – 1. April 2026 (30 months)

Countries involved: Austria, Hungary, Slovenia (Lead: EMI – Hungary)

Funding program: EU-LIFE 2022–CET-FINROUND

Grant Agreement number: 101120673

Goal:

RENOINVEST focuses on sustainable financing solutions for the renovation of existing **public and private buildings** in **Austria, Hungary and Slovenia**.

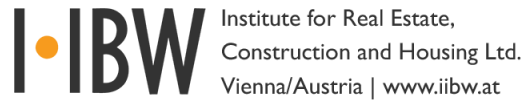
The main aim of the project is to **develop action plans** on smart investments in sustainable renovation of buildings for 2025-2030 (and 2050).

RENOINVEST **provides a platform for open dialogue** involving key financial, private and public experts through the roundtables and thematic working group activities



**Co-funded by
the European Union**

AUSTRIA



Real Estate, Construction and Housing Institute. Focus: housing finance and subsidy systems, housing policy, housing regulations, statistics.



RENOWAVE.AT is the innovation laboratory for climate-neutral building and neighbourhood renovations throughout Austria founded in January 2022.

HUNGARY



Coordinator: ÉMI Non-Profit Limited Liability Company for Quality Control and Innovation in Building (ÉMI) is Hungary's largest complex institute in construction and building materials industry with more than 200 employees.



ArchEnerg is a leading International Renewable Energy and Building Trade Cluster based in Hungary with 80 members

SLOVENIA



Chamber of Commerce and Industry of Slovenia (CCIS) is a non-profit, non-governmental, independent business. 20 branch associations, representing all important industry sectors of Slovenia.



Slovenian National Building and Civil Engineering Institute (ZAG) is a leading Slovenian research organization in the construction sector

European Green Deal- Renovation wave

**Fit for 55 package: EED, RED, EPBD
REPowerEU**

- Long-term renovation strategies
- National energy and climate plans

Austria:

- 100% decarbonisation of the building stock by 2040
- Renovation rate (across all building types) to be increased to 3% by 2030

Hungary:

- Decarbonisation 20% by 2030, 60% by 2040, 90% by 2050
- Renovation rate of private building stock 3%/year and 5%/year of public building by 2030

Slovenia:

- 70% reduction GHG emissions; 2/3 of energy use in buildings from RES by 2030; 75% reduction CO2 Emissions by 2050
- 74% of single dwellings 91% of multi-apartment buildings renovated by 2050



Renoinvest project objectives

#1: set up **national smart finance roundtables** in 3 countries focusing on smart finance with a particular focus on residential & public buildings to facilitate active dialogue between stakeholders and highlight real needs

#2: **assess national framework conditions and analyse smart financing solutions** replication potential in the participating countries

#3: develop **national action plans & policy papers** for 2025-2030 to support smart financing for energy efficiency measures and renewable energy sources in the building sector

#4: **pilot case study** (financial scheme, business model) for building renovation in the participating countries
2 per country

#5: facilitating **cross-border activities** to foster **knowledge-sharing** among partners, financial entities, and business actors

How RENOINVEST project works to achieve its objectives?



3x6 national roundtables

3 international roundtables

Status Quo Analysis

Best practices

National action plans

Cross-border recommendations

Green finance & thematic working groups

6 Pilot projects

Cross border exchange



33. INTERNATIONAL FAIR FOR CONSTRUCTION

17. - 19. 4. 2024
Gornja Radgona, Slovenia

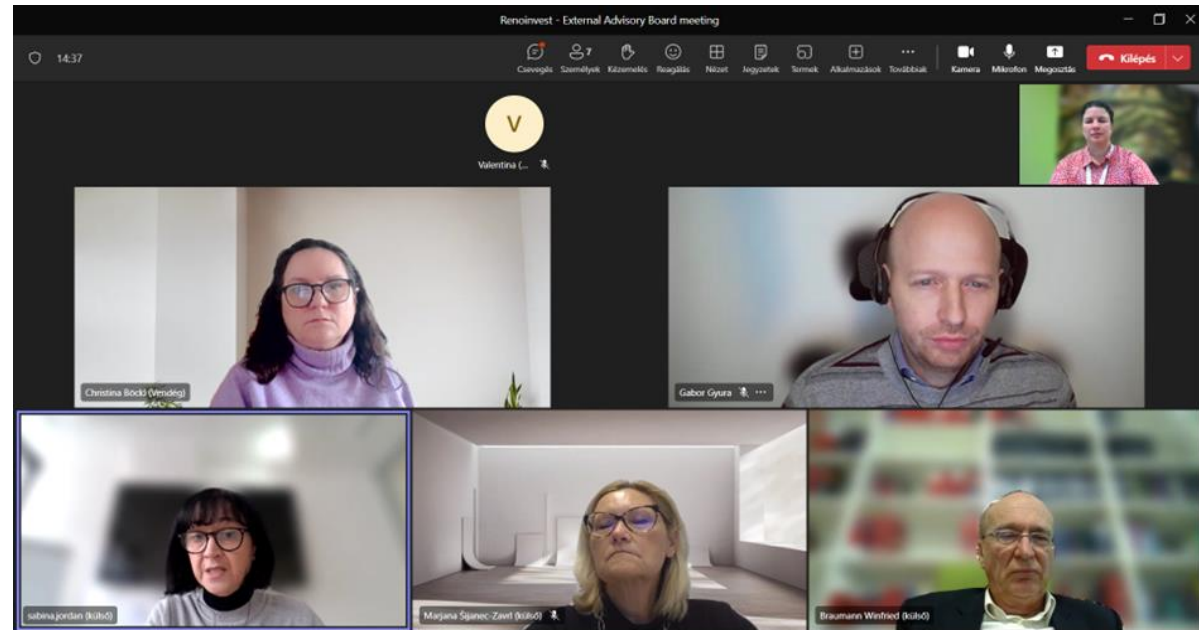


Co-funded by
the European Union

Objective #1 achieved results: Expert work

Consortium supported by the External Advisory Board consisting of three national experts:

- prof. dr. Marjana Šijanec Zavrl-Head of Centre for Indoor Env., Building Physics and Energy at Building and Civil Engineering Institute
- Braumann Winfried -business policy and organizational development at REENAG
- Gábor Gyura - financial expert and adviser for the UNEP Finance Initiative



Objective#1 achieved results: Expert work on national and international levels

4 national working groups established and meetings held to discuss green investments, financing and funding on the topics:

- ❖ Staged renovation
- ❖ Circular economy and nature based solutions,
- ❖ Energy communities (RES, DH),
- ❖ Energy consumption monitoring & visualisation

8 national roundtables on private and public buildings organized :

- 4 in Austria
- 3 in Hungary
- 2 in Slovenia



1 international roundtable organized :

- April 2024 in Slovenia focusing on one-stop-shops



Objective #2 achieved results: Circumstances and characteristics of sustainable building renovations



RENOINVEST
sustainable renovation of buildings


Co-funded by the European Union

D2.1 - Policy context and market capacities for sustainable building renovations

July 2024



69



Co-funded by the European Union

7.3.2 Main findings on financing the renovation of public buildings

The SWOT analysis of municipal buildings in Hungary reveals several key findings. Municipally managed projects have benefitted from significant funding under the KEHOP and TOP programs. However, weaknesses include a historical reliance on grant funding alone for building retrofits and limited capacity for municipalities to secure loans due to stringent budgetary laws. Municipalities also face challenges such as a shortage of expertise, human resources, and financial capabilities required for complex project management. Opportunities lie in exploring market-based financing models that combine loans with grant or guarantee elements, potentially facilitated by clearer rules under budget laws to enable borrowing and innovative funding approaches. Additionally, adopting ESCO/EnPC models and engaging in energy communities could enhance efficiency efforts. Nevertheless, threats include legal and procedural barriers to implementing ESCO/EnPC contracts and insufficient legislation supporting innovative business models.

Table 4: SWOT analysis in financing building renovation of public buildings in Hungary.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">2200 projects implemented under the KEHOP, TOP programs, between 2014-2020.Municipal sustainable real estate financing (loans or bonds) is also eligible for MNB's Green Preferential Capital Requirement Programme.Lots of preparatory work have already been done under various EU and non EU-funded programs and can be used to design programs.	<ul style="list-style-type: none">Retrofits of municipal buildings were financed typically by grants only.Municipalities are not encouraged to finance their energy efficiency projects on market basis or via combined methods.Municipalities have limited borrowing capacity under the Law on Stability and State Budget.Multi-annual budgeting (required for loans or ESCO) is limited for municipalities.Municipalities usually lack appropriate expertise, human resources and financial sources necessary for the technical, legal and financial preparation and management of such complex projects.
OPPORTUNITIES/POSSIBILITIES	THREATS/BARRIERS
<ul style="list-style-type: none">Introduce and encourage market based financing – loans blended with grant/guarantee elements.A well-defined rule on the financing of energy efficient retrofits as an exception under the Law on Stability and State Budget could extend the room for municipalities for taking out loans. This would be a basic condition for the municipalities enabling them to adopt innovative financing schemes.ESCO/EnPC based models and solutions, based on energy performance contracts and savings models.Increase private sector participation in energy renovations in public buildings.Pooling projects for participation in ELENA, Smart Cities programs.Energy communities and other innovative business models.Energy efficiency Obligation Schemes (ESB).ESRO GEFY programmes.Emphasizing the multiple benefits of EB beyond financial savings (climate change mitigation, adaptation, cleaner air, hedging against energy price fluctuations etc.).	<ul style="list-style-type: none">Available funding for energy renovations in public buildings may not be sufficient.Construction industry in Hungary may face capacity constraints regarding the volume of renovations.Complex planning procedures and lack of clear guidelines for public buildings.Lack of appropriate legal definitions, business models for ESCOs and EnPCs in Hungary.Public procurement, lack of experience on how to procure ESCO/EnPC type services.Public procurement system regarding low bidder principle and not best bidder principle prevails.Lack of appropriate legislation to enable innovative business models like energy communities.Obligations to comply with a set of building construction norms also for other aspects than those related to energy when buildings are renovated or regulations protecting the cultural heritage.Lack of knowledge and training of various energy actors, including authorities, government institutions, renovation solution suppliers, financing intermediaries and other intermediaries.Lack of an encouraging environment.Shortage of available skilled workforce to implement renovations.

69



RENOINVEST
sustainable renovation of buildings

Co-funded by the European Union

D2.2-Best practice handbook of sustainable building renovations

October 2024

First edition



5.2 Description and analysis of each case

5.2.1 Austria

No. 1: Apartment block Marktstraße Linz – Passive house renovation

FINANCIAL DATA	
Type of financing, year	Reserves, funding & subsidised housing loan, 2006
Financier	Österreichische Landesbank AG, BMVIT (non-repayable subsidy)
Specifics	First renovation to passive house standard, use of prefabricated facade modules
Beneficiary	ÖSWG – Ökonomie- und Industrie-Wohnungs AG (non-profit housing association)
Link	https://www.bmvit.at/Invest/Architektur/Top-1-passive-house-renovation

DESCRIPTION and PHOTO



Upgrading an apartment building in Marktstraße, Linz, to near Passive House standard. The residential complex was built in 1957/58 and consists of 55 residential units, 5 commercial and 10 public units.

For the include:

- Prefabricated facade elements with built-in windows and doors
- A solar home-made facade was employed
- Living space is ventilated mechanically by means of single- and double-flow mechanical ventilation with heat recovery
- The balconies were enclosed, which increased the use of the balconies and the facade
- Thermal insulation of basement and attic ceilings and new roof building envelope

The modernisation of the energy system consisted of:

- Installation of controlled ventilation with a 70% heat recovery

No. 48: Energy renovation of Student dormitory Vite, Ljubljana, SLOVENIA

FINANCIAL DATA	
Type of financing, year	Energy Performance Contracting (EPC), 2022-2023
Financier	Reaktor d.o.o., Ministry of education
Specifics	PPP between ministry and private company (public source: Operational Programme for Cohesion Policy Funding (OP-EPF 2014-2020))
Beneficiary	Student dormitory Vite
Link	https://www.reaktor.si/en/energy-renovation-student-dormitory-vite-ljubljana-slovenia-a-new-dormitory-for-the-future

DESCRIPTION and PHOTO



The renovation project of the Vite Student dormitory included the implementation of the necessary measures for the comprehensive energy renovation and the establishment of an efficient energy management of the building. The works themselves were carried out on the old administration building and the student dormitory. The main objective of the project was to carry out a comprehensive energy rehabilitation of the two public buildings with the aim of reducing energy consumption and, consequently, the running costs.

The project included the replacement of the window and lighting, thermal insulation of the external walls and attic, renovation of the heating system with the installation of thermostatic valves, ventilation of the kitchen and living room, rehabilitation of the setting up of a central control system. The measures renovated an estimated 13 24.80 m² of net floor area. Reaktor and DigiReaktor Vite signed a 15-year concession contract, through a model of energy contracting, with public-private partnership. European cohesion funds covered 1 613 969 EUR, School dormitory Vite 200 000 EUR, Ministry of education 143 379 EUR and with the private capital (Reaktor) 1 501 685 EUR, coming together at 3 359 012 EUR.

SWOT ANALYSIS

Strengths	Weaknesses
<ul style="list-style-type: none">The energy renovation did not disturb the students living in the dormitory.	<ul style="list-style-type: none">15-year long concession contract with the same energy provider.
Opportunities / Possibilities	Threats / Barriers
<ul style="list-style-type: none">An opportunity for raising local awareness and learning about sustainability because the solar panel is implemented on a student dormitory.	<ul style="list-style-type: none">Improper use and behaviour of occupants can negatively affect the expected results.

Available: <https://www.archenerg.eu/en/renoinvest/results/policy-analysis>

Objective #3 achieved results – Action plan development

- Aim: Develop national action plans and policy proposals through thematic working group and national roundtable discussions to accelerate the decarbonization of the building stock.
- Status: Drafting of action plans- some highlights

Austria	Hungary	Slovenia
<ul style="list-style-type: none">• Reform the Tenancy Act (MRG) and open tenants' obligations to tolerate renovations and renewable energy installations• Revitalize development bank for renovation and infrastructure• Special subsidies for serial and step-by-step renovations based on the German model• Building law: Make standards and integral planning for circularity and NBS• BIM - Digitisation of the building stock to assess "material values"• Info campaigns for renewable energy communities• Existing buildings, low-tech solutions more sustainable than full automation > Adjust laws accordingly• Binding monitoring and visualisation• Release missing implementation regulation for contracting guarantees	<ul style="list-style-type: none">• Strengthen the one-stop shops and pilot projects with financial institutions to enhance collaboration and support.• Develop long-lasting, stable financing schemes incorporating grants, bank loans, and reduced-interest loans.• In financial products encourage staged renovation• Revitalize the home savings scheme• Create open access databases with relevant datasets for homeowners and financiers• Provide financial advantages (e.g., tax relief) for promising circular solutions and NBS systems.• Resolve legal conflicts between shared renewable energy use and individual billing.• Standardizing Energy Consumption Data for financiers• RRF Funding for new generation District Heating Systems	<ul style="list-style-type: none">• Provide grants or favorable loans from state authorities to support step-by-step renovations, prioritizing seismic improvements first.• Educate apartment owners and property managers on renovation benefits and processes.• Ensure long-term planning for green transition actions to provide stability and predictability.• Reduce bureaucracy and simplify procedures through one-stop shops and standardized documentation.• Expand banking services from commercial banks, including financing options for circular and nature-based renovation solutions.• Showcase successful renovation projects to the public to encourage wider adoption.• Implement mandatory monitoring and data collection at the building level to address data protection and ownership concerns.

Objective #4 achieved results: Pilot cases to support the sustainability of project results

- Development of pilots - practice-oriented **case studies** accompanied by financial plans and **business models** for large-scale energy renovations.
- Aim: Demonstrating the optimal technological and financing possibilities for implementing the renovation, emphasizing the practical orientation of the action plans
 - Six practical feasibility studies in both the private (residential/multi-apartment building) and public sectors (municipal building).
 - Two pre-feasibility studies per participating country.
- Status: Cases have been selected, study in progress

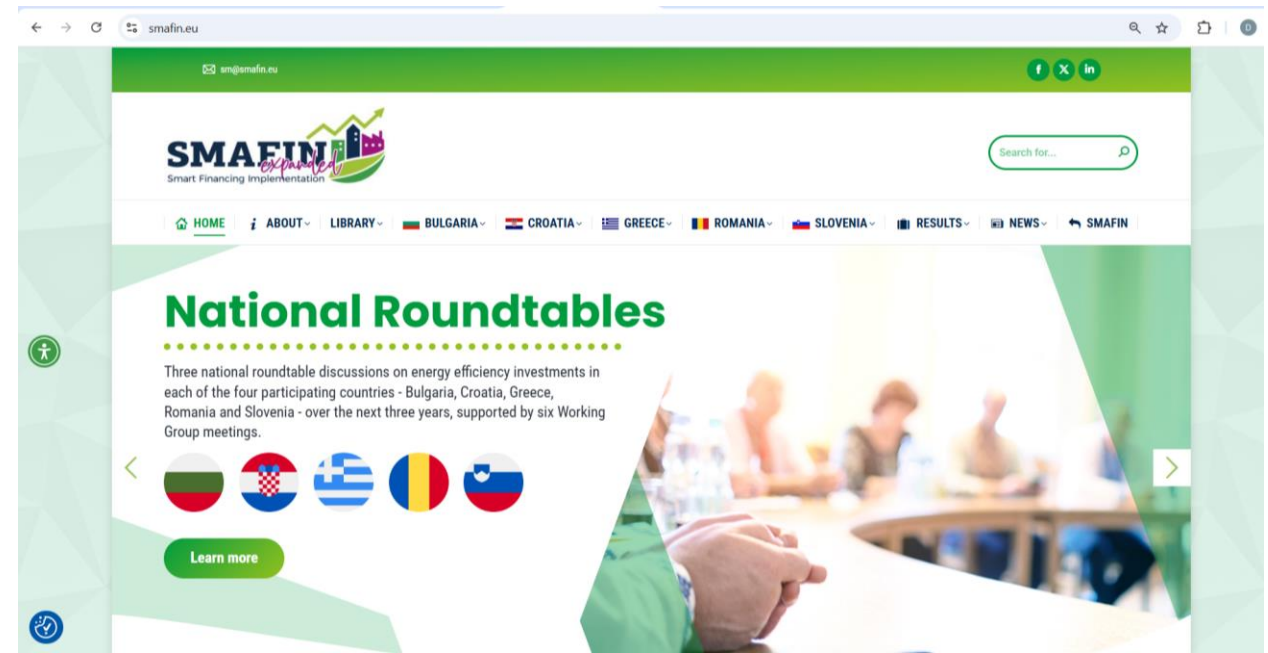
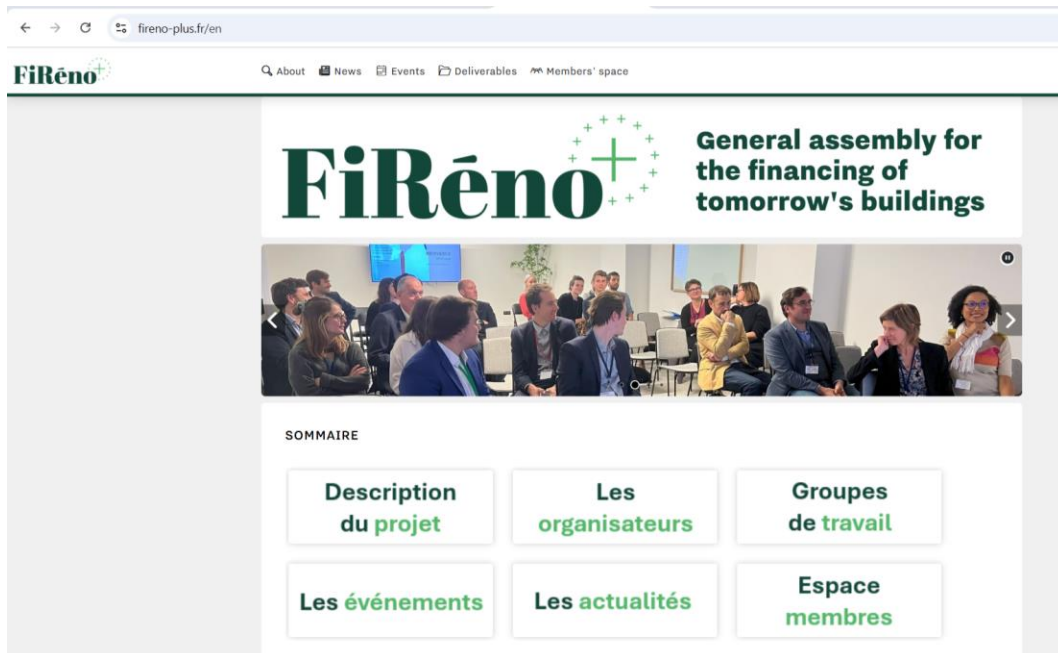


Co-funded by
the European Union

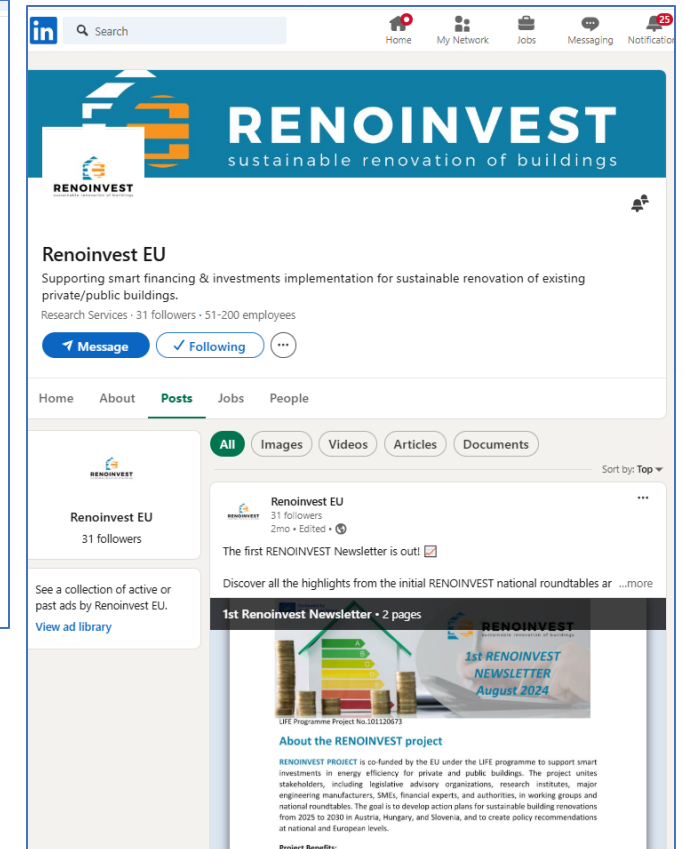
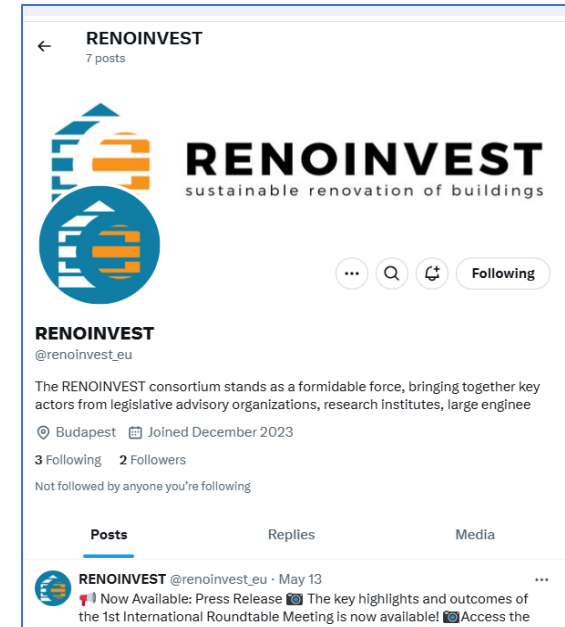
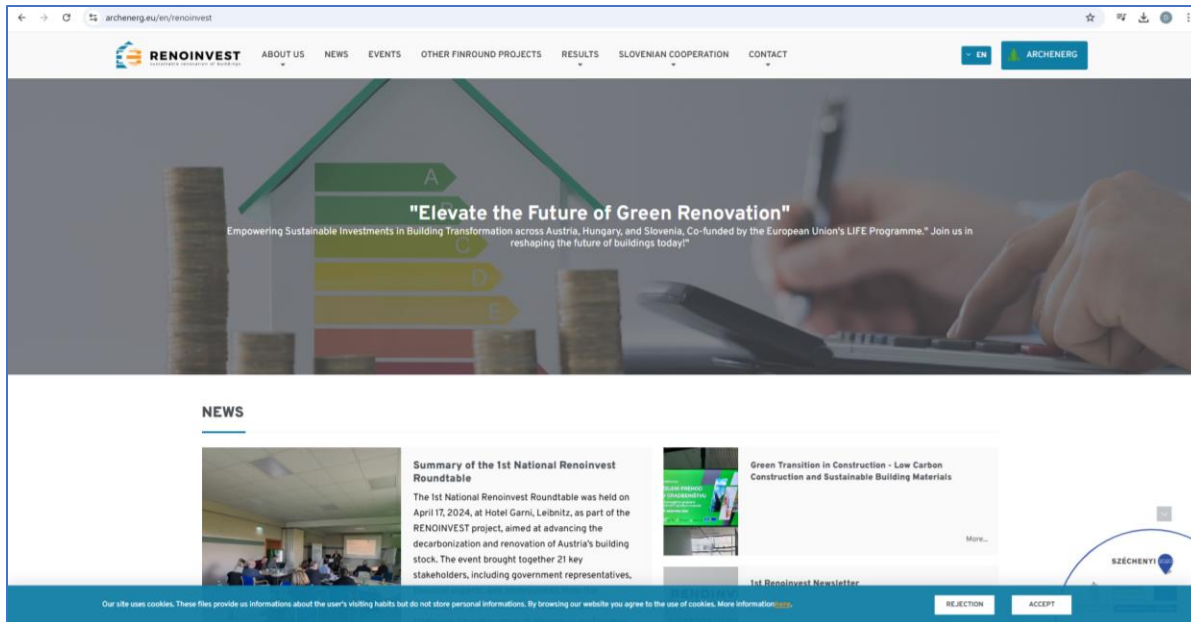


Objective #5 achieved results: Knowledge-sharing

- HORIZON2020 and LIFE Clean Energy Transition projects: National Roundtables on energy efficiency finance
- Finalized: [AUNA](#) (ES), [SMAFIN](#) (EL, BG, RO, HR), [ROUNDBALTIC](#) (DK, PL, LT)
 - Started in 2021: [GreenHome](#) (DE), [GreenDeal4Buildings](#) (CZ, SK), [BeSmart](#) (BG), [GreenRoad](#) (IT)
 - Started in 2023: [RAISE-PT](#) (PT), SMAFIN- EXPANDED (EL, BG, RO, HR, SI), [LIFE FREE BE](#) (BE), [RENOINVEST](#) (AT, HU, SI), [FR-BS/FIRENO](#)+ (FR)



Follow RENOINVEST results and upcoming events



- Slovenian National Roundtable: 30. May 2025 – Ljubljana (CCIS joint with SMAFIN EXPANDED)
- Austrian National Roundtable: 7-8. April 2025 – Vienna (BauZ Congress)
- Hungarian National Roundtable: May 2025 – Szentendre/online
- 3rd International Roundtable: 24-25. October 2025 – Linz (Impact days)



Co-funded by
the European Union



**Thank you
for your attention!**

Follow us:



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



RENOINVEST EU
PROJECT



[@renoinvest_eu](#)

Contact:

Dorottya Hujber

dhujber@emi.hu

+36 30 3110657