



ComActivate

Enabling community action for energy sufficiency

ANALYSIS OF GAPS AND BARRIERS FOR FINANCING HOA'S AND MFAB'

D5.2

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Background

1.1 Introduction

Homeowners' associations (HOAs) and multi-family apartment buildings (MFABs) are important components of residential communities throughout the European Union. Both face ongoing challenges related to maintaining and retrofitting buildings to meet the requirements of the EU Green Deal and other EU programme. Yet one of the most problematic issues is how to finance the renovation of these buildings, especially in the context of improving energy efficiency in the face of the growing problem of energy poverty in the EU.

Energy poverty affects not only low-income groups, but also those who struggle to pay high energy bills due to poor energy efficiency in buildings. In recent years, the EU has increasingly focused on this issue, with more than 41 million Europeans failing to keep their homes adequately warm in 2022.¹ That said, the issue of financing and energy poverty in the EU is complex. The energy poor have difficulty financing their heating costs, yet there is an urgent need to invest in energy-efficient renovations. Improving insulation, modernising heating systems and installing renewable energy systems can reduce energy consumption and heating costs, thereby improving the living conditions of those who need it the most. However, financing these improvements is a significant challenge. Many residents do not have enough initial capital for renovation projects. Another complicating factor is the differences in the rules for financing energy efficiency improvements across the EU Member States. Although there are several key EU programmes, such as the Energy Efficiency Directive (EED) and the Renovation Wave, supported by various financial mechanisms, many challenges remain that countries must overcome. This creates an inconsistent environment that makes it difficult for these communities to navigate the available financial assistance programs.

ComActivate responds to growing levels of energy poverty across the EU, especially in the Central and Eastern European (CEE) region, by addressing the poor energy efficiency of buildings as a major driver of energy poverty, and as a driver of climate change. It aims to address the poor energy efficiency of buildings as a major driver of energy poverty and as a driver of climate change; 75% of the building stock in the EU is inefficient with buildings responsible for 34% of greenhouse gas emissions. ComActivate aims to enhance public-private policy and investment dialogue at the national and EU levels to enable the sustainability of Resource Centers and the implementation of Neighbourhood Energy Sufficiency Roadmaps in energy-poor districts in four CEE countries.

What is the aim of this report

In this report, we analyse the gaps and barriers and provide a comprehensive assessment of financing strategies and best practices to improve the energy efficiency of buildings, focusing in particular on the European Union (EU) and three Central and Eastern Europe countries: Bulgaria, Hungary and Lithuania, which are pilot countries in ComActivate. The results of this report should reflect the current state of development banks investing in energy-related projects. It provides an overview of how these banks make decisions on funds allocation, including the conditions and factors that influence such decisions. In addition, the report focusses on the functions of development banks, their primary objectives and priorities, and offers a comprehensive overview of the latest trends in the sector.

This report contributes to exploring effective ways within and beyond ComActivate to actively participate in the process of influencing and providing guidance on the development of new strategies of the capital market players, especially development banks targeting CEE energy-related financing in fund upscaling energy performance of multi-family apartment buildings (MFABs) through collecting and analyzing data.

¹ [Energy poverty in the EU | Think Tank | European Parliament](#)

1. Executive summary

This report addresses the financing landscape for homeowners' associations (HOAs) and multi-family apartment buildings (MFABs) in Bulgaria, Hungary and Lithuania, focusing on the significant challenges and opportunities in securing loans for energy efficiency renovations that align with the European Union's Green Deal. With over 41 million Europeans facing energy poverty, the need for improved building energy efficiency is undeniable. However, critical obstacles remain, including high upfront costs, insufficient investor interest, and inconsistent financing regulations across EU member states.

Key Findings

- **Financing Strategies and Gaps:** Numerous EU initiatives, such as the Energy Efficiency Directive (EED) and the Renovation Wave, aim to enhance energy efficiency. Yet, barriers such as high initial costs and a lack of standardization continue to obstruct progress. Prioritizing innovative financial products and forging public-private partnerships are essential for attracting private investments.
- **Role of Development Bank:** Institutions like the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) play a crucial role in fostering energy efficiency investments. Their leadership in developing financing models and ensuring transparency is vital for mobilizing private sector funding, which needs to be leveraged more effectively across all EU member states.
- **Data Collection and Monitoring:** Collecting data on energy efficiency investments is essential for tracking progress and addressing the investment gap. The current lack of standardized metrics and ineffective tracking across member states hampers our efforts and must be rectified immediately to facilitate informed decision-making.
- **Barriers and Solutions:** Major barriers include a lack of investor interest and perceived financial risks in energy efficiency projects. Recommended solutions include implementing standardized procedures, incorporating the energy efficiency-first principle into all financial decisions, and developing tailored financial products for specific market segments.
- **Good Practices and Recommendations:** Successful examples from Western Europe should inform strategies in Central and Eastern Europe (CEE). Enhancing private sector engagement, promoting uniformity in financing procedures, and emphasizing the multiple benefits of energy efficiency projects are crucial for ensuring socially equitable transitions.

Country-Specific Insights

Bulgaria

Bulgaria has approximately 6.7 million inhabitants and around 4.3 million dwellings. Despite a high homeownership rate of 87%, many apartments are energy inefficient, with 85% built before 2000, leading to high energy consumption. The renovation rate is notably low, at only 1.3% for medium renovations and 0.1% for deep renovations. Limited financing for homeowner associations (HOAs) and multi-family apartment buildings (MFABs) poses a significant barrier to necessary energy efficiency renovations. Although there were programmes such as the Recovery and Resilience Plan for Bulgaria, there is a lack of political consistency that undermines the confidence of homeowners in receiving long-term support. This situation highlights the need to explore financing gaps and barriers to improve Bulgaria's residential sector. Despite positive trends, gaps remain, including insufficient funding and complex application processes for EU grants, which can deter renovations. Streamlining compliance processes and raising awareness about available funding can empower homeowners and encourage greater participation in energy efficiency initiatives.

Hungary

Hungary, with a population of 9.6 million and approximately 4.6 million dwellings—97.6% of which are privately owned—faces significant energy consumption challenges, particularly related to heating, which accounts for 34% of total energy use. Although price caps have somewhat mitigated energy poverty, the absence of state subsidies since 2015 has reduced lending activity among commercial banks. Major banks, including OTP Bank, MBH Bank, Raiffeisen Bank, and UniCredit Bank, currently

offer joint loans to HOAs. However, persistent high inflation rates and arrears among HOA members present ongoing hurdles that must be addressed through targeted financial solutions.

Lithuania

Lithuania has a population of nearly 3 million and around 1,4 million dwellings. Regarding to ownership, in 2023 around 88,8 % of population lived in owner-occupied dwellings. The high ownership rate plays a significant role in energy poverty, as homeowners often bear full responsibility for renovation investments. This is why financial mechanisms play a critical role in addressing energy poverty. Lithuania features a robust financial sector characterized by a concentrated banking system and the National Promotional Bank (NPB), which facilitates access to finance for SMEs. The legal framework governing HOAs requires a structured majority voting process for loans, complicating access to financing due to collective creditworthiness challenges and collateral requirements. Crowdfunding platforms provide limited options, often with steep interest rates and stringent eligibility criteria for state-supported loan guarantees—issues that require urgent attention to improve overall accessibility to funding.

Recommendations

- **Enhanced Grant Programs:** Advocating for state-sponsored grant schemes to alleviate financial burdens on HOAs for major renovations, enabling projects to progress despite high interest rates.
- **Development Bank Involvement:** Development banks should be encouraged to enter the HOA lending market, offering lower interest rates and longer loan terms, making significant renovations financially viable.
- **Research on HOA Access:** Conduct thorough assessments to identify HOAs lacking access to loans, allowing for targeted financial products tailored to their specific needs.
- **Improved Legal Frameworks:** Streamlining the legal and regulatory frameworks governing HOAs is essential to facilitate easier access to financing and strengthen their creditworthiness.
- **Financial Education and Support:** Providing robust technical assistance and educational resources for property managers is crucial to help them navigate the loan application process efficiently.

By implementing these strategies, Hungary and Lithuania can enhance the ability of HOAs to secure financing for vital renovations, improve energy efficiency, and contribute to broader climate and energy objectives within the EU. The collective insights from both countries can serve as a model for Initiatives and financial structures for upscaling financing building renovation

2. Overview of the EU initiatives supporting energy efficiency in buildings²

The **Energy Efficiency Directive** (EED) contributes to doubling the global rate of energy efficiency improvements from about 2% to over 4% by 2030. It commits EU Member States to collectively reduce energy consumption by 11.7% by 2030, compared to the projections of the EU reference scenario 2020, which means that primary energy and final energy should not exceed 992.5 million tonnes of oil equivalent (Mtoe) and 763 Mtoe, respectively.

Renovating buildings was singled out in the [European Green Deal](#) to drive energy efficiency in the sector and deliver on objectives. For this, The European Commission initiated the **Renovation Wave** in 2020 to boost building retrofits, reduce energy consumption and provide jobs. It aims to unite regulation, funding and technical assistance concepts that are usually addressed separately. The Renovation Wave strategy also identifies the €275 billion of additional investment in building renovation necessary per year to reach climate and energy targets by 2030. In light of this, the Renovation Wave aims to renovate 35 million buildings by 2030, at least doubling the annual rate of energy renovations in the EU, for which the revised **Energy Performance of Building Directive** (EPBD) provides a legal framework.

EPBD aims to decarbonise the entire building sector by 2050. Besides, it sets intermediate goals on reducing greenhouse gas emissions by at least 60% in the building sector by 2030 compared to 2015 levels. Furthermore, EPBD aims to accelerate the renovation of buildings with the lowest energy performance by promoting deep energy renovations in both residential and non-residential sectors. To deliver its objectives, the Directive commits Member States to develop national Building Renovation Plans for energy efficiency and decarbonisation targets through renovation activities.

The EU established different funds and financial mechanisms, which can be used to finance the needed renovation rates while considering social challenges *inter alia* of the growing demand for accessible housing. **Cohesion Policy Funds** (including the Cohesion Fund, European Social Fund, and European Regional Development Fund) and the **Recovery and Resilience Facility** are the most targeted for supporting the implementation of the Renovation Wave while potentially covering the immediate funding gap on energy efficiency investments. The Cohesion Policy supports the most distressed economies and regional development, for which the EU dedicated altogether €6,6 billion from 2014 to 2020 and allocated over €1 billion for 2021-2027 to affordable housing through energy efficiency and social measures. Within the framework of the Recovery and Resilience Facility targeting the recovery after COVID-2019, National Recovery and Resilience Plans (RRPs) include a minimum of 30% of climate-relevant expenditure, and they contain a buildings renovation flagship priority. Furthermore, RRP of 10 Member States have substantial housing reforms by prompting energy efficiency and housing provision with the help of €57.76 billion.

The **Social Climate Fund** supports vulnerable households during the energy transition. Member States can use this financial support to fund structural measures and investments in energy efficiency and renovation of buildings, clean heating and cooling, integration of renewable energy as well as in zero- and low-emission mobility solutions. Member States have to prepare their national plans (Social Climate Plans) by mid-2025 to showcase how and through what kinds of investments and mechanisms they plan to use this fund in order to mitigate the potentially harmful social impacts of climate transition.

Horizon Europe, LIFE and Innovation Fund are longer-term opportunities for maturing and scaling new technologies and will not have substantial impacts before 2030. The LIFE programme, Horizon Europe (before Horizon 2020) research and innovation programme helps public and private developers in large-scale energy efficiency and renewable energy projects.

The **InvestEU** programme is a joint initiative by the European Investment Bank (EIB) and the European Commission aiming to combine private and public investments for social investment delivery, including

² KISS, V. Analysis of gaps and report on best practices for financing HOA's and MFAB's. 2025 (annex 1)

building renovation. Altogether with its forerunner entitled the European Structural and Investment Fund (ESIF), it has allocated a total of €1.09 billion for affordable housing. With this effort, 3167 affordable social housing units have been built or renovated. Under InvestEU, the European Local Energy Assistance (**ELENA**) was established in 2009, since then, it has been providing technical assistance and financial support for energy efficiency and renewable energy investments. ELENA has awarded more than €296 million of EU support and managed to mobilise €9.5 billion investment between 2009 and 2023. ELENA applies some rules, including minimum investments of €30 million and a certain level of project maturity to ensure that the project will be implemented. Furthermore, 90% of project development support can be covered by grants. Besides, project implementation is expected to last for 3-4 years. With this approach, ELENA has been providing technical advisory facilities or one-stop shops (OSS) for combining financial instruments and grant products with separate guarantee instruments, which is a very beneficial way of boosting building retrofits.

The EU's **Innovation Fund** provides funding for large-scale innovative technologies, which can be either large-scale flagship projects or small-scale projects to all 27 Member States. It supports initiatives that can bring significant emission reductions including ones aiming for energy efficiency. The **Modernisation Fund** supports investments targeted at 13 lower-income EU Member States (all CEE Member States plus Portugal, see Figure 1 below) to meet EU energy targets by helping them to modernise energy systems and improve energy efficiency.

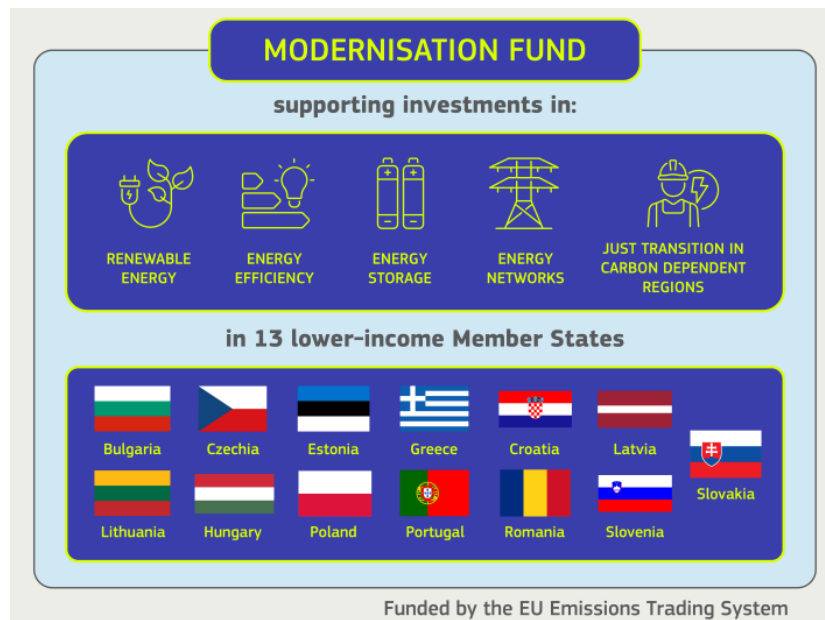


Figure 1: Member States and areas benefiting from the Modernisation Fund

The Modernisation Fund operates under the responsibility of the [beneficiary Member States](#) in close cooperation with the [European Commission](#) and the [EIB](#). It plays a crucial role in the European Green Deal Investment Plan and supports *inter alia* renewable energy and energy efficiency-related investments aiming at carbon emission reduction.

The **Connecting Europe Facility** (CEF) for Energy is the EU funding programme to implement the Trans-European Networks for Energy policy by building new cross-border energy infrastructure in Europe as well as rehabilitating and upgrading existing ones.

Below, Table 1 showcases the biggest funding sources (except for the Social Climate Fund) that potentially finance energy efficiency investments, including building retrofits.

Funding source	Budget 2021-27
Horizon Europe	15 bn EUR (climate energy and mobility)
Innovation Fund	10 bn EUR (overall budget)
Modernisation Fund	14 bn EUR from EU ETS auctioning (2021-2030)
CEF	5 bn EUR (energy infrastructure)
Invest EU	9 bn EUR (sustainable infrastructure)
LIFE	1 bn EUR (clean energy transition)
ERDF & CF	25 bn (share targeting climate objective)
Recovery and Resilience Facility	249 bn EUR (share targeting climate action), subject to national recovery plans

Table 1: Different funding sources can be used for enhancing energy efficiency through building retrofits

Integrated Renovation Programmes and Local Heating and Cooling Plans under the Urban Agenda aim to deliver targets of the Energy Efficiency Directive (EED) and the Renewable Energy Directive (RED), namely committing cities with a minimum of 45,000 inhabitants to develop local cooling and heating plans with a RED-defined mandatory percentage of renewable energy. The Urban Agenda for the EU represents a new multi-level working method, for urban policy and practice, promoting cooperation between Member States, cities, the European Commission, and other stakeholders. In the 2021–2027 period, support for delivering the Urban Agenda is provided under the European Urban Initiative.

Members of the **European Energy Efficiency Financing Coalition**, such as the Commission, all EU Member States, and app. 50 financial institutions, including the EIB and European Bank for Regional Development (EBRD) are committed to increasing investment in energy efficiency. Therefore, they aim to foster a favourable market for energy efficiency investments and increase private funding to meet EU energy and climate targets for 2030 and 2050. The Coalition, set in 2024, facilitates the implementation of financial instruments under EU programs, promotes these programs to encourage private investment, and supports the objectives of the EED and EPBD. Its forerunner, [Energy Efficiency Financial Institutions Group](#) (EEFIG), in its decade of operation, developed different tools for helping invest in energy efficiency. De-risking, standardisation, and measurement tools, such as the [Carbon Risk Real Estate Monitor \(CRREM\)](#), are important to make decarbonisation measurable, reduce carbon risk and enable Paris-agreement-aligned buildings. CRREM is able to translate climate science to the level of different building types (warehouse, office, home etc) by country to enable analysis of stranded asset risk and net zero operational alignment. These kinds of de-risking programmes of financial institutions actively help support and accept the standardisation of design and implementation processes in their underwriting actions.

Capacity building for the sake of building retrofitting is needed for a broad group of stakeholders, from homeowners, renters and property managers, over financiers, to installers, designers and architects, thus, EEFIG developed the **Underwriting Guide**. The document assists financial institutions to scale up their capital deployment into energy efficiency. Namely, it helps departments of originators, analysts and risk better understand energy efficiency investments and therefore, enhance the evaluation of their value and their associated risks. Furthermore, the Guide helps developers and owners, looking for external capital for energy efficiency investments, understanding the needs of financial institutions. Therefore, it catalyses a common language between project developers, project owners, and financial institutions.

Moreover, the EEFIG created an open-source **De-risking Energy Efficiency Platform (DEEP)** database, allowing public and private financial institutions to monitor and benchmark their proposed investments against 37,000+ past projects provided by 25 data providers. DEEP helps enhance the understanding of risks and benefits associated with energy efficiency investments by providing investment track records and market evidence.

Last but not least, EEFIG developed the **European Energy Efficient Mortgage Initiative (EEMI)** supported by Horizon and Life programmes promoting green mortgages by offering favourable terms to incentivise property owners to enhance energy efficiency. This initiative integrates energy efficiency into mortgage lending, which catalyses sustainable building renovations while reducing energy consumption and CO₂ emission. It possesses a vast number of commercial banks operating in EU Member States. It has been the catalyst for the growth of a new, integrated, multi-stakeholder energy efficient mortgage ecosystem, which could serve as a source of inspiration for other sector-based initiatives.

3. Results of the analysis of gaps and barriers to financing HOAs

3.2 Bulgaria

3.2.1 Overview

Bulgaria has a population of approximately 6,7 million people and is one of the poorest countries in the EU. The country faces many economic challenges, which contribute to a lower standard of living compared to other EU nations. Despite this, the country's housing stock has been growing, reaching about 4.3 million dwellings by 2023.³ Municipally owned apartments constitute about 0.8 % of the total national housing stock, housing only 1.2 % of the total population.⁴ The rest of the population mostly resides in privately owned apartments. In terms of homeownership,

Homeownership in Bulgaria has a high ownership rate, with up to 87 % of people living in homes they own, according to 2022 data, while only 13 % are tenants. Additionally, nearly 85 % of the housing units were built before 2000. These older buildings often lack modern energy efficiency standards, resulting in higher energy consumption and costs for residents.⁵

The renovation rate for these older buildings is alarmingly low, with only 1.3 % undergoing medium renovations and only 0.1 % achieving deep renovations. These factors, such as high home ownership rate, a large number of energy inefficient building and limited renovation activity, highlight significant challenges in improving Bulgaria's housing stock. A key barrier to addressing these issues is the limited financing available for HOAs and MFABs to undertake necessary energy efficiency renovations, along with several other challenges faced by multi-family residential buildings, including regulatory and organizational obstacles. The need to explore the gaps and barriers for financing HOAs and MFABs becomes critical in understanding how to overcome these obstacles and drive necessary improvements in Bulgaria's residential sector.

3.2.2 Key trends

Trends for Renovation of Energy Efficiency in Multi-Apartment Buildings in Bulgaria

- **EU Funding and Grants:** Bulgaria has increasingly utilized European Union funds and grants aimed at improving energy efficiency in multi-apartment buildings. Programs such as the European Regional Development Fund (ERDF) and the Cohesion Fund provide essential financial resources for renovation projects, allowing for substantial upgrades in energy performance.
- **National Energy Efficiency Strategy:** The Bulgarian government has established a National Energy Efficiency Action Plan, which outlines specific targets for improving energy efficiency in residential buildings. This strategic framework encourages investments in retrofitting multi-apartment buildings and promotes the use of energy-efficient technologies.
- **Public-Private Partnerships (PPPs):** There is a growing trend toward forming public-private partnerships to finance energy efficiency renovations. These collaborations help leverage private sector investment alongside public funding, facilitating larger-scale renovation projects that might otherwise be financially unfeasible.
- **Increased Awareness and Demand:** Awareness of energy poverty and the benefits of energy-efficient renovations has increased among homeowners and tenants. This growing demand for

³ [Dwellings | National statistical institute](#)

⁴ [Municipalities Own Just 0.8% of Bulgaria's Housing Stock - Habitat for Humanity - Bulgaria](#)

⁵ [Country Update: Bulgaria - EnergyMeasures](#)

better living conditions and lower energy bills is driving the need for renovations in multi-apartment buildings.

- **Innovative Financing Models:** The introduction of innovative financing mechanisms, such as energy performance contracting (EPC) and green mortgages, is gaining traction. These models provide financial incentives for building owners to invest in energy-efficient upgrades by linking payments to energy savings.
- **Energy Efficiency Obligation Schemes:** The implementation of energy efficiency obligation schemes requires energy suppliers to contribute to energy-saving measures, including renovations in multi-apartment buildings. This regulatory framework incentivizes energy efficiency investments by creating a market for energy savings.
- **Focus on Comprehensive Renovations:** There is a shift towards comprehensive renovation strategies that not only improve energy efficiency but also enhance overall building quality, including insulation, heating systems, and renewable energy integration. This holistic approach is becoming essential for achieving significant energy savings.
- **Legislative Support:** Recent legislative changes in Bulgaria have aimed to streamline processes for obtaining financing for renovations and have established clearer guidelines for energy improvement projects in multi-apartment buildings, making it easier for homeowners' associations to access funds.
- **Community Engagement:** Increased community engagement and the formation of homeowners' associations have become important for driving renovations. Community-led initiatives often result in more effective decision-making and collective action towards energy efficiency improvements.
- **Monitoring and Evaluation:** Enhanced focus on monitoring and evaluation of energy efficiency projects is leading to better data collection and analysis. This trend supports the identification of successful practices and the continuous improvement of financing mechanisms for energy-efficient renovations.
- These trends indicate a positive trajectory towards improving the energy efficiency of multi-apartment buildings in Bulgaria, driven by a combination of EU support, innovative financing, and increased community engagement.

3.2.3 Analysis of Gaps and Barriers to Financing HOA

Key Gaps for Renovation of Energy Efficiency in Multi-Apartment Buildings in Bulgaria

1. **Insufficient Funding Availability:** Despite the presence of EU grants and funding programs, there is often a gap between the financial resources available and the actual costs of comprehensive renovations. Many projects do not receive full funding, leaving homeowners' associations (HOAs) to cover significant out-of-pocket expenses.
2. **Complex Application Processes:** The application processes for accessing EU funds and grants can be cumbersome and bureaucratic. This complexity can discourage HOAs from pursuing necessary renovations, as they may lack the administrative capacity or expertise to navigate the requirements.
3. **Limited Awareness and Knowledge:** Many homeowners and property managers are not fully aware of the available financial instruments and support mechanisms for energy efficiency renovations. This lack of information can lead to underutilization of funding opportunities.
4. **High Upfront Costs:** The initial investment required for energy-efficient renovations is often a substantial barrier. Many homeowners may not have the necessary capital to invest upfront, even if they recognize the long-term savings associated with energy efficiency improvements.

5. **Diverse Regulatory Frameworks:** Inconsistencies in local regulations and building codes can complicate renovation efforts. Different municipalities may have varying requirements, leading to confusion and delays in project implementation.
6. **Lack of Standardization:** The absence of standardized measures for assessing energy efficiency improvements can create uncertainty for investors and homeowners. Clear guidelines and benchmarks for energy performance could facilitate better financing options.
7. **Inadequate Risk Assessment Models:** Financial institutions may lack appropriate risk assessment models that account for the specific characteristics of multi-apartment buildings and energy efficiency projects. This can lead to a reluctance to provide loans or favorable terms for renovations.
8. **Limited Support for Low-Income Households:** There is often inadequate support for low-income households or those in energy poverty, who may struggle to finance even basic renovations. Targeted financial products and subsidies for these populations are essential but frequently lacking.
9. **Fragmented Market for Financial Products:** The financing market for energy efficiency renovations can be fragmented, with various products available but not widely promoted or understood. This fragmentation can create confusion and limit access to appropriate financing solutions.
10. **Short-Term Focus of Financing:** Many financial products available for energy efficiency renovations have short repayment periods, which may not align with the long-term nature of energy efficiency investments. Homeowners may find it challenging to commit to loans that require rapid repayment.
11. **Insufficient Collaboration Among Stakeholders:** There is often a lack of collaboration between public authorities, financial institutions, and HOAs. Improved partnerships could enhance access to funding and support for energy efficiency initiatives.
12. **Limited Monitoring and Evaluation Frameworks:** Weak monitoring and evaluation mechanisms for funded projects can hinder the assessment of effectiveness and impact. Without reliable data, it is challenging to make informed decisions about future investments and improvements in financing strategies.

Addressing these gaps is crucial for enhancing the financing landscape for energy efficiency renovations in multi-apartment buildings in Bulgaria, ultimately leading to improved living conditions and reduced energy consumption.

Analysis of Provisioning Requirements, Rules, and Monetary Policy and Banking Regulation in Bulgaria

Overview of Banking Sector in Bulgaria

Bulgaria's banking sector is characterized by a mix of domestic and foreign banks, with a growing emphasis on regulatory compliance and risk management. The sector has shown resilience in the face of economic challenges, and it is governed by both national regulations and European Union directives.

Provisioning Requirements

Provisioning requirements are critical for ensuring that banks maintain adequate reserves to cover potential loan losses. In Bulgaria, the provisioning framework is influenced by:

- **Bulgarian National Bank (BNB) Regulations:** The BNB establishes the guidelines for provisioning, which require banks to set aside funds based on the risk profile of their loan portfolios. Banks must assess the credit risk associated with loans, including those for energy efficiency renovations in multi-apartment buildings.

- **International Financial Reporting Standards (IFRS):** Compliance with IFRS, particularly IFRS 9, mandates banks to adopt an expected credit loss (ECL) model for provisioning. This model requires banks to estimate the likelihood of default over the life of a loan and to create provisions accordingly.
- **Risk-Based Approach:** Banks in Bulgaria are encouraged to adopt a risk-based approach to provisioning, ensuring that higher-risk loans, such as those related to energy efficiency renovations, are adequately covered.

Regulatory Framework

The regulatory framework governing the banking sector in Bulgaria includes:

- **Law on Credit Institutions:** This law serves as the foundational legal framework for the licensing, operation, and supervision of credit institutions in Bulgaria. It establishes the legal basis for banking operations and ensures compliance with EU regulations. This law ensures that Bulgarian banks operate in accordance with EU regulations, aligning national laws with EU directives to promote a unified banking market
- **Capital Adequacy Requirements:** Bulgarian banks must adhere to capital adequacy ratios set by the Basel III framework, ensuring that they have sufficient capital to absorb losses. This is crucial for maintaining financial stability and protecting depositors.
- **Consumer Protection Laws:** The regulatory environment includes provisions to protect consumers in financial transactions, ensuring transparency and fairness in lending practices, particularly for loans related to energy efficiency improvements.

General Overview of Commercial Lending for Homeowner Associations in Bulgaria

1. Homeowner associations play a crucial role in managing multi-apartment buildings, which require regular maintenance, renovation and upgrades. Commercial lending has become increasingly important for financing necessary improvements, particularly in renovation and energy efficiency. Many commercial banks offer specific loan products tailored for HOAs, which can be utilized for building renovations and energy efficiency upgrades. Additionally, smaller financial institutions may provide microloans for minor repairs, while EU- funded programs offer access to grants or subsidized loans aimed at promoting sustainable development. The Bulgarian Recovery and Resilience Plan further supports these initiatives by allocating 924 million eur for green buildings renovations and offering grants for renewable energy installations. However, accessing financing can be challenging due to factors such as lack of awareness or regulatory barriers.⁶**Types of Loans:**

- **Bank Loans:** Many commercial banks in Bulgaria offer specific loan products tailored for HOAs. These loans can be used for various purposes, including building renovations, energy efficiency upgrades, and infrastructure improvements.

Several major banks provide lending support:

Table 1 Commercial banks

Financial institution	Type of lending	Description
First Investment Bank (Fibank)	Direct Consumer Lending	Financing for renewable energy installations, with a variable interest rate based on SBIR plus margin, repayment through proceeds from NFRE grants

⁶ [Financing for Prosumer Renewable Energy in Lithuania, North Macedonia, and Bulgaria - EUKI](#)

ProCredit Bank	Direct Consumer Lending	For photovoltaic installation. Does not require approval from NFRE grant program.
International Asset Bank	Subsidized Green Mortgages	Subsidized green mortgage for purchasing or building energy-efficient homes ("A+", "A", "B"), repairs, and refinancing.
UBB	Subsidized Green Mortgages	Mortgage loans for purchasing or refinancing properties with energy classes A, A+, or B, and a primary energy demand not exceeding 150 kWh/sq.m. will receive a 0.15% interest rate reduction upon loan approval.

- **Microloans:** Smaller financial institutions may provide microloans to HOAs for minor repairs or quick upgrades, allowing for flexibility in financing.
- **EU-Funded Programs:** HOAs can also access funding through EU initiatives aimed at improving energy efficiency and supporting sustainable development, which may include grants or subsidized loans.

2. Lending Criteria:

- **Creditworthiness:** Banks typically assess the financial health of the HOA, including its repayment capacity, existing debt levels, and overall financial management.
- **Project Viability:** Lenders evaluate the proposed project's feasibility, including cost estimates, potential energy savings, and expected return on investment.
- **Collateral Requirements:** Loans may require collateral, often in the form of the property itself or guarantees from individual homeowners.

3. Interest Rates and Terms:

- Interest rates for commercial loans to HOAs can vary based on market conditions, the bank's policies, and the perceived risk of the project. Generally, rates may be higher than those for individual home loans due to the collective nature of HOAs.
- Loan terms typically range from a few years to up to 20 years, depending on the project scope and financial structure.

4. Challenges in Accessing Financing:

- **Lack of Awareness:** Many HOAs may not fully understand available financing options or the benefits of undertaking energy-efficient renovations.
- **Bureaucratic Hurdles:** The loan application process can be complex, often requiring extensive documentation and project proposals, which may deter some associations from pursuing financing.
- **Regulatory Barriers:** Inconsistent regulations and a lack of standardization in the lending process may create obstacles for HOAs seeking loans.

- **Financial Data History:** Newly established companies or NGOs often lack the required financial data history, with bank typically needing at least two years of credible records to assess creditworthiness.
- **Credit Capacity Issues:** The credit capacity of HOAs can be unstable, making it challenging for them to fulfill banking repayment criteria, which can deter banks from approving loans.
- **Timeliness of Obligations:** Many HOAs struggle to meet their financial obligations on time, resulting in a poor credit history and reputation that further complicates their ability to secure funding.
- **Collateral Limitations:** HOAs frequently lack adequate collateral or have collateral instruments that are not of sufficient quality, which is a significant factor for banks when considering loan approvals
- **Operational Costs:** Banks exhibit reduces interest in lending to HOAs due to high operating and provision costs associated with these loans, leading to a significant gap in financing opportunities for necessary property improvements.

5. Support Mechanisms:

- **Financial Advisory Services:** Some banks provide advisory services to help HOAs prepare loan applications and develop project proposals.
- **Government Initiatives:** The Bulgarian government, along with EU support, has introduced various programs aimed at facilitating access to financing for energy efficiency projects in residential buildings.

6. Future Trends:

- **Increased Focus on Sustainability:** As energy efficiency becomes a priority, lenders may increasingly offer products specifically designed for green renovations, potentially including lower interest rates or favorable terms for energy-efficient projects.
- **Digitalization of Lending Processes:** The adoption of digital platforms for loan applications and management may simplify the lending process for HOAs, making it easier to access financing.

In summary, commercial lending for homeowner associations in Bulgaria is evolving, with various financing options available to support building improvements. However, challenges remain in terms of awareness, access, and regulatory frameworks. As the focus on energy efficiency grows, there is potential for enhanced lending products and support mechanisms tailored to the needs of HOAs.

Risk and Risk Perception for Lending for Building Renovations by Banks in Bulgaria

1. Types of Risks:

- **Credit Risk:** The primary concern for banks is the borrower's ability to repay the loan. For homeowner associations (HOAs), this includes assessing the financial health of the association and the individual homeowners' willingness and ability to contribute to loan repayments.
- **Project Risk:** This includes the potential for cost overruns, delays, or failure to achieve the anticipated energy efficiency improvements. Banks may be apprehensive about the feasibility and execution of renovation projects.
- **Market Risk:** Changes in the real estate market can affect property values, which impacts the collateral for the loan. A downturn in the market may reduce the value of the property being financed, increasing the risk for lenders.

- **Regulatory Risk:** Changes in regulations regarding building codes, energy efficiency standards, or financing policies can introduce uncertainties that may affect the viability of renovation projects.
- **Operational Risk:** This pertains to the risks associated with the management of the renovation project, including contractor reliability and the quality of workmanship.

2. Risk Perception:

- **Conservative Lending Practices:** Banks in Bulgaria may exhibit conservative lending practices when financing renovations due to the perceived risks involved. This can lead to stringent lending criteria, making it more challenging for HOAs to secure funding.
- **Historical Experiences:** Past experiences with failed projects or defaults on loans can shape banks' risk perceptions, leading them to be more cautious in approving renovation financing.
- **Awareness of Energy Efficiency Benefits:** As awareness of the benefits of energy-efficient renovations grows, banks may begin to perceive these projects as lower risk, particularly if they result in long-term cost savings and improved property values.
- **Conditional Financing:** Offering loans with conditions linked to project milestones or energy performance outcomes can incentivize successful project execution and mitigate risks.

3. Future Outlook

- **Growing Focus on Sustainability:** As the emphasis on sustainable building practices increases, banks may adapt their risk assessment frameworks to account for the long-term benefits of energy-efficient renovations, potentially leading to more favorable lending terms.
- **Increased Data Availability:** Improved data collection and reporting on renovation project outcomes can enhance banks' understanding of risks and support more informed lending decisions.

In conclusion, while there are significant risks associated with lending for building renovations in Bulgaria, banks can employ various strategies to mitigate these risks. As awareness of the benefits of energy efficiency grows and data availability improves, perceptions around these risks may evolve, potentially leading to increased lending activity in this sector.

3.2.4 Recommendations

- **Streamline Compliance Processes:** Simplify application procedures for funding to enhance accessibility for HOAs.
- **Enhance Awareness and Education:** Implement programs to educate homeowners about available financing options and energy efficiency benefits.
- **Develop Targeted Financial Products:** Create financing instruments specifically designed for low-income households and those in energy poverty.
- **Encourage Public-Private Collaboration:** Foster partnerships between government, financial institutions, and HOAs to improve funding access and project execution.
- **Standardize Assessment Measures:** Establish clear guidelines for energy efficiency improvements to reduce uncertainty for investors and homeowners.
- **Investment in Capacity Building:** Provide training for financial institutions on energy efficiency projects to improve their assessment capabilities.
- **Adjust Risk Assessment Models:** Develop risk models that account for the unique characteristics of energy efficiency projects in multi-apartment buildings.

- **Integrate Long-Term Financing Options:** Encourage the development of financing products with longer repayment periods to align with the nature of energy efficiency investments.

By addressing these gaps and implementing the recommendations, Bulgaria can enhance its financing landscape for energy efficiency renovations, leading to improved living conditions and reduced energy consumption in multi-apartment buildings.

3.3 Hungary

3.3.1 Overview

Hungary has a population of 9.6 million people, which is steadily decreasing and aging. Regarding the country's housing stock, an increasing trend can be seen in the number of dwellings, reaching 4.6 million by 2023. In 2022 about 2.4% of the whole dwelling stock was municipally owned, the rest was privately owned, and the rate of municipal stock is ever decreasing. While the rate of owner occupation is very high, the respective population living in owner-occupied housing is 90%, the remaining 10% are tenants, as was mentioned, 2.4% in municipal housing and 7.6% in private rental dwellings.

In 2011, 62% of the housing units were in single-family homes (buildings with 1-3 apartments), and 38% of the flats were in multi-family homes (buildings over 3 apartments) in Hungary. This division is substantially different in cities, e.g. in Budapest 16% of the apartments are in single-family homes while 84% in multi-family buildings (Census 2022). The multi-family housing units are in about 80,000 buildings in Hungary, about half of them in Budapest.

In 2020, 34% of all primary energy went to residential buildings. 71% of all energy used in residential buildings was used for heating. Regarding heating, 62% of the flats uses natural gas as a primary source, 16% uses firewood, 15% district heating, 3% electricity and 4% other sources (Census 2022)

There are vague definitions of energy poverty in the national Energy and Climate Plan (2024) and in the Energy Efficiency Law. According to the EU SILC indicators energy poverty is relatively moderate in Hungary (except for the extreme cases in rural areas) partly due to the capped prices of electricity and gas since 2013. This cap was partially released in August 2022. From that date the price cap remained up to a certain consumption level (2,520 kWh/year for electricity; 1,729 m³/year for gas), while above that the price became about seven times more in the case of natural gas and about two times more in the case of electricity. District heating is completely exempt from the modification in capping. Mostly the family houses are affected by the change of the capping of prices, while apartments in multi-family buildings hardly experienced any effects.

Condominiums and cooperatives are existing entities from the beginning of the 20th century in Hungary that is why their legal background is stable. These organisations were in the centre of state subsidies in the 2000s, while after the financial crisis the subsidy scheme was terminated and did not enter in its original form. Since the 2010s family houses are preferred, and most of the funds went specifically for the installation of solar panels.

3.3.2 Key trends

Providing joint loans to Homeowners' Associations is an already tested and mainstreamed procedure of commercial banks in Hungary. Currently four commercial banks provide joint loans: OTP Bank, which has far the biggest share; MBH Bank that was established in 2023 with the merger of three big commercial banks and currently is about to restructure its HOA product to make it more accessible; Raiffeisen Bank that introduced several innovations in HOA lending in the 2000s, but currently is specialised for the high end of the market; and UniCredit Bank that is relatively small, but has a flexible approach to HOA lending.

HOA lending was on its peak when grant schemes were in operation in Hungary, and commercial loans helped the HOAs to provide the needed own shares for the subsidies. This peak time was the 2005-2010 and the 2015 period. Without the subsidies, the HOA loan market is operating in a relatively moderate level.

Table 1: Scope of commercial loans to condominiums and cooperatives (400 HUF=1 EURO)

	Annual credit for cooperatives (EUR)	Annual credit for condominiums (EUR)	Accumulated loan equity for cooperatives (EUR)	Accumulated loan equity for condominiums (EUR)
2020	3,685,500	28,398,000	30,184,000	141,683,000

2021	4,753,500	31,067,000	27,583,250	142,564,000
2022	5,044,000	38,960,250	26,323,000	148,735,250
2023	4,080,500	28,722,250	23,028,750	137,325,250
2024	5,065,000	37,598,000	22,302,500	142,847,750

Source: Hungarian National Bank

On the other hand, there is an expectation, that this period without state subsidies cannot continue forever due to the climate crisis and the pressing EU energy requirements. Thus, the banks are currently considering making their products more user friendly, and new banks are planning to enter the HOA lending market, like the ERSTE Bank.

There is currently no loan product on the market in which international or European development banks would play a role. The European Investment Bank had a loan product (provided through Raiffeisen Bank) between 2009-2015 that contained a non-repayable part of 14-15% of the costs, but it was used only for some cooperative buildings and were not mainstreamed.

3.3.3 Analysis of Gaps and Barriers to Financing HOA

Part 1. Commercial Lending for HOAs

General Overview of Commercial Lending for HOAs

Commercial lending for Homeowners Association theoretically existed already at the socialist times, taking into account, that condominiums and cooperatives operated in that era, and their legal background was not fundamentally different from the current one. Cooperatives that were formulated in the 1970s and 1980s had to take huge loans in order to construct their housing stock, while condominiums were established on the own funds of their residents.

Subsidized loans for the renovation and refurbishment of condominium and cooperative buildings were accessible since 1988, and were provided by the only state bank, the OTP Bank. Even if the possibility was there, only few buildings benefitted from it, mainly small condominiums. The main reason behind was the lack of proper collateral for the joint loans. Only a small percentage of HOAs owned a common marketable property (like a commercial room) which could have been put a lien on. Not having this joint property, only individual flats could have been collateralized, which happened very rarely.

The breakthrough happened in the middle of the 2000s, when the collateral issue was solved. There were two major factors leading to this change:

- Since 2001 a state grant scheme had been in operation (till 2009) for the energy efficient refurbishment of multi-family buildings built by industrialized technology (so-called Panel Programme). The state provided 1/3 of the renovation costs, while another 1/3 was provided by the local municipalities, thus the last 1/3 had to be paid by the HOAs themselves. Financing this 1/3 of renovation costs happened to be a huge market for commercial banks, which were eager to find solution for the collateral problem.
- The World Bank established a guarantee scheme for SME loans that were converted to guarantees for HOAs used by the Raiffeisen Bank that was the first to release the collateral requirements. This guarantee scheme does not exist since many years, still it helped the market to get experiences with HOA lending.

Since the middle of the 2000s liens on common or individual properties are practically not applied. What is applied instead is a mixture of different collaterals.

- The main collateral is the pledge on all the accounts and cash-flow of the HOAs, including their housing savings accounts or cash-flow from rented common apartments or advertisement surfaces.
- Not all the commercial banks taking part in HOA lending, but some of them require a security deposit for some months of instalments.

Due to the simplification of the collateral requirements, the scope of commercial lending to HOAs has accelerated and taking a joint loan became an everyday practice of HOAs. According to the memories of the representatives of commercial banks, HOA lending was on its peak at the time of the Panel Programme of the 2000s.

Nearly all of these loans are subsidized loans as it is a low threshold subsidy product, which is easy to be eligible for. The subsidy content is 70% of the interest rate in the first five years of the loan duration, while 35% of the interest rate in the next five years. The loan can be taken only for the common areas of HOAs and not for the individual apartments. Those HOAs (condominiums and cooperatives as well) are eligible, that started accumulating a certain level of savings for renovation in a separate account at least for 2 years or – in case of newly established HOAs – created their renovation fund in 90 days after their foundation. The level of mandatory savings (presented in Table 2) did not change in the last decades, thus it became a negligible amount.

Table 2: Mandatory contribution to the renovation fund (400 HUF=1 EURO)

Buildings below 15 years		Buildings over 15 years	
With an elevator	Without an elevator	With an elevator	Without an elevator
0.02 EUR/m ² /month	0.015 EUR/m ² /month	0.03 EUR/m ² /month	0.025 EUR/m ² /month

Source: Government Decree on Housing Subsidies (12/2001)

According to the interpretation of most commercial banks that provides joint loans for HOAs, the amounts that are accumulated for renovation must be handled in a separate account or in a form of housing savings contracts. What is an important attribute is that it cannot be used for everyday maintenance or operation.

Table 3: Main publicized financial parameters of condominium/cooperative loans

	OTP Bank	MBH Bank	Raiffeisen Bank	Unicredit Bank
Market interest rate	Prime rate (13,5%) +2,5% = 16%	3 monthly BUBOR + 7-9% = 13,5-15,5%	Not public	Not public
Handling fee	0%	Na.	Na.	Once, 1% of the loan
Fee for reserving the not-used loan amount	2% annually	1% annually	Na.	1% annually
Duration	Max. 15 years	Max. 10 years	Max. 10 years	Max. 10 years

Source: own compilation

As the table above shows, there are four commercial banks on the market offering loans for HOAs and their conditions are not substantially different (with regard to the main parameters).

As was mentioned before HOAs request subsidized loans and not market loans as 13.5-16% would be difficult to pay back. In practice, the interest they have to pay in the first five years is between 4-5%. The banks have different schemes to calculate the monthly instalments. E.g. the OTP Bank have a variable interest rate product but on equal monthly payments. It means, that by the time of the second five years, when the interest rate subsidy is halved, the equity is also halved and the interest has a larger share in the instalment than the equity.

The volume of the loans is widespread. In most cases at least 10% down-payment is required (however, under certain circumstances the loan can finance 100% of the investment, e.g. in case the collateral is

a marketable common property.) The subsidized loans are used for smaller scale investments (some ten thousands of Euro) till complete deep renovations, around 600-700.000 Euro¹. The object of the loan can be any type of renovation implemented on the common parts of the building.

The maximum duration of the loan is 10-15 years, aligning to the accessibility of the subsidized loan up to 10 years. However, in most cases the loans are paid back earlier than 10 years.

The banks have different practice with regard to having all the HOA accounts at the lending bank. Some of them require the transfer of all accounts as they are the cash-flow based collaterals, while others are satisfied with having the pledged accounts in other banks as well.

The combination of the subsidized loan with a Housing Savings scheme is very common. It was a typical and useful combination even at the time of the Panel Programme, but as the state subsidy for Housing Savings was terminated in 2018, this combination is much less beneficial for the HOAs.

Risk and Risk Perception

Providing joint loans to HOAs was considered a risky process before the market had any experience with it. The last 20 years has proven that in practice joint loans are the most secure loans that are on the market, as the community of the HOAs provide a kind of internal guarantee for those, who do not pay. In practice the maintenance and management fees are calculated in a way that they automatically cover a certain amount of arrears.

Banks report 1-2 outstanding loans/portfolio, which usually can be handled by postponing some instalments.

In addition, there are certain elements that are built in the loan schemes that aim to provide extra security:

- Banks in general do not provide HOA loans in case the share of those owners, who are in arrears with the common costs for more than three months exceeds 10% of all the owners.
- In addition, some of these banks require additional deposit either for a 3 months complete instalment, or a three months share of those who are in arrears.

The HOA must have a property insurance.

Currently the HOA sector is not considered risky by those banks who has experience with them. Those however, who only consider to step into this market or plan to restructure their product, show a certain level of caution with their steps.

Legal Framework and Eligibility of HOAs

The stability of HOA lending is rooted in the stability of HOA legislation. Cooperatives and condominiums existed already from the beginning of the 20th century, with practically the same legal framework.

In a condominium the private owners own their flats and also a share proportionate to their flats' size from the common places. There is an obligation by the Condominium Law to establish a condominium over six flats in a building. A condominium consists of one building (not one staircase) and is considered a legal entity. This legal entity has the right to enter into contract and to have its own bank accounts. The property manager - who may be one of the owners, or a professional company contracted – can act on behalf of the condominium, and sign also the loan contracts, but these actions have to be supported by the decision of the General Assembly of the HOA. In addition, the property manager is controlled by the Accounting Committee that consist of at least 3 owners elected by the General Assembly.

The cooperative is quite similar to a condominium, but the major difference is that it can consist of more than one buildings, and the common spaces of the buildings are owned by the cooperative and not by the owners of the flats. A cooperative usually have its own professional management, that is why it usually runs the buildings more efficiently.

Both in case of cooperatives and condominiums the decision about renovation and taking a loan can be done by a 50%+1 vote at a valid General Assembly. And the General Assembly is valid if at least the majority of the ownerships are represented, or in case less than the 50% is present at once, then a new Assembly organised in half an hour or so, is valid regardless of the share of owners present. Thus, it is possible that only 5-10% of the owners decide on taking a loan, and it is compulsory for all the owners (as long as they do not challenge this decision at the court.) On the other hand, the banks prefer those loan applications where the agreement of the owners are stronger, thus it is worth to collect signatures to support the loan applications independently from the General Assembly.

What is also important to note that commercial lending mechanisms can only operate smoothly if the collection of arrears runs relatively smoothly as well. According to the legislation, the General Assembly can vote on putting a lien on those owner's property, who is in arrears for more than three months. (Even if it is a possibility, it rarely applied. The traditional forms of collecting arrears is more common, like issuing a payment notification and starting a court procedure.)

Thus, the legal background of entering into contract and taking a loan by the HOA is relatively straightforward. On the other hand the decision and the process itself depends strongly on the capabilities of the property managers, whether they can collect the needed documents or can convince the HOA community to take a loan.

It is also important to note, that a joint loan does not necessary mean that all the owners take part in the repayment. Owners can take their financial obligations for the renovation by paying in one sum, and not contributing to the loan repayment. This case the loan amount covers only those part, who are willing to pay in instalment rather than in one payment, and they will be the ones to pay the increased common fee for the coming years.

Existing Obstacles and Gaps in Commercial Lending for HOAs

The legal background of HOAs, the loan product developed would be sufficient to provide substantial financial resources for the renovation of multi-family buildings. What are still the biggest barriers to enlarge the market are two major factors:

- The lack of grants that would reduce the upfront cost for major or deep renovations. Due to the lack of these subsidies all the renovation costs should be covered by loans but under the current energy price capping system (gas and electricity prices are capped since 2013), the pay-off period for a deep renovation last for decades, which cannot be covered by a 10 years subsidized loan.
- The other main barrier is the inflation rate that determines the market interests. It is visible from Table 1 that the amount of condominium/cooperative loans has dramatically decreased in 2023 due to the high inflation, that even with an interest rate subsidy, can result in substantial interests that makes the loans unaffordable.

There are also some technical obstacles as well with regard to the loan product that can be limitations for certain HOAs, like:

- The upper limits for the share of owners being in arrears can be a limitation for HOAs that have owners with lower payment capacity. On the other hand, the practice shows that the banks try to be flexible with this requirement, providing time for the HOAs to collect the arrears.
- The other limitation can be the proper accumulation of renovation funds, according to the legislation. Many of the HOAs do not formally meet the requirement of collecting the funds for renovation on a separate account and it may be a reason for rejecting the access to subsidized loans. (E.g. as the representative of the OTP Bank noted, 2-3 HOAs from 10 being interested getting the subsidized loan do not accumulate the renovation fund properly. These are mostly the smaller communities with a less professional property management.) There are banks however from the four, which are quite flexible in judging the existence of the renovation fund and do not require a separate account but counts all the amounts that are saved or used for renovation and maintenance purposes.

- Another important limit might be the maximum loan amount/flat, which is somewhat different bank by bank. E.g. in case of the biggest actor, the OTP Bank, this limit was just raised from 20,000 HUF/flat/month to 40,000 HUF/flat/month² (about 100 EUR/flat/month). This monthly instalment contains the specific loan, but any other loan instalments (e.g. the loan part of a housing savings contract) that are still has to be paid. The former 20,000 HUF/flat/month that was applied till April 2024 was a strong limitation for larger loans that aimed to finance major or deep renovations. However, the current increase, that doubled the threshold is much more realistic, and are in line with the reality of the maximum payment capacity of owners. (The usual instalment is about 25,000 HUF/flat/month currently – 62 EUR.) On the other hand another bank, MBH Bank, accepts only 100% increase in the common fees, and this increase cannot exceed 15,000 HUF (approx.. 38 EUR). This limitation might not be sufficient for a substantive amount of loan.

Part 2. Analysis of Provisioning Requirements, Rules and Monetary Policy and Banking Regulation

Loan Process

Slight differences between the four commercial banks issuing HOA loans can be experienced less with regard to the conditions of the loan but rather with regard to the loan procedure. The four banks have different settings: while OTP bank and MBH bank have several branches all over the country, Raiffeisen and UniCredit banks have a lower access. On the other hand, the number of branches is not directly connected to the accessibility of loans: while OTP bank is very experienced in HOA lending thus have a unique position in the market and provides direct HOA advice in all branches, MBH bank has only few, central branches in which property managers can get professional services.

Loan experts emphasized that OTP bank is the most proactive, that has specific HOA consultants, who attend the General Assemblies and give hands on advice. The other advantage of OTP bank is the fact, that it hosts most of the HOA accounts, thus it has an overview of the financial history of the specific HOAs, which is an additional source of information in the evaluation procedure.

The documents required in the loan procedure are quite common in all four banks:

- A general loan application sheet
- Founding document of the cooperative/condominium
- Internal Rules for Operation (SZSMSZ in Hungarian)
- Title Deed for the property
- The General Assembly decision that entitles the property manager to sign the contracts and the personal documents of the property manager
- The General Assembly decision on the contribution to the renovation fund
- The General Assembly decision on taking the loan
- The General Assembly decision on the renovation works
- Balance sheets of the condominium/cooperative for the last two financial years
- Proof of payment of utility fees from the utility companies
- Proof of payment of taxes and social security contributions
- Quotes from construction companies on the renovation works
- Information on all the accounts of the HOA
- Information on any other loans

Provisioning

The provision of the loan can take from some weeks to some months. If all the documents are properly collected, then the evaluation can be as short as 2-3 weeks in OTP Bank. On the other hand, if the loan request is not typical, and a more careful investigation is needed, then the procedure can take up some months.

The risk assessment is not a publicly transparent procedure. Theoretically it is standardized, but it is obvious that individual features of HOAs can have a big impact, like disciplined cash-flow management, low arrears rate or high share of owners supporting the decision on taking a loan. It is also a practice to provide loans for more favourable conditions (e.g. for 4% instead of 4.8%) for larger projects, or for those property managers, who manage several buildings and plans to take multiple loans.

After the successful underwriting procedure, the loan is paid after the down-payment is spent on the construction. The banks pay directly the invoices of the construction company. Technical or energy audit is not a requirement of the loan. The bank itself does not make a personal inspection of the construction works, however it is expected that the HOA contracts out the quality assurance of the construction works to an independent expert.

Findings and Gaps

Providing the proper documents in a proper format is a challenge for an inexperienced property manager. In this regard the willingness of the bank to assist the manager is a crucial issue. OTP bank has the biggest experience with it, but the other commercial banks also plan to build stronger capacities for technical assistance.

Part 3. Possibilities to Create Guarantee Mechanisms for Lending to HOAs

Assessment of Existing Guarantee Mechanisms

There is no guarantee mechanism for HOA lending in Hungary. The state guarantee programmes are targeted to certain economic operations of companies³, like innovative investments, investments with high added GDP or high employment obligations. There are guarantees regulated by national legislations (laws and decrees), but there are occasional, project based guarantees as well.

The guarantee is provided mostly through state organisations, like Start Guarantee Rt., Guarantiqa Zrt. and the Agricultural Entrepreneur Guarantee Foundation. The clients pay a certain fee for the guarantee, so the state activity is in general profitable as it is hardly activated in practice.

Access and Initiatives for HOAs

As was mentioned before, there is no guarantee mechanism for HOA lending in Hungary. Under the current circumstances there is no real demand for that either, as the bottleneck for lending is less the trust towards HOAs in general, more the lack of grant schemes that would leverage the loan products.

On the other hand it is not yet analysed properly whether the social eligibility requirements for acquiring a commercial loan (such as the requirements on the level of arrears or the proper accumulation of renovation fund) is a major bottleneck that excludes HOAs with a higher rate of vulnerable people. If it turns out to be an evidence, that these requirements are too strong for energy poor communities, then the introduction of a public guarantee system might be reasonable.

Part 4. Key Takeaways and Recommendations

HOA lending by commercial banks is an everyday practice in Hungary. It is based on two major foundations: 1) the HOA legislation that allows HOAs to enter into contracts, have their own accounts, be represented by their manager, take decisions on a simple majority and collect the arrears properly, and 2) the experience of the commercial banks with HOA lending, that proves that without liens and a simple cash-flow collateral the HOA market is the most secure segment of the financial market.

Even under these favourable conditions, there are factors that would result in more efficient and more intense lending activities:

- More in depth research would be needed to find out which are those HOAs who do not have access to loans even under these favourable conditions.
- State grant for renovations would be needed, as under these circumstances (relatively high interest rate and short duration period) the instalments are too high for deep renovations to be accessible for most of the HOAs. State grants should be complemented by state supported loans issued by the commercial banks, and this mix of financing might result in higher investments into the renovation process.
- Development banks are not part of the HOA market now, and they are not essential either as there are resources to lend. On the other hand, these financial resources of the commercial banks are expensive, which result in high interest rates and even with a substantial interest rate subsidy long term cheap loans are not available. The presence of development banks' fund might result in lower capital costs and lower interest rates might lead to 15-20 years duration of loans instead of the current practice of 5-10 years. This might make deep renovation more accessible for most of the HOAs.

3.4 Lithuania

3.4.1 Overview

Lithuania has a well-developed financial system, with its economy being one of the most advanced in the Baltic region. Here's an overview of the key aspects of Lithuanian financing and the financial landscape:

Financial Sector

- **Major Banks:** Lithuania's banking sector is highly concentrated, 15 banks and 5 foreign bank branches,
- **Credit Unions:** 59 credit unions, many of these institutions operating in rural areas or small towns. They play a significant role in providing access to financial services for individuals who may not have access to larger commercial banks.

Crowdfunding: 21 Crowdfunding platforms, operate within Lithuania, providing small businesses and startups with opportunities to raise capital from a broader investor base. Crowdfunding is regulated by Bank of Lithuania.

National Promotional Bank (NPB): is represented by the Investment and Business Guarantees UAB (INVEGA now ILTE), a public institution established to support the country's economic development. INVEGA (now ILTE) offers a range of financial instruments, including venture capital, loans, guarantees, and global grants, to facilitate access to finance for businesses, particularly small and medium-sized enterprises (SMEs).

In Lithuania, to carry out the renovation of an apartment buildings with state support, it is necessary to wait for the Ministry of Environment of the Republic of Lithuania published calls.

Calls are announced in the information system "APVIS" of the Environmental Project Management Agency under the Ministry of Environment of the Republic of Lithuania at <https://apvis.apva.lt/>.

In each published call is specifically indicated to which funder or funders can be applied to.

Currently valid call for the renovation of apartment buildings is open from 2024-11-11 08:00 to 2025-10-01 16:00, call number "DNM-AM-DNAM13". Funder UAB "ILTE".

3.4.2 Key trends

In Lithuania, if a Homeowners' Association (HOA) is considering taking out a loan, the decision-making process should follow a clear legal and procedural structure to ensure everything is done correctly and in accordance with Lithuanian law. Here's an outline of steps to guide the process:

1. Review of HOA Documents and Governing Law

- The first step is to review the HOA's founding documents (e.g., Articles of Association, Regulations) to check whether there are any provisions about taking loans. Some documents might already outline the conditions and procedures for borrowing.
- The HOA should also consult with a legal advisor (Elektrėnų komunalinis ūkis, Kaišiadorių butų ūkis) to ensure compliance with Lithuanian laws related to loans, property management, and the rights of homeowners.

2. General Assembly Meeting

- A general assembly or a meeting of the HOA members must be convened. According to Lithuanian law, the HOA members must be involved in major decisions, particularly those involving financial matters like loans.

- Typically, a quorum (the minimum number of members who must be present for the meeting to be valid) must be met for decisions to be made.

3. Agenda and Discussion

The decision to take out a loan should be included as a specific agenda item for the meeting. Before the meeting, members should be provided with sufficient information about the loan, including:

- The loan amount
- Purpose of the loan (e.g., for repairs, maintenance, or other purposes)
- Loan terms (interest rate, repayment schedule)
- Impact on the HOA's financial stability and homeowners' fees

The HOA board or relevant committee should present detailed reasoning behind the need for the loan, the terms, and any alternatives considered.

4. Approval Process

- After discussion, a vote must take place. In Lithuania, the decision to take out a loan typically requires a majority vote (50%+1 member, or 55%) by the members present. The specific voting threshold (simple majority, two-thirds, etc.) should be outlined in the HOA's governing documents.
- Ensure that all members are allowed to voice concerns or ask questions before the vote.

5. Documentation of Decision

- The outcome of the vote should be officially recorded in the meeting minutes. If the majority approves the loan, this decision must be documented and signed by the meeting chairperson and a designated secretary or representative.

6. Loan Agreement

- Once the loan is approved, the HOA should engage a legal advisor to review or negotiate the loan agreement with the lending institution.
- The agreement should specify the amount, repayment schedule, interest rate, and other terms. This contract should also be signed by authorized representatives of the HOA.

7. Communication with Homeowners

- After securing the loan, the HOA should inform all homeowners of the loan agreement, the reasons for the loan, the repayment plan, and any adjustments to monthly fees or contributions.

8. Repayment and Monitoring

- The HOA board should ensure that the loan is repaid according to the agreed-upon terms. Regular reports should be provided to homeowners on the loan status and financial situation of the HOA.

Key Considerations:

- **Legal Advice:** Ensure that the HOA consults with a lawyer or financial expert familiar with Lithuanian property law to ensure the loan is structured legally.
- **Transparency:** Keep the process transparent to all homeowners to avoid misunderstandings and ensure compliance with any applicable Lithuanian regulations.
- **Financial Stability:** It's critical to assess the HOA's ability to repay the loan without causing financial strain on the homeowners or the association's operations.

- By following this process, the HOA can ensure that the decision to take out a loan is made responsibly, legally, and with the approval of the homeowners it represents.

3.4.3 Analysis of Gaps and Barriers to Financing HOA

Part 1. Commercial Lending for HOAs

General Overview of Commercial Lending for HOAs

1. UAB Finomark by Neo Finance - crowdfunding

Financial institution	UAB Finomark
URL to Product	Paskola DNSB https://www.finomark.lt/paskola-dnsb
Status	Crowdfunding company
Customers	Homeowners' associations, multi-apartment building administrators, garden communities.
Product and services	Loan
Price	9% interest rate
Purpose	for repair, renovation, maintenance work in residential communities, partly renovation.
Loan amounts	Up to 500 000 Eur
Loan term	36 months
Description	
State support	No

Risk and Risk Perception

- High interest rate

Legal Framework and Eligibility of HOAs

- By HOA law and Requirements of the Civil Code of the Republic of Lithuania

Existing Obstacles and Gaps in Commercial Lending for HOAs

- Short loan period, large monthly instalments, no state support for interest compensation.

Part 2. Analysis of Provisioning Requirements, Rules and Monetary Policy and Banking Regulation

Loan Process

- After owners of apartments and other premises in apartment building have approved the prepared investment plan and application to the funder, two applications are submitted in separate stages.
- First application is submitted to Environmental Project Management Agency under the Ministry of Environment of the Republic of Lithuania (short cut "APVA"), after their approval second application is submitted to funder in order to obtain a loan.

- Decisions must be made in accordance with the Law on Apartment Building Communities of the Republic of Lithuania and the Civil Code, majority 50% + 1 vote.

Provisioning

- Lithuanian financial institutions, including banks that may provide services to HOAs, are subject to provisioning requirements set by the Bank of Lithuania. These requirements ensure that banks maintain adequate reserves to cover potential loan losses, thereby safeguarding financial stability. HOAs seeking financing for property maintenance or improvement projects should be aware that banks will assess their financial health and may require certain provisions or guarantees to mitigate lending risks.
- Owners of apartments and other premises in apartment buildings are provided with a preferential loan.
- The main conditions for granting the preferential loan are as follows:
 - Type and rate of interest: fixed 3% annual interest rate.
 - Loan term: up to 20 years.
 - Loan amount: no greater than the cost of construction works, including VAT.

Owners of apartments and other premises in apartment buildings repay the loan according to the provided repayment schedule. The funder allows for a reduction in the monthly payment by making an immediate partial loan repayment. The funder also allows for the full loan repayment by paying the deferred interest amount in one lump sum.

Findings and Gaps

For big loans financial institutions ask high guarantees to secure them.

Part 3. Possibilities to Create Guarantee Mechanisms for Lending to HOAs

Assessment of Existing Guarantee Mechanisms

In Lithuania, Homeowners' Associations (HOAs) seeking financing for property maintenance, renovations, or other projects can benefit from various loan guarantee mechanisms designed to facilitate access to funding.

ILTE Loan Guarantees

The Investment and Business Guarantees (ILTE) institution offers loan guarantees. ILTE guarantee programs have been extended to include residential energy efficiency projects. This expansion allows HOAs to access financing for energy-efficient renovations and improvements. Granted with government support and subsidies.

Access and Initiatives for HOAs

Just government program which supported and granted with subsidies and coordinated by ENVIRONMENTAL PROJECT MANAGEMENT AGENCY (APVA) by Ministry of Environment.

Gaps in Guarantee Mechanisms for HOAs

Not all HOAs can apply for guarantee just, those who are taking governmental program for house renovation program, have less then 10% overdue debts of utilities.

Part 4. Existing Commercial Banking Products Available to HOAs financed by Development Banks

Role of Development Banks in country context

Financial institution	National Promotional Bank (NPB) ILTE
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URL to Product	Apartment buildings renovation fund 2023 ILTE
Status	Government guaranteed loans, A total of 223 million euro is allocated for the renovation of multi-apartment houses from the European Union (EU) investment fund resources for the 2021–2027 financial period.
Customers	The loan can be applied for by the project administrator , who is the manager of common-use areas as defined by Lithuanian law, or by a person acting under a mandate contract to provide project administration services for the implemented project. Alternatively, the municipal program implementation administrator can apply.
Product and services	Loan
Price	Fixed annual interest rate of 3%.
Purpose	Loans are available for the renovation of multi-apartment buildings constructed based on construction permits issued before 1993. The aim is to achieve an energy class as specified in the Environmental Projects Management Agency's call and a minimum of 40% energy savings.
Loan amounts	Depends on investment plan voted by majority of HOAs members.
Loan term	240 months
Description	The loan is repaid in equal instalments. Repayment begins after receiving state support, at which point the loan amount will be recalculated and reduced accordingly. The payment schedule is provided after receiving state support.
State support	• No initial payment, property collateral, guarantees, or surety are required. • No fees are applied for loan administration, issuance, contract amendments, or early repayment. • For individuals entitled to heating compensation, the state covers the loan and interest. • The decision to apply for the loan is made by a majority of no less than 55% of the owners of the apartments and other premises in the building. • 100% subsidy for actual expenses, including construction technical supervision, project preparation work, and administrative expenses. • 30% compensation for energy efficiency-enhancing measures. 20% additional compensation for the renewal of heating and hot water systems. • Or fixed subsidies for energy efficiency-enhancing measures depending on programs requirements.

	• Soft loan for covering construction work expenses.
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Risk and Risk Perception

Owners of apartments and other premises in apartment building must make loan payments on time. In case of a delayed payment, late fees are applied. If the payment is overdue for 3 months, the apartment owner is referred to bailiffs.

Legal Framework and Eligibility of HOAs

- Participants can be owners of apartments and other premises in apartment buildings constructed according to construction technical standards that were in effect until 1993.
- Owners of apartments and other premises in apartment building shall make decisions to receive financing in accordance with the procedure set out in Article 4.85 of the Civil Code of the Republic of Lithuania (in the specific case of a renovation financing application, at least 55 percent of the votes of the owners of apartments and other premises).
- Applications to funders and etc. may only be submitted by applicants specified in the call.

Existing Obstacles and Gaps in Commercial Lending for HOAs

- An apartment building can receive funding only if there are no debtors in the building with overdue payments for more than 60 calendar days for utilities and other services, exceeding 200 euros (amount and period may vary depending on the conditions of existing call).
- The number of debtors in the apartment building cannot exceed 10 percent.
- For example, if an apartment building consists of only 4 apartments, then if even one apartment has debts, such apartment building cannot receive funding or state support and carry out the apartment building renovation.

Part 5. Key Takeaways and Recommendations

Taking a loan for Homeowners' Associations (HOAs) in Lithuania, or in any country for that matter, can be challenging due to several factors:

- 1. Legal and Regulatory Framework:** In Lithuania, the legal structure surrounding HOAs may be less conducive to securing loans. While HOAs are common in residential buildings, they may not always be treated as formal legal entities capable of taking on debt. This could make it difficult for banks or financial institutions to offer loans, as they might require guarantees or a formal, legally recognized structure for the association to repay.
- 2. Financial History and Creditworthiness:** HOAs typically consist of a group of homeowners who may have varying financial situations. The collective creditworthiness of the association might not be as strong as that of a single individual, especially if the HOA doesn't have a strong track record of managing its finances or has little to no accumulated capital. Banks often see this as a higher risk, making them hesitant to lend.
- 3. Banking Policies:** Lithuanian banks, like banks in other countries, tend to be cautious when it comes to lending to groups or organizations that do not have a clear, stable income source. HOAs might not have consistent or guaranteed revenue streams to assure banks they can repay the loan, especially if the loan is meant for larger projects or maintenance, which can be unpredictable in cost and scope.
- 4. Loan Terms and Collateral:** HOAs typically do not have individual assets or collateral to offer, which is another reason why they may face difficulty in obtaining a loan. Banks usually prefer loans backed by property or other tangible assets, which HOAs might not have or be able to pledge.

5. **Public Perception and Risk:** There's also the matter of risk perception. Lending to an HOA can be seen as riskier than lending to an individual or a corporation because of the collective nature of the responsibility. This means that in case of default, banks would have to deal with multiple individuals rather than one party.
6. **Limited Loan Products for HOAs:** Financial institutions have specific loan products for residential associations or communal organizations, but such products might be less common, making it harder to find suitable loan options.

In conclusion, the difficulty of taking out a loan for HOAs in Lithuania stems from a combination of legal, financial, and banking policy challenges.

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Annexes

Anex 1 : Detailed analysis of gaps and report on best practices for financing HOA's and MFAB's

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European Union financial framework assessment

Overview

The analysis provides a comprehensive assessment of financing strategies and best practices for enhancing energy efficiency in buildings, particularly focusing on the European Union (EU) and Central and Eastern Europe (CEE). It highlights the critical role of private finance in bridging the substantial investment gap necessary to meet EU climate and energy goals, as detailed in initiatives like the Renovation Wave and the European Green Deal.

Key EU programmes, such as the Energy Efficiency Directive (EED) and the Renovation Wave, aim to double the rate of energy efficiency improvements and renovate millions of buildings by 2030. These initiatives are supported by financial mechanisms like the Cohesion Policy Funds, the Recovery and Resilience Facility, and the InvestEU program, which aim to catalyse private investment by blending public and private finance. The analysis emphasises the importance of integrating the energy efficiency first principle across financial institutions to stimulate and guide investments.

Despite these efforts, significant barriers remain, including insufficient private investor interest, high upfront costs, and a lack of standardised approaches. The document suggests solutions such as leveraging multiple benefits of energy efficiency (focusing on social ones besides economic and financial benefits), developing targeted financial products like green mortgages, and fostering public-private partnerships. Additionally, it highlights the potential of small and medium-sized enterprises (SMEs) in driving energy efficiency, suggesting tailored support and standardisation of processes to enhance their participation.

The roles of development banks like the European Investment Bank (EIB), the European Bank for Regional Development (EBRD), and the German Development Bank (KfW) are crucial in promoting energy efficiency investments. As an example, these institutions are encouraged to continue leading, developing innovative financing models, and ensuring transparency in their operations.

The analysis concludes by recommending a shift from an EU fund-based approach to a project-based approach, emphasising the need for comprehensive data collection to monitor investment gaps and inform policy decisions. It calls for enhanced cooperation across sectors and institutions, integration of climate adaptation measures, consideration of harmful consequences of the climate transition, and a focus on social equity, to ensure that building retrofits contribute to a just and ecologically sound transition.

Methodology and limitations

In order to reveal and thus influence fund allocation mechanisms of development banks targeting building retrofit-related investments in the CEE region, a profound desktop research was carried out. [EU initiatives and financial structures targeting the upscale of building renovation](#) financing were analysed. Furthermore, [trends in public finance for energy investments](#), as well as financial feasibility of building retrofit were also evaluated. Besides initiatives, financial mechanisms and trends; investment priorities of development banks active in the CEE region and their roles in enhancing building retrofits were under deeper scrutiny. Therefore, different documents of the European Investment Bank (EIB), European Bank for Regional Development (EBRD), [Council of the European Development Bank](#) (CEB), [German Development Bank - Kreditanstalt für Wiederaufbau \(KfW\)](#) were assessed. Last, but not least, [barriers and their overcoming mechanisms for enhancing finance for building retrofits](#) were analysed, and best practices - mainly from the CEE region - were showcased to catalyse the renovation wave.

We see a limitation in the timeline and timing of the analysis, which were not optimal as the Christmas break and time constraints in January prevented the collection of primary data from development bankers that was essential for the analysis. Furthermore, there is no single dataset identified that would by itself support the EU effort to track and monitor energy efficiency investments across sectors and member states. This could be, however, attributed to the fact that tracking energy efficiency investments is a multifaceted topic. It is much more than renewable energy installations or the volume of green steel production. Energy savings are delivered both intentionally and indirectly through many types of capital investments. Besides, energy efficiency investment performance depends upon an imagined base line providing a reference in a parallel world where the investment had not been made) and often the savings are estimated by design. Moreover, fully scaled and investment performance data are dependent by cases and, therefore, hard to extrapolate.

Research findings

Initiatives and financial structures for upscaling financing building renovation

EU initiatives and financial mechanisms

The **Energy Efficiency Directive** (EED) contributes to doubling the global rate of energy efficiency improvements from about 2% to over 4% by 2030. It commits EU Member States to collectively reduce energy consumption by 11.7% by 2030, compared to the projections of the EU reference scenario 2020, which means that primary energy and final energy should not exceed 992.5 million tonnes of oil equivalent (Mtoe) and 763 Mtoe, respectively.

Renovating buildings was singled out in the [European Green Deal](#) to drive energy efficiency in the sector and deliver on objectives. For this, The European Commission initiated the **Renovation Wave** in 2020 to boost building retrofits, reduce energy consumption and provide jobs. It aims to unite regulation, funding and technical assistance concepts that are usually addressed separately. The Renovation Wave strategy also identifies the €275 billion of additional investment in building renovation necessary per year to reach climate and energy targets by 2030. In light of this, the Renovation Wave aims to renovate 35 million buildings by 2030, at least doubling the annual rate of energy renovations in the EU, for which the revised **Energy Performance of Building Directive** (EPBD) provides a legal framework.

EPBD aims to decarbonise the entire building sector by 2050. Besides, it sets intermediate goals on reducing greenhouse gas emissions by at least 60% in the building sector by 2030 compared to 2015 levels. Furthermore, EPBD aims to accelerate the renovation of buildings with the lowest energy performance by promoting deep energy renovations in both residential and non-residential sectors. To deliver its objectives, the Directive commits Member States to develop national Building Renovation Plans for energy efficiency and decarbonisation targets through renovation activities.

The EU established different funds and financial mechanisms, which can be used to finance the needed renovation rates while considering social challenges *inter alia* of the growing demand for accessible housing. **Cohesion Policy Funds** (including the Cohesion Fund, European Social Fund, and European Regional Development Fund) and the **Recovery and Resilience Facility** are the most targeted for supporting the implementation of the Renovation Wave while potentially covering the immediate funding gap on energy efficiency investments. The Cohesion Policy supports the most distressed economies and regional development, for which the EU dedicated altogether €6,6 billion from 2014 to 2020 and allocated over €1 billion for 2021-2027 to affordable housing through energy efficiency and social measures. Within the framework of the Recovery and Resilience Facility targeting the recovery after COVID-2019, National Recovery and Resilience Plans (RRPs) include a minimum of 30% of climate-relevant expenditure, and they contain a buildings renovation flagship priority. Furthermore, RRP of 10 Member States have substantial housing reforms by prompting energy efficiency and housing provision with the help of €57.76 billion.

The **Social Climate Fund** supports vulnerable households during the energy transition. Member States can use this financial support to fund structural measures and investments in energy efficiency and renovation of buildings, clean heating and cooling, integration of renewable energy as well as in zero- and low-emission mobility solutions. Member States have to prepare their national plans (Social Climate

Plans) by mid-2025 to showcase how and through what kinds of investments and mechanisms they plan to use this fund in order to mitigate the potentially harmful social impacts of climate transition.

Horizon Europe, LIFE and Innovation Fund are longer-term opportunities for maturing and scaling new technologies and will not have substantial impacts before 2030. The LIFE programme, Horizon Europe (before Horizon 2020) research and innovation programme helps public and private developers in large-scale energy efficiency and renewable energy projects.

The **InvestEU** programme is a joint initiative by the European Investment Bank (EIB) and the European Commission aiming to combine private and public investments for social investment delivery, including building renovation. Altogether with its forerunner entitled the European Structural and Investment Fund (ESIF), it has allocated a total of €1.09 billion for affordable housing. With this effort, 3167 affordable social housing units have been built or renovated. Under InvestEU, the European Local Energy Assistance (**ELENA**) was established in 2009, since then, it has been providing technical assistance and financial support for energy efficiency and renewable energy investments. ELENA has awarded more than €296 million of EU support and managed to mobilise €9.5 billion investment between 2009 and 2023. ELENA applies some rules, including minimum investments of €30 million and a certain level of project maturity to ensure that the project will be implemented. Furthermore, 90% of project development support can be covered by grants. Besides, project implementation is expected to last for 3-4 years. With this approach, ELENA has been providing technical advisory facilities or one-stop shops (OSS) for combining financial instruments and grant products with separate guarantee instruments, which is a very beneficial way of boosting building retrofits.

The EU's **Innovation Fund** provides funding for large-scale innovative technologies, which can be either large-scale flagship projects or small-scale projects to all 27 Member States. It supports initiatives that can bring significant emission reductions including ones aiming for energy efficiency. The **Modernisation Fund** supports investments targeted at 13 lower-income EU Member States (all CEE Member States plus Portugal, see Figure 1 below) to meet EU energy targets by helping them to modernise energy systems and improve energy efficiency.

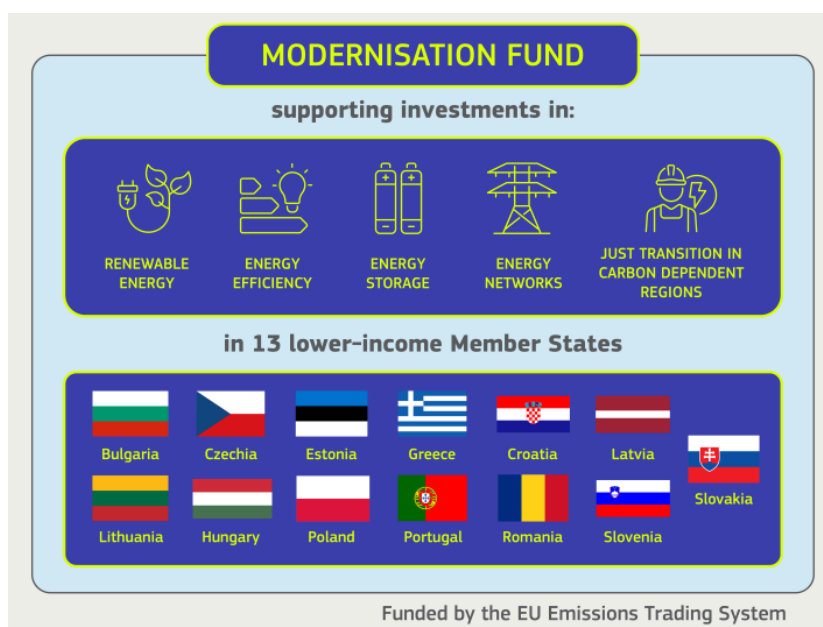


Figure 1: Member States and areas benefiting from the Modernisation Fund

The Modernisation Fund operates under the responsibility of the [beneficiary Member States](#) in close cooperation with the [European Commission](#) and the [EIB](#). It plays a crucial role in the European Green Deal Investment Plan and supports *inter alia* renewable energy and energy efficiency-related investments aiming at carbon emission reduction.

The **Connecting Europe Facility (CEF)** for Energy is the EU funding programme to implement the Trans-European Networks for Energy policy by building new cross-border energy infrastructure in Europe as well as rehabilitating and upgrading existing ones.

Below, Table 1 showcases the biggest funding sources (except for the Social Climate Fund) that potentially finance energy efficiency investments, including building retrofits.

Funding source	Budget 2021-27
Horizon Europe	15 bn EUR (climate energy and mobility)
Innovation Fund	10 bn EUR (overall budget)
Modernisation Fund	14 bn EUR from EU ETS auctioning (2021-2030)
CEF	5 bn EUR (energy infrastructure)
Invest EU	9 bn EUR (sustainable infrastructure)
LIFE	1 bn EUR (clean energy transition)
ERDF & CF	25 bn (share targeting climate objective)
Recovery and Resilience Facility	249 bn EUR (share targeting climate action), subject to national recovery plans

Table 1: Different funding sources can be used for enhancing energy efficiency through building retrofits

Integrated Renovation Programmes and Local Heating and Cooling Plans under the Urban Agenda aim to deliver targets of the Energy Efficiency Directive (EED) and the Renewable Energy Directive (RED), namely committing cities with a minimum of 45,000 inhabitants to develop local cooling and heating plans with a RED-defined mandatory percentage of renewable energy. The Urban Agenda for the EU represents a new multi-level working method, for urban policy and practice, promoting cooperation between Member States, cities, the European Commission, and other stakeholders. In the 2021–2027 period, support for delivering the Urban Agenda is provided under the European Urban Initiative.

Members of the **European Energy Efficiency Financing Coalition**, such as the Commission, all EU Member States, and app. 50 financial institutions, including the EIB and European Bank for Regional Development (EBRD) are committed to increasing investment in energy efficiency. Therefore, they aim to foster a favourable market for energy efficiency investments and increase private funding to meet EU energy and climate targets for 2030 and 2050. The Coalition, set in 2024, facilitates the implementation of financial instruments under EU programs, promotes these programs to encourage private investment, and supports the objectives of the EED and EPBD. Its forerunner, [Energy Efficiency Financial Institutions Group \(EEFIG\)](#), in its decade of operation, developed different tools for helping invest in energy efficiency. De-risking, standardisation, and measurement tools, such as the [Carbon Risk Real Estate Monitor \(CRREM\)](#), are important to make decarbonisation measurable, reduce carbon risk and enable Paris-agreement-aligned buildings. CRREM is able to translate climate science to the level of different building types (warehouse, office, home etc) by country to enable analysis of stranded asset risk and net zero operational alignment. These kinds of de-risking programmes of financial institutions actively help support and accept the standardisation of design and implementation processes in their underwriting actions.

Capacity building for the sake of building retrofitting is needed for a broad group of stakeholders, from homeowners, renters and property managers, over financiers, to installers, designers and architects, thus, EEFIG developed the **Underwriting Guide**. The document assists financial institutions to scale

up their capital deployment into energy efficiency. Namely, it helps departments of originators, analysts and risk better understand energy efficiency investments and therefore, enhance the evaluation of their value and their associated risks. Furthermore, the Guide helps developers and owners, looking for external capital for energy efficiency investments, understanding the needs of financial institutions. Therefore, it catalyses a common language between project developers, project owners, and financial institutions.

Moreover, the EEFIG created an open-source **De-risking Energy Efficiency Platform (DEEP)** database, allowing public and private financial institutions to monitor and benchmark their proposed investments against 37,000+ past projects provided by 25 data providers. DEEP helps enhance the understanding of risks and benefits associated with energy efficiency investments by providing investment track records and market evidence.

Last but not least, EEFIG developed the **European Energy Efficient Mortgage Initiative (EEMI)** supported by Horizon and Life programmes promoting green mortgages by offering favourable terms to incentivise property owners to enhance energy efficiency. This initiative integrates energy efficiency into mortgage lending, which catalyses sustainable building renovations while reducing energy consumption and CO₂ emission. It possesses a vast number of commercial banks operating in EU Member States. It has been the catalyst for the growth of a new, integrated, multi-stakeholder energy efficient mortgage ecosystem, which could serve as a source of inspiration for other sector-based initiatives.

Financial structures for building retrofits

Besides EU funds detailed above, there are other, still **not fully exploited financial instruments** that have the potential to address the energy efficiency financial gap if they are considered properly. Within financing energy efficiency-related projects, there are several mechanisms targeting building renovations. These mechanisms include *inter alia* **grants**, which are commonly provided by governments, private foundations and non-profit organisations. They are non-refundable and have low risk with stringent eligibility criteria and limited budgets. Furthermore, **subsidies** are typically offered by government agencies as tax incentives and deductions. Financial institutions provide **debt financing** through either green loans or energy-efficiency mortgages, which are often combined with public funding sources. **Loans and mortgages**, however, might deter property owners due to additional debt and often are inaccessible to vulnerable groups. Furthermore, private financing for building renovation includes the equity (e.g., household savings) of the building owner.

Credit lines are lending facilities made available for specific purposes, e.g., for energy efficiency, which are often backed by public and multilateral banks. As markets evolve, local, commercial banks have to establish dedicated energy-efficiency credit lines since they are in direct contact with the building owners. Thus, they need to develop home renovation products in the same way that they have car loans or mortgages, addressing real and perceived risks, as well as building capacity within the local banks to originate and underwrite energy efficiency loans. These types of credit lines mitigate the perceived high financial risk of energy efficiency projects and can lower transaction costs by establishing standardised project appraisals and loan processing procedures.

Energy Performance Contracts (EPCs) with Energy Service Companies (ESCO) cover some or all initial costs for energy efficiency investments, where the amount borrowed is repaid through the financial savings from the achieved energy savings. ESCOs can also play a role in de-risking projects by introducing performance-linked repayments to help private and public sector organisations develop, finance and implement energy efficiency measures. However, ESCOs can focus on the most profitable measures, where repayment can be easily repaired through energy savings. Therefore, ESCO-like approach appears easier for homes in social tenure, where stock is more consistent, allowing for cheaper retrofit solutions, and where buildings have a long-term owner, which are primarily not the privately owned residential buildings. Moreover, businesses, especially SMEs and other non-residential buildings, where energy bills are likely to be much higher, can also be viable on an ESCO basis.

There are other financial instruments, which can target building renovations but are still underexploited. These include *inter alia* **crowdfunding**, which is particularly well-suited for small projects that might not gain access to traditional financial resources. Furthermore, within **on-bill repayment / on-tax**

financing, the costs of renovation are repaid through utility bills/local taxes. Besides, **energy communities** involve individuals, households, or organisations to collaborate in the field of renovation. At the EU level, the **Support Service for Citizen-Led Renovation** is designed to empower energy communities to oversee energy-saving renovations in buildings, facilitating renovation projects in several EU countries. Last but not least, the EU and its Member States promoted the establishment of one-stop shops aiming to provide comprehensive support to citizens and property owners in navigating the technical, legal, and financial complexities of renovation projects.

However, without properly involving the private sector in unlocking sufficient capital for green, including energy efficiency and renewable energy-driven renovation investments, climate and energy targets remain an unreachable challenge. Therefore, getting private funding on board to contribute to building retrofits, exploit potential financial opportunities and create a sustainable, low-carbon built environment is inevitable. This assessment aims to reveal how this can be delivered.

Structure for financing for building renovation

Privately financed renovations are carried out on a project basis, which consists of three phases: 1) preparation, 2) construction, and 3) operation. Renovation projects start with a preparation phase, where admission documents, licenses, construction plans, etc. are executed, and constructors and investors are contracted. This phase can last quite long, up to 3 years, till it reaches the “ready-to-build phase”. Once done, and all participants are in place, it is followed by the construction phase where the concrete project is realised. The construction phase usually takes between 0.5 - 2 years, after which the project is ready to operate and generates revenue. Investors are generally repaid by either being refinanced at the beginning of the operational phase, or via the cash flow operation of the project in a longer term.

Fully or partly private-financed projects possess different kinds of stakeholder involvement at three levels:

1. **Equity tranche:** usually provided fully or partially by the Developer (Sponsor). It usually has 10-15% as equity of the overall project budget. The Developer is responsible for procuring admission documents and inquiring about contractors for the renovation. Furthermore, it is also responsible for raising funding to cover the overall budget for the project, including mezzanine investors and senior lenders.
2. **Mezzanine tranche:** usually provided by asset managers, credit funds, or high net worth individuals (HNWIs) investors. Their risk is in between Sponsors and Seniors, and pricing falls in the low two-digit (10-20%) area. They finance pp. 35% of the overall budget. They ask for 6-8% tax above the Euribor and usually aim to get out of the project after half a year of operation. The mezzanine tranche - being costly - is usually refinanced after the project is operational and cash flow is stable.
3. **Senior tranche:** These investors include development or commercial banks. They provide 50%-70% of the total funding of the project. It is the most senior tranche, meaning that the equity and mezzanine tranches offer a cushion to them to absorb losses. Hence, pricing is between 100-300 basis points over the interbank benchmark rate. Development banks do not have private investors since they use public money.

The project-based structure of building financing is a useful source when striving for the enhancement of supporting energy efficiency investments.

Key trends

Trends in public finance for energy investments

Finance for new energy investment can come from public or private sources, which in 2023 summed up to a record USD 2.8 trillion to replace and expand the world’s energy infrastructure. Figure 2 shows public financing for energy investments between 2013 and 2022, which contains G20 country bilateral finance institutions and the largest multilateral development banks (MDBs). Finance is classified as “Fossil fuel,” “Clean,” and “Other.” “Clean” refers to solar, wind, tidal, geothermal, and small-scale

hydro, while the “Other” category includes large hydropower (over 30 MW), biofuels, biomass, nuclear power, and waste-to-energy.

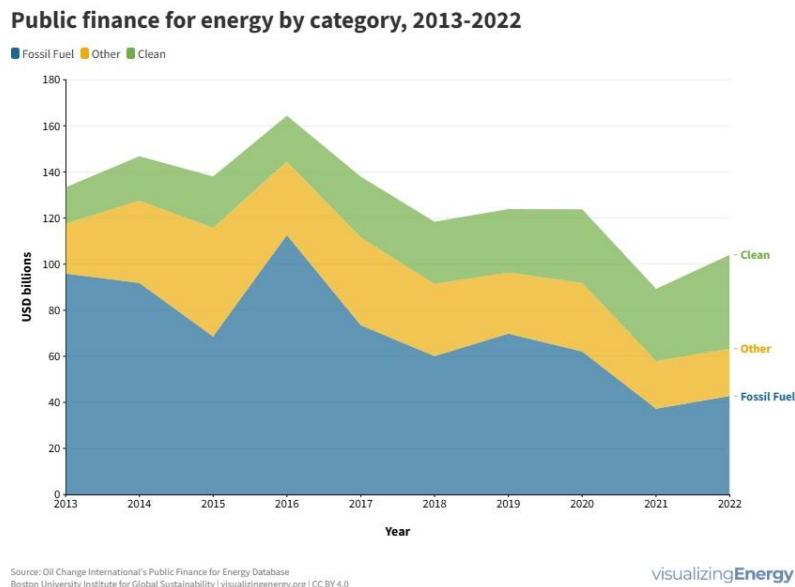


Figure 2: Public finance for energy by category between 2013 and 2022

As Figure 2 shows, subsidising fossil fuels is still ongoing. Even though more and more countries and institutions have stopped financing fossil fuels, not so many of the signatories to the joint Statement on International Public Support for the Clean Energy Transition delivered their commitments to end subsidising fossil fuels by 2022. Out of the 39 signatories, including multilateral financial institutions and national governments, only New Zealand stopped financing oil, gas, coal, and their supply chain. Even though EIB and EBRD have stopped financing oil and coal, they still have not stopped financing the gas production and fossil fuel supply chain.

Despite all official and needed commitments, between 2013 and 2022 from all public sources of USD 1.3 trillion, fossil fuel projects received 56%, followed by “Other” with 24% and “Clean” energy-related projects with 20%. Supported fossil fuel projects were concentrated in North America, South Asia, and the Middle East. The very little public finance for European fossil fuel projects concentrated in CEE, e.g., 0.03 billion USD for Romanian, 0.3 billion USD for Ukrainian, and 0.7 billion USD for Moldovan fossil fuel projects.

However, not only fossil fuels cause significant harm to nature and society. The other two categories (“Clean” and “Other”) can also pose threats to the natural environment and humans, especially indigenous and vulnerable populations. For instance, decarbonisation-related technologies – wind turbines, solar panels, electric vehicles, battery storage, etc. – require a wide range of minerals and metals, mostly found in pristine and intact nature and home to indigenous people, so their mining causing enormous social disorders, especially in the Global South. Therefore, to ensure a safe and just operating space for humanity, public finance institutions must finance only those energy-related investments, which are in harmony with nature and society and use their unique influence to catalyse a safe and just energy transition.

Global investment trends in renewables and energy efficiency

The share of total annual public finance for “Clean” energy roughly tripled between 2013 (12%) and 2021 (39%) before declining sharply in 2022. Due to the distributed nature of wind and solar energy and the well-established effectiveness of energy efficiency technologies, public-financed “Clean” energy projects have a wide geographic distribution. “Clean” energy was supported between 2020 and 2022, mainly by the EIB, the World Bank Group, Germany, Brazil, France, and the EBRD. EU-related financial institutions, such as the EIB, provided 52 billion USD, while the EBRD provided 11 billion USD for

“Clean” energy within these two years. Below, Figures 3 and 4 show how these two financial institutions distributed their funding sources between the three energy categories.

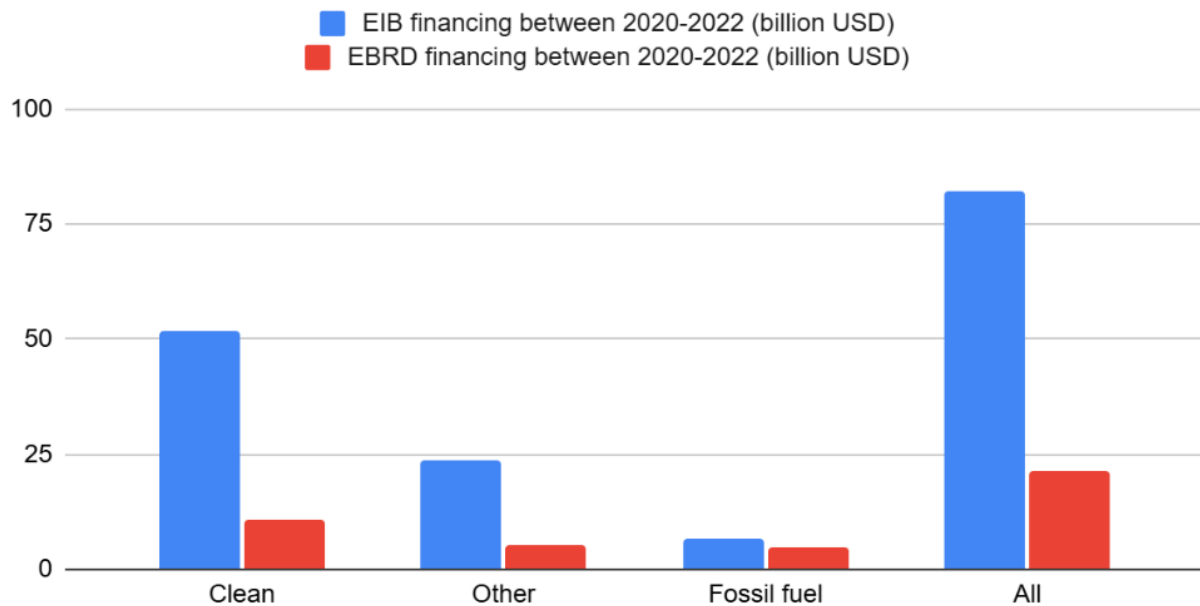


Figure 3: EIB and EBRD financing for “Clean”, “Other”, and “Fossil fuel” categories.

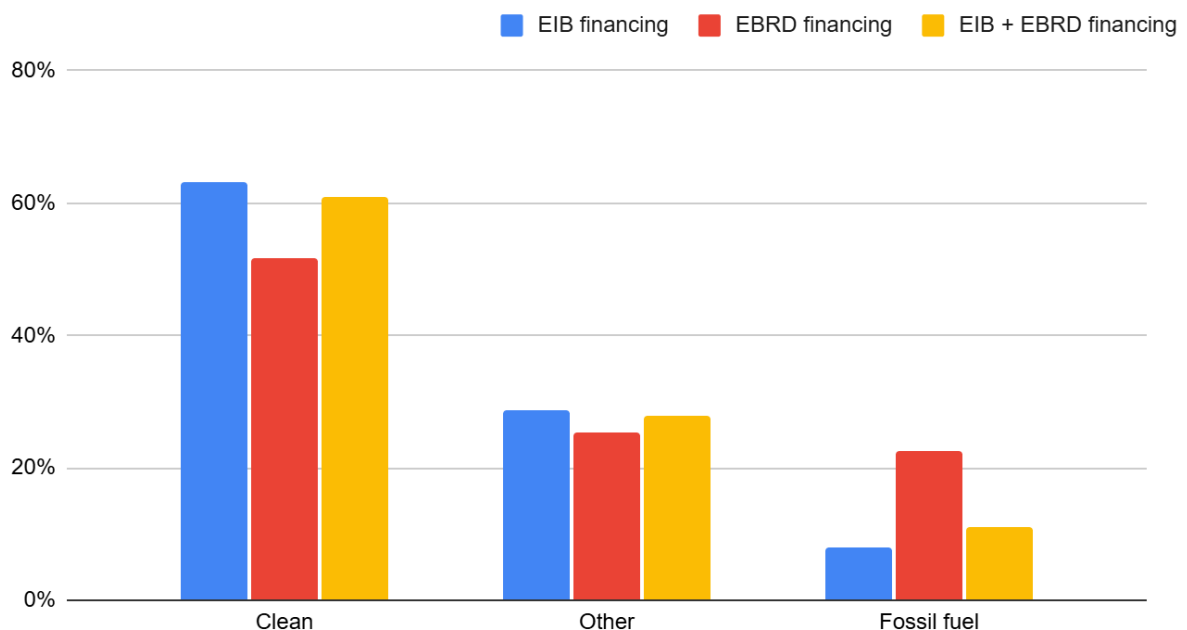


Figure 4: Distribution of EIB and EBRD financing in the three energy resource categories between 2020 and 2022.

In Figures 3 and 4, it can be seen that EIB invests much more in energy projects than EBRD, while proportionally supports more significantly “the Clean” and “Other” energy categories, while EBRD still provides a significant amount for the fossil fuel industry.

EU and CEE investment trends in renewables and energy efficiency

To reach the emission and energy consumption reduction goals of 2030 and 2050, the EU invests an average of €764 billion per year, but the Commission [estimates](#) a €477 billion annual **green investment gap** for the total needed budget of €1241 billion. Even though other financial institutions estimate a lower budget needed to deliver climate and energy targets, the gap is still significant, which needs to be largely financed by the private sector while catalysed by the public sector. In terms of energy efficiency, an additional €275 billion per year in renovation investments over the period 2021-2030 was identified in the Renovation Wave Strategy in order to reach EU energy and climate objectives in 2030, meaning that energy renovation rates must triple, increasing from 1% a year to 3%.

Energy efficiency investments in the EU have been in the range of €60 billion per year between 2016 and 2019. They grew from 2014 to 2016 but have remained stable until 2019, despite increasing policy support over this period. Aggregate energy efficiency investments, however, must more than double to reach the 2030 targets, which effort can be seen in the enhancement of funding from development banks (see more in Section 4.4). Comprehensive and systematic tracking of energy efficiency investment data, however, remains a challenge, adding to market uncertainty, with some indicators showing that the real investment volume is larger than reported.

CEE countries set different final energy consumption goals to reach the energy efficiency target of the EU. Below, Figure 5 shows most of the CEE countries' final energy consumption data from 2017 and their respective final energy consumption target by 2030. Hungary and Romania did not set ambitious targets, since their 2030 goals are more than the nation-scale energy consumption in 2017.

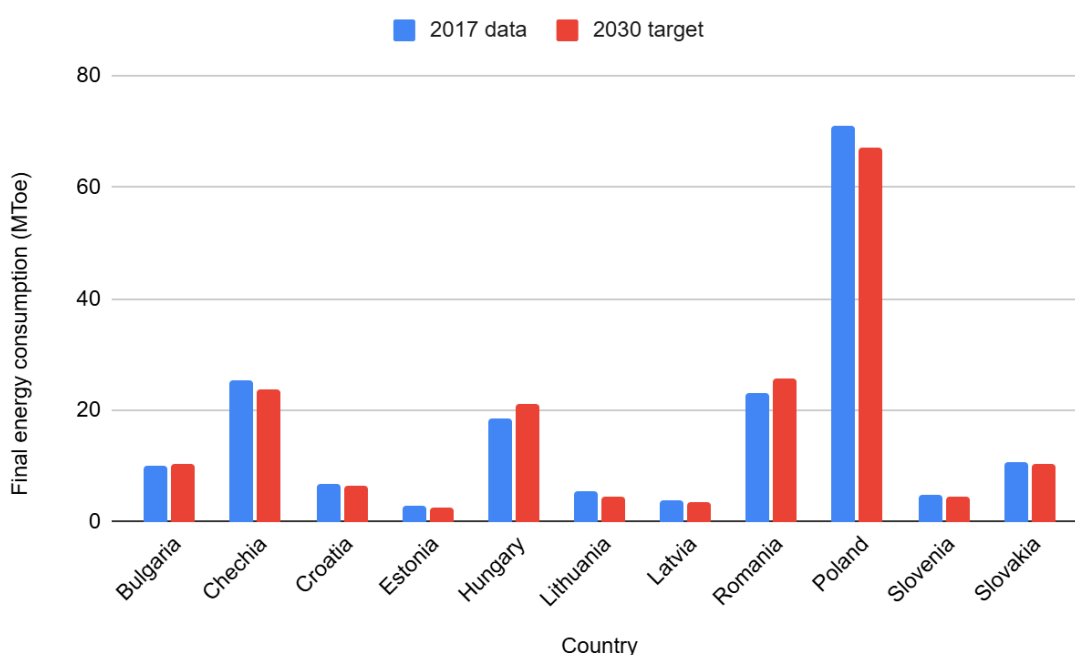


Figure 5: CEE countries' final energy consumption of 2017 and their 2030 target

These 11 CEE countries identified their energy efficiency, containing residential buildings investment needs between the period of 2021 and 2030 in order to reach climate and energy-related 2030 targets. These investment needs are illustrated below in Figure 6. (There is no data for residential building investment needs for Czechia and Lithuania.)

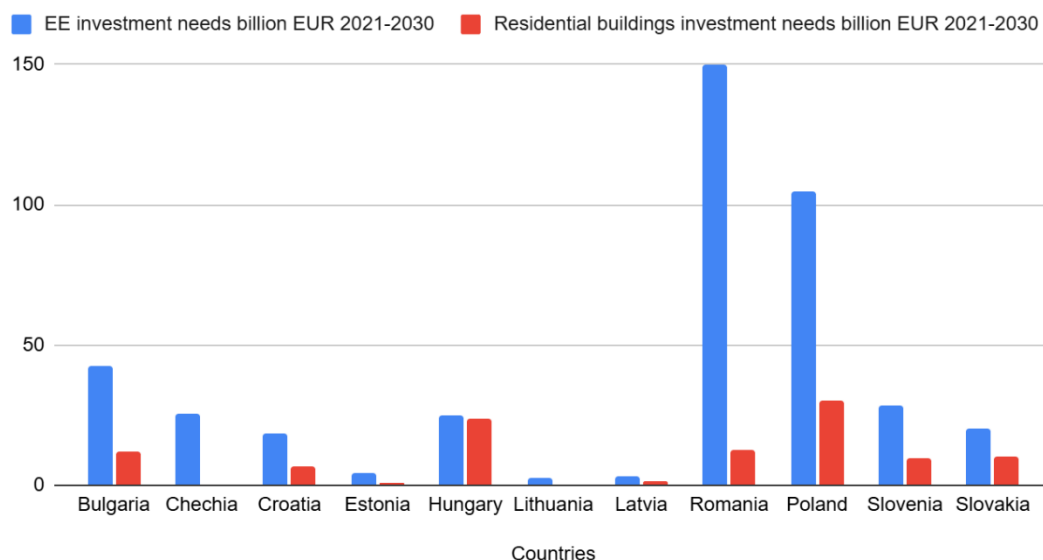
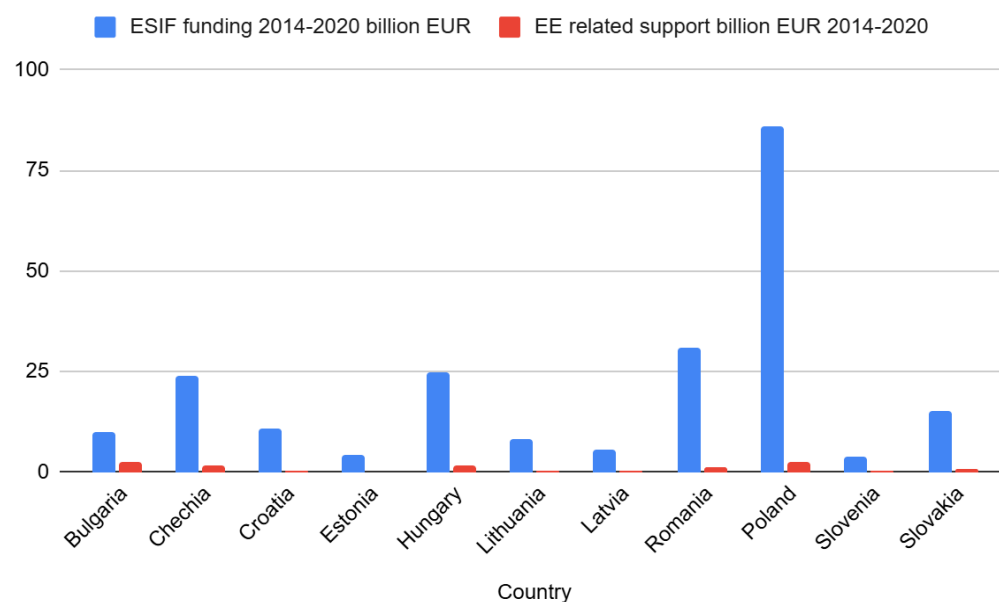
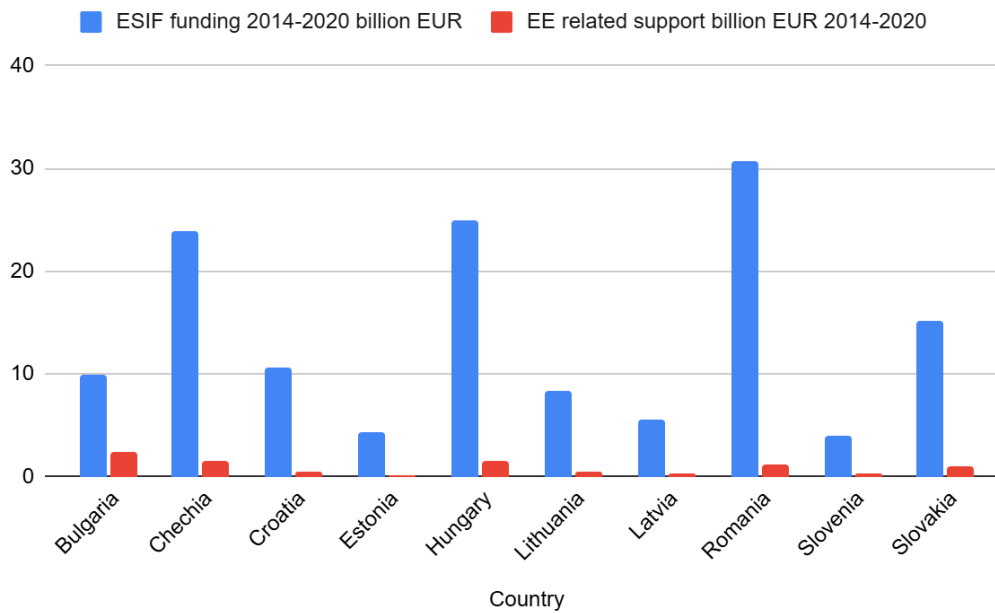


Figure 6: Energy efficiency, containing residential building-related investment needs of 11 CEE countries by 2030

In order to enhance energy efficiency-related investments, countries received support from the ESIF between 2014 and 2020. However, as illustrated in Figures 7 and 8, out of ESIF contributions, only a small portion was dedicated to energy efficiency investments, which questions 2030 target delivery. In Figure 7, Poland is included, but in order to see ratios more clearly in other countries, the Figure 8 does not include Poland.



Figures 7: Energy efficiency-related support out of the ESIF budget (with Poland)



Figures 8: Energy efficiency-related support out of the ESIF budget (without Poland)

Through comparing the financial budget of energy efficiency investments for the period of 2014-2020, and investment needs for 2021-2030, combining data from Figure 6 and Figure 7, the Figure 8 below shows that ESIF energy efficiency support for 2014-2020 (marked with yellow) is not at all corresponding to the investment needs (marked in blue for energy efficiency and red for residential investments) for 2021-2030. Even though the two periods are not overlapping, it can be anticipated from this ratio that energy efficiency related support needs to be upgraded significantly in order meet the needs of this decade.

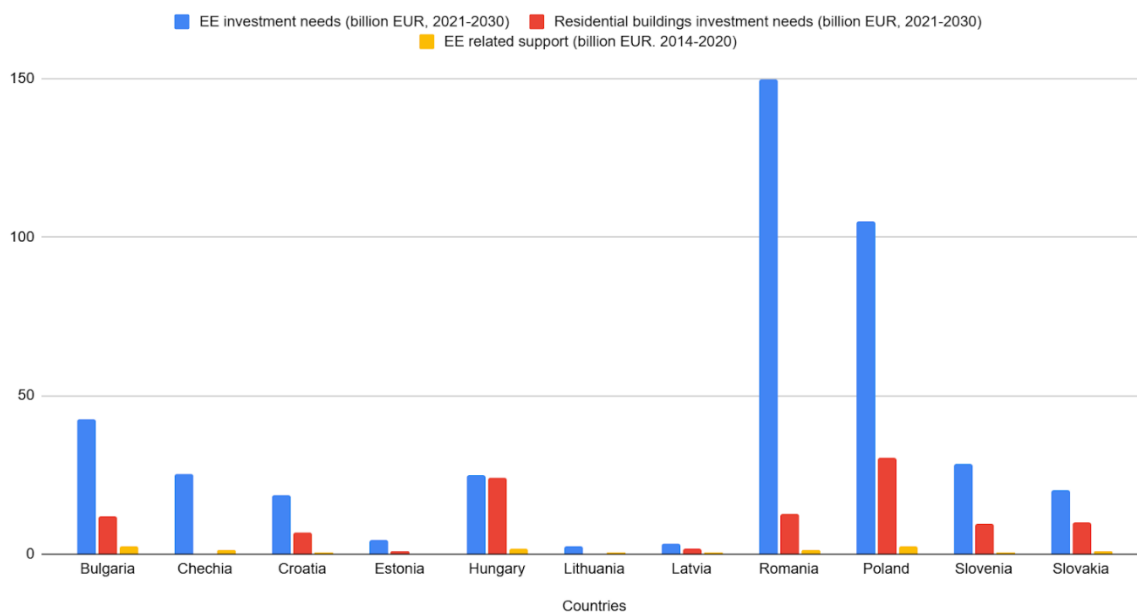


Figure 9: Investment needs for this decade compared to energy efficiency investments for 2014-2020

From the overall ESIF budget dedicated to these countries, per capita ESIF fund distribution is illustrated in Figure 10 below. Even though some countries, such as Hungary or Romania set their 2030 final energy consumption target higher than the 2017 level, they still receive EU support for enhancing energy efficiency. Per capita level, ESIF support was the highest in Estonia, while the lowest in Bulgaria.

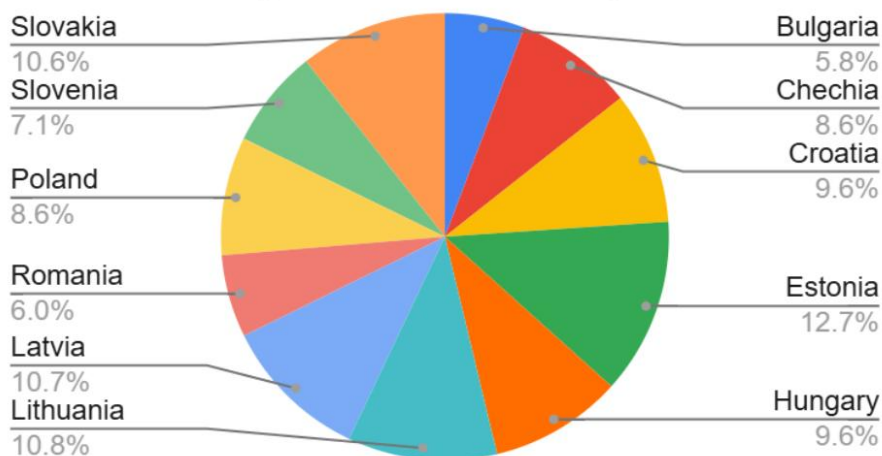


Figure 10: ESIF funding per capita distribution for the period between 2014-2020

In regards to “Clean” energy-related investments, 14 CEE countries recorded more than 15 billion USD of public finance between 2013 and 2022. Figure 11 shows the geographic distribution of public finance, targeting “Clean” energy support in CEE, showing that the biggest supported nations are Poland, Ukraine and Greece.

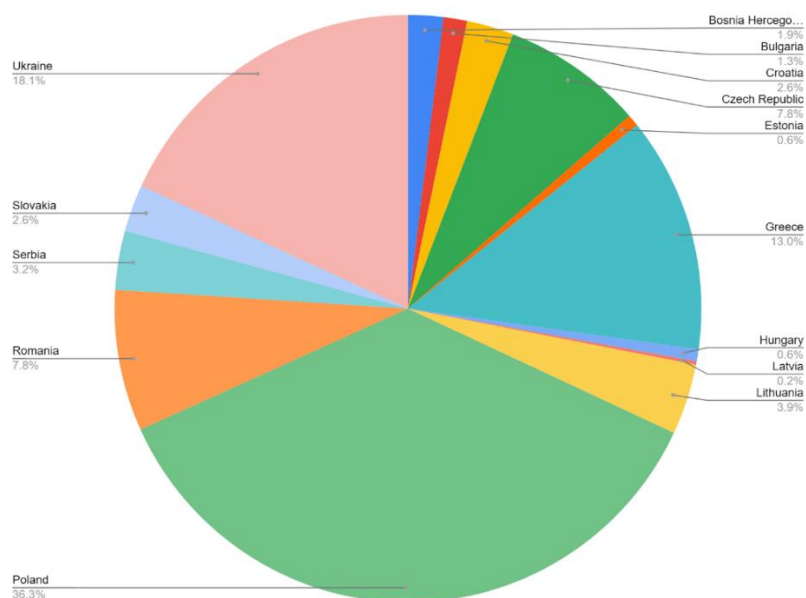


Figure 11: Geographic distribution of public finance support for “Clean” energy in CEE

However, if we consider the population of these countries, the picture looks much more balanced, as the below figure shows, according to which public funding for “Clean” energy is the highest for Lithuanians, while the lowest for Hungarians (0.8% - marked with blue between Latvians and Greeks)

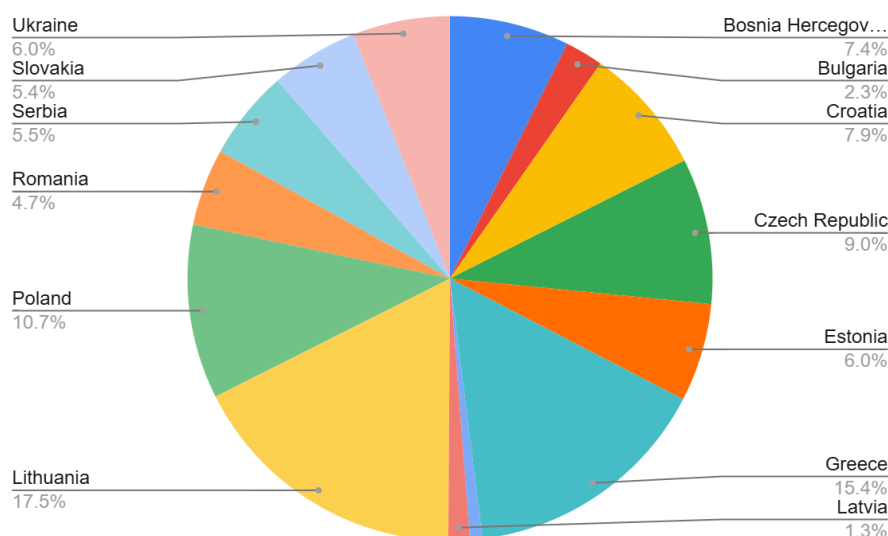


Figure 12: Geographic distribution of public finance support per capita for "Clean" energy in CEE

Furthermore, it is interesting to compare public finance dedicated to finance "Clean" energy and GDP. Below, Figures 13, 14 and 15 show how public finance corresponds to the GDP of the concerned countries. The first two illustrate (both at the country as well as at the per capita level) that a decade of public finance between 2013 and 2022 is invisible compared to the annual GDP in 2023 of the concerned countries. On these figures below, the blue colour can not be seen even if we take out Poland from the first figure as we did above, showcasing the small ratio of public finance for "Clean" energy compared to national GDP.

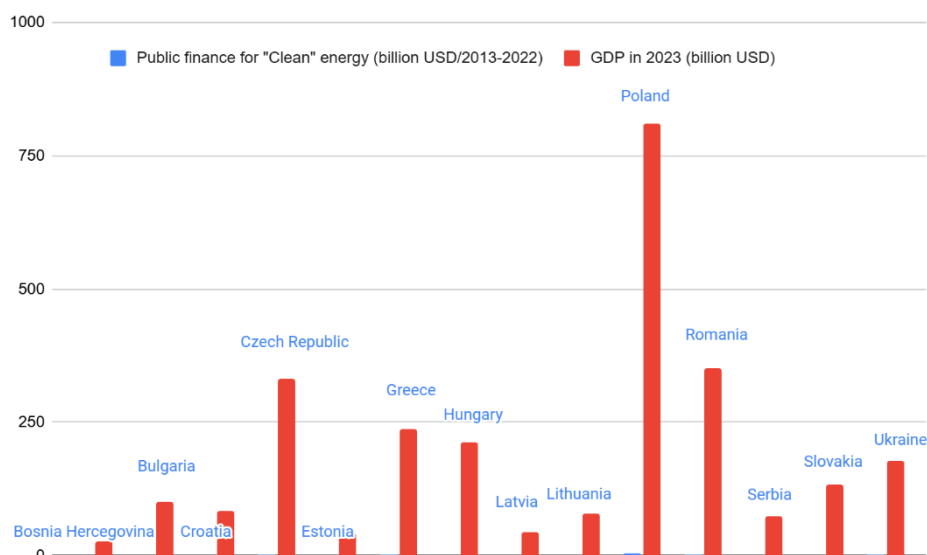


Figure 13: Amount of public finance desiccated to "Clean" energy projects in CEE countries compared to their national GDP

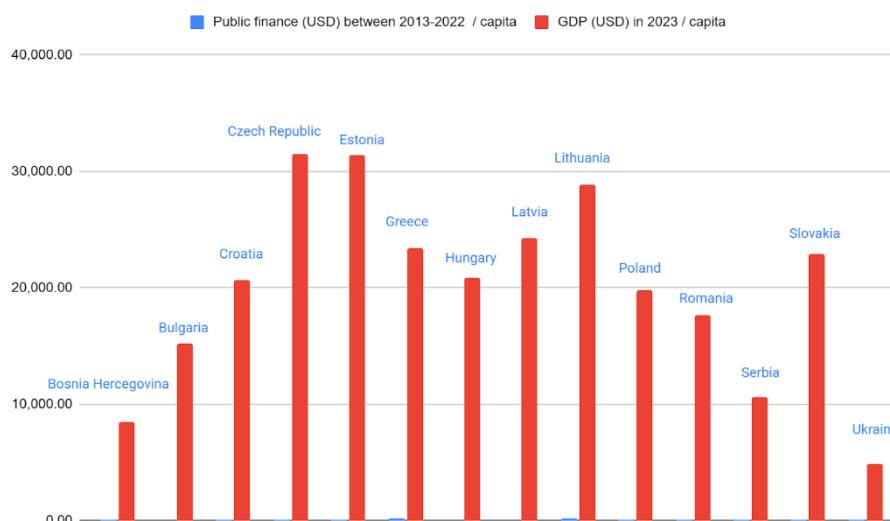


Figure 14: Amount of public finance dedicated to “Clean” energy projects in CEE compared to national GDPs at capita level

Below, Figure 15 shows in blue, public finance / capita dedicated to CEE countries from the overall CEE “Clean” energy-related public finance budget, while in red the GDP / capita of the CEE countries from the cumulative CEE GDP / capita.

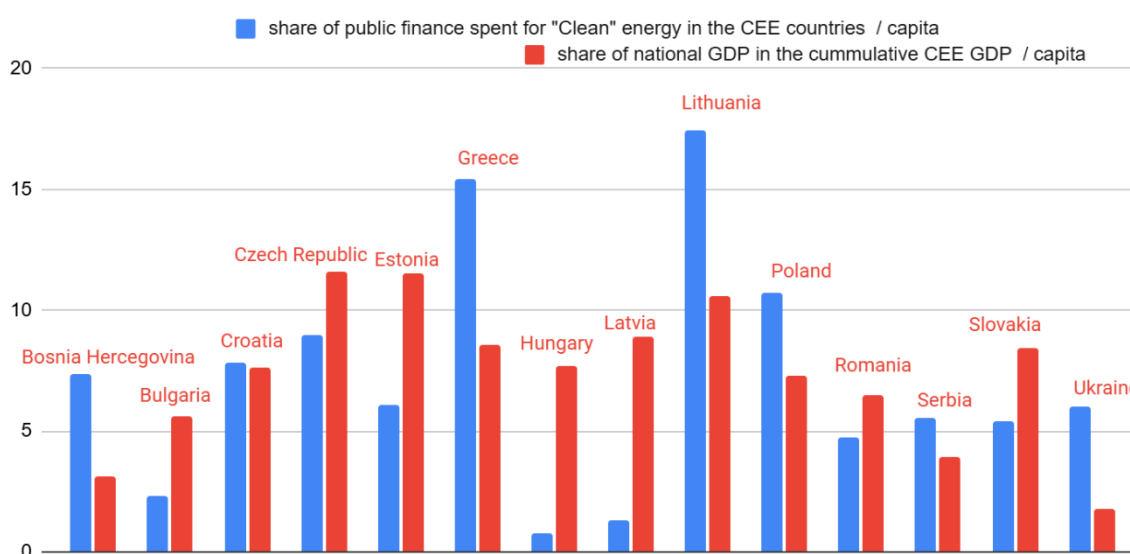


Figure 15: Capitalevel public finance dedicated to “Clean” energy projects compared to GDP/capita in CEE

According to Figure 15 above, there is no significant correlation between GDP/capita and the capita-level amount of public funding for “Clean” energy.

Financial feasibility of building retrofits

Support for energy efficiency investments does not satisfy the identified needs to meet climate and energy goals even though energy efficiency improvements, on the one hand, reduce energy consumption and operational costs, and they can also improve a building’s image, regulatory resilience, and comfort. Furthermore, energy efficiency improvements result in an increase of 3-10% in the sale

price of residential assets, as well as an increase of around 3-5% in residential rents compared to similar properties. However, the wide variation in price increase is clearly highly location, typology and building-specific.

Benefits arisen from building retrofits are mirrored in that there is a statistically significant correlation between the energy performance of building collateral and mortgage credit performance. This is underpinned by the analysis of mortgage books of Nationwide Building Society (NBS) in the UK, Allianz in Germany and OP Financial Group in Finland with a sample of almost 800,000 residential mortgages across all three countries. According to the evaluated 73,000 Italian mortgages, energy efficiency investments in mortgage collateral tend to improve owners'/borrowers' solvency, indicating that the degree of energy efficiency also matters, i.e. owners of more energy-efficient buildings are associated with a relatively lower risk of default. Further studies were undertaken by the Bank of England, in the Netherlands and Portugal with similar conclusions.

However, analysis of energy efficiency benefits is limited by the fact that energy efficiency may be correlated with unobserved quality variables such as the appearance or design of a property, the in-the-meantime mandatory minimum energy performance standards as well as a stronger regulatory incentive for upgrade.

Roles and priorities of development banks in enhancing finance for energy efficiency in buildings

European Investment Bank - EIB

EIB possesses several mechanisms promoting energy efficiency investments. The overarching EIB Group Environmental and Social Sustainability Framework possesses 11 Environmental and Social Standards, all of them applied during the due diligence and monitoring carried out for all EIB financed projects. Two of these 11 standards refer to energy efficiency. Furthermore, the EIB Energy Lending Policy and Guide to Economic Appraisal explicitly mentions the energy efficiency first principle.

EIB developed tools to support financial intermediaries in marketing dedicated energy efficiency financing, raise awareness for the energy savings potential in different sectors, and facilitate on-lending for energy efficiency. The WebCheck Tool, the predecessor of the Green Eligibility Checker, allows financial institutions and intermediaries to pre-check the eligibility of an energy efficiency project, while the EEQuest Tool provides users with an estimate of energy, cost and CO₂ savings for typical measures.

Between 2007 and 2023, the EIB allocated €3.8 billion to finance more than 8200 projects in five fields, including Greener Europe¹. Within the topic of Greener Europe, EIB's overall financing of energy efficiency projects increased from around €1.1 billion in 2012 to €5.8 billion in 2020. Within the decade of 2021-2030, EIB plans to support with €1 trillion realisation of the European Green Deal and a just transition to low-carbon, climate-resilient, and environmentally sustainable development. For this, the EIB devotes more than half of its financing to climate action and environmental sustainability and plans to finance up to 75% of eligible capital expenditures of a project. Specifically, to energy efficiency in buildings, the EIB has doubled its financing between 2019 and 2022 from €2.6 billion to €5.6 billion, lending €2-3 billion annually for enhancing the energy efficiency of buildings, while an additional annual €1-1.5 billion for supporting affordable housing. It has developed new products such as green mortgages and operations for building rehabilitation targeting low-income households. Aligned with the aim of the Social Climate Fund, the EIB plans to dedicate special financial packages between 2025 and 2030 to mitigate the harmful social impacts and offset adverse distributional consequences of the climate transition.

In connection to the funds under the Cohesion Policy (e.g., Cohesion fund, ERDF), Member States may use these financial instruments to transform resources into financial products that support eligible projects. For this, EIB can provide professional fund management expertise and engage in innovative financial instruments, as well as combine funds with other sources of financing, e.g., in the form of loans, guarantees, quasi-equity, and direct equity.

The EIB recognises to some extent the multiple benefits arising from energy efficiency, including the extension of the economic life of the assets and the reduction of operation and maintenance costs, and on a case-by-case basis, other benefits, when the available information is reliable and sufficient to produce robust estimates. Therefore, EIB has incorporated in its cost-benefit analysis (CBA) methodology the robustly estimated multiple benefits generated by energy efficiency projects, such as the extension of the economic life of the asset, and the reduction of operation and maintenance costs.

However, recently leaked information covers all these efforts in shadow, according to which EIB fears a “reputational disaster” in 2025 if the EU applies reporting rules. According to the new rules, the bank has to declare a “Green Asset Ratio” — an EU standard intended to show the proportion of a bank’s assets considered climate-friendly — of around 1%. The fear of EIB over the 1% ratio should be unjustified, if its “Climate Action ratio” of over 50% based on EIB-defined metrics would be really in line with the climate and energy objectives of the EU. The fear that it is not, however, is justified by the fact that many watchdog organisations are calling the institution for more transparency and public accessibility to the EIB methodology on measuring climate-friendliness and calculating CO₂ emissions of investments to ensure outside scrutiny.

European Bank for Regional Development - EBRD

The EBRD has long been a leader in energy efficiency and indeed has incorporated energy efficiency measures into its loans from its formation, largely in response to the very low levels of energy efficiency in CEE prevalent at that time. The role of energy efficiency in reducing energy intensity in different sectors as well as its cross-cutting theme are emphasised in most EBRD documents. Furthermore, most country strategies of the EBRD place energy and resource efficiency as one of the top three priorities, however, energy efficiency is not one of the key areas under the Environmental and Social Policy of the financial institute.

EBRD issues Environmental Sustainability Bonds financing specific projects that target substantial cost-effective improvements in energy efficiency and the expansion of renewable energy production in residential buildings. The Green Transition Bonds finance investments in key sectors of the economy that today are highly dependent on the use of fossil fuels, thus significantly supporting energy efficiency projects.

The EBRD’s climate finance increased from €4.2 billion in 2019 to €6.5 billion in 2022. Besides, it aimed to mobilise private climate finance, reaching €9.5 billion in 2022, to make the green transition happen by bridging the climate investment gap. Furthermore, EBRD Green Economy Transition Approach 2021-2025 set a green financing target for the financial institute of more than 50% by 2025, contributing to the mitigation and adaptation goals of the Paris Agreement, and explicitly refers to the energy efficiency first principle. This approach also supports energy efficiency partnership projects such as the Eastern Europe Energy Efficiency and Environment Partnership and the Western Balkans Regional Energy Efficiency Programme.

The EBRD has adopted a set of specific Performance Requirements for key environmental and social sustainability areas that projects are required to meet, such as resource efficiency and pollution prevention and control, including avoiding, minimising and managing project-related GHG emissions. Under green financing, a project must meet the EBRD Environmental and Social Policy and Performance Requirements and the Green Economy Transition principles, resulting in net environmental benefits relative to appropriate baseline scenarios.

All projects, including the ones targeting energy efficiency enhancement of commercial, public and private buildings, undergo environmental and social appraisal in order to help EBRD to decide on its financing. In financing decisions, it is also considered how environmental and social risks and impacts should be addressed in planning, implementing, and operating a project. Every project is screened for its environmental and social impacts, and environmental monitoring is continued throughout the project life cycle.

Council of the European Development Bank - CEB

Within the CEE region, CEB promotes social cohesion through promoting inclusive and resilient living environments. For this, CEB has been supporting investments aimed at improving the energy efficiency

of residential buildings and has approved about €10 billion in favour of projects targeting energy efficiency improvements in the last decade. Besides, the CEB developed a Constructing Education framework aiming to turn (re)constructed buildings into enabling environments with the strong participation of local authorities, teachers, and other users and stakeholders. Furthermore, CEB finances social and affordable housing for vulnerable populations and also drives private investment in this area.

German Development Bank - Kreditanstalt für Wiederaufbau (KfW)

KfW targets that after 2023, at least 38% of new financing must be dedicated to addressing climate change and environmental protection. KfW transposes the efficiency first principle in the building sector through long-standing provision of loans with interest rate subsidy, partial debt relief and investment grants for energy efficiency in all building types (residential, commercial, public) within Germany. The promotional support is only provided if a target energy efficiency level over and above the applicable building codes is reached, which is assessed using a standard model and the involvement of independent energy experts. This KfW product structure and features are broadly regarded as best practice (See more under Best Practice section 4.6).

Furthermore, the bank supports energy efficiency investments in developing countries by providing finance for energy efficiency on the demand side, covering buildings, industry and private households. In light of this, Germany has entered into a regional green and sustainable development partnership with the non-yet-EU western Balkan countries and is helping them reach the EU's climate targets as well as the Paris Agreement's 1.5-degree target. Within the framework of these agreements on behalf of the German Federal Government, KfW is supporting Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia, in complying with the requirements laid out within them. KfW is providing €1.5 billion for these countries to promote renewable energy sources and make buildings more energy efficient.

Besides, KfW supports Ukraine in repairing, restoring and modernising the energy supply, while in Moldova, it provides financial sources *inter alia* in the areas of energy and energy efficiency. These funds are made available through local and regional banks using a system similar to the KfW domestic lending model, in the framework of which loans are provided using an on-lending model where KfW distributes the products via a broad network of retail finance partners. Moreover, since 2014, KfW has been issuing Green Bonds of more than €50 billion, where energy efficiency loans for buildings can be used as underlying.

Analysis of gaps and barriers

Barriers and their overcoming mechanisms for enhancing finance for building retrofits

Lack of interest from investors

Investors do **not perceive the profitability** of energy efficiency measures to a high extent, as they do not increase the investment's cash flows directly, discouraging them from stirring their capital to such kinds of investments. Nevertheless, there are many studies emphasising the benefits of energy efficiency and the significant role it can play in mitigating climate change and its potential to contribute to sustainable finance, the level of **awareness and focus is still limited** in the financial sector. Therefore, there are limited, but growing number of specialist investment funds and lending facilities dedicated to energy efficiency, but their aggregate investment capital is still small compared to the size of the opportunity. However, public banks, including EBRD, EIB and KfW, are among the most advanced in incorporating energy efficiency into their investment and decision-making processes as an integral part of their wider sustainability efforts. Their practices should be mainstreamed and applied within commercial banks.

Private investors can be reluctant to invest in energy efficiency projects, especially in small scale renovation ones or where start-up companies are involved, since they are considered **risky** compared to "traditional" investment projects. Therefore, banks do not take higher risks or are constrained in doing so by regulatory requirements, while these projects have **high transaction costs** since underwriting of energy renovation loans is more complicated where the amounts are usually modest. Besides, properly

predicting energy savings from the concerned renovation is difficult. Therefore, investors do not usually consider the cost savings generated through efficiency when **assessing the creditworthiness** of the investment. Hence, creditworthiness usually ends up depending on the borrower rather than the project itself, instead of evaluating it from a profound calculation of energy saving, from which a payback period can be soundly defined. This leads to a **long payback period**, posing a significant obstacle to get investors on-board but also for building owners.

Companies that finance energy efficiency interventions in buildings and have **short-term business models** prefer interventions with shorter payback periods, such as sealing air leaks around doors, windows and other areas, instead of performing a deep renovation. This approach, however, does not tackle the problems of inefficient, carbon-intensive building blocks, only touching the surface of the symptoms. Another obstacle to getting private investors on board to finance deep retrofits is the **lack of standardisation**. Each building has its own characteristics depending on several factors ranging from the year of construction to geographical features of the surrounding area, which makes each efficiency intervention unique. Furthermore, information asymmetry as well as lack of common agreement among owners can further hinder proper investment decisions.

Other barriers to enhancing finance for building retrofits

Green investment projects differ from “traditional” investments since they often require new, often **immature technologies**, while renewable energy supply is relatively capital-intensive, with high upfront capital needs and a higher depreciation rate reflecting a shorter life cycle. Furthermore, sources of other financing for loans, such as **venture capital, are less freely available** in the EU compared with other jurisdictions, notably the USA. Even though green bond issuances have grown in recent years, their overall share of total issuances is still very small.

At the Member State level, countries face challenges using their resources effectively to achieve their energy efficiency targets and the EU’s common energy goals. Furthermore, they **struggle in combining EU funds with private finance** (e.g., grants and financial instruments) to support sound and well-prepared energy efficiency investment projects due to the lack of clear and effective mechanisms.

Even though **multiple benefits**, e.g., job-creation, energy poverty alleviation, public health and environmental sustainability are increasingly considered by policymakers, these are not yet fully part of the financing and investment decision-making routines of financial institutions. E.g., the EIB recognises as multiple benefits only the extension of the economic life of the assets or the reduction of operation and maintenance costs. Furthermore, other, direct asset-related benefits (e.g., improved comfort, higher property value, healthier inhabitants/users) are very often also not considered in decision-making.

Furthermore, the **cost of a deep retrofit** for a single home **remains high**, and given the variation in housing stock across Europe, it will take several years for economies of scale and improved supply chain capacity to materially bring down the cost. While the resulting energy savings are necessary from a climate perspective, from the householder’s perspective, a deep retrofit may take 20-30 years to ‘pay for itself’ from energy cost savings, which may be longer than the householder intends to occupy the home.

Last, but not least, there is not so much attention given on how to increase demand for energy efficiency investments in the buildings owned by **SMEs** (see more in Section 4.5.4).

Solutions for the barriers

Regarding **tackling the risk** for energy efficiency investments, growing evidence that the risks associated with energy efficiency investments are lower than the level perceived by markets is emerging (see more in Section 4.3.3 on feasibility).

Properly analysing the multiple benefits can significantly increase the attractiveness of energy efficiency investments and boost their deployment. This is specifically true for buildings, as for example, health benefits are not realized only through a switch of the heating system but mostly through a properly planned and implemented deep renovation, which would reduce drought, outdoor air pollution

and indoor air quality. The consideration of non-energy benefits, especially better comfort, healthier homes and workplaces, and reduced energy poverty, can help design energy efficiency programs that stimulate demand building renovation efforts and thus boost energy efficiency investments. Many of the multiple benefits overlap with the environmental, social and governance (ESG) criteria that financial institutions and their stakeholders use to screen investments and measure their portfolios against. Therefore, measuring, monitoring and reporting multiple benefits already have commitments to meet. Furthermore, their proper identification and evaluation strengthens the connection between energy efficiency investing and impact investing, thus can increase their attractiveness to impact investors.

Regarding the **combination of different financial mechanisms**, a model framework is already developed by EIB and the European Commission, see its model structure in Figure 16.

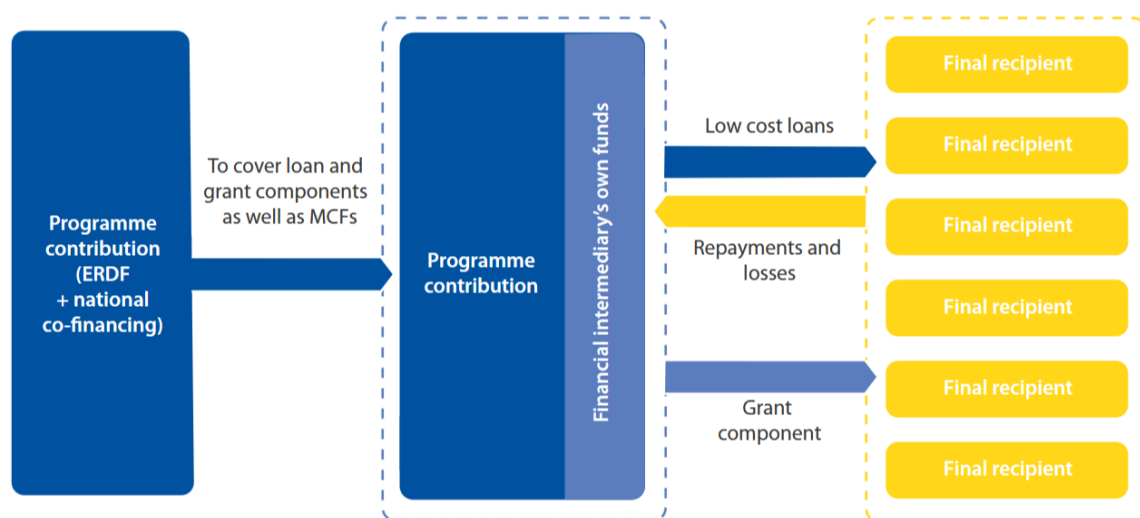


Figure 16: A model for a financial instrument with a grant component to support energy efficiency

In order to **increase flows of third-party capital** into energy efficiency renovations in homes and businesses, it is important to consider already identified success factors for private finance delivery. These factors include 1) addressing project orientation by considering how demand for energy efficiency investments can be stimulated in the target market, 2) integration facilitation services, 3) tailoring the financial offer for the target market needs, 4) suitability for deep retrofit, 5) easy, robust repayment mechanism.

Moreover, there is a growing recognition that targeted, **market-segment-specific solutions** are needed, and that the availability of a financial product does not in itself act to stimulate demand. There are examples targeting this shortcoming, including green mortgages and related products; performance contracting; repayment mechanisms such as On Bill Financing Schemes (where funding is arranged to an energy utility); blending of grants and loans, public and private cooperation, e.g., around the refurbishment of social housing.

The high cost of deep retrofits can be mitigated if the **repayment mechanism is robust** to changes in occupant, but still ESCO-like approach would be more feasible in case of social housing, SMEs or non-residential buildings (see more in Section 4.1.2 touching upon ESCOs).

Exploit opportunities lying in SMEs

Almost all (99%) European firms are SMEs, summing up to 25 million small and medium-sized enterprises. The average specific energy consumption in the non-residential sector is 280kWh/m² (covering all end-uses), which is at least 40% greater than the equivalent value for the residential sector. However, small-sized and non-energy-intensive industrial SMEs do not have enough capacity and

capital to apply energy efficiency improvements and are thus in need of a more supportive approach from intermediaries such as external experts. Therefore, they also lack the capacity to build a business case on any possible energy efficiency measure that they can take to financial institutions and funding sources. This is where an intermediary (e.g. ESCOs, qualified auditors) can provide important support. Concerns about financing have been exacerbated in the Covid-19 crisis, with SMEs reluctant to take on any more debt since SMEs predominantly finance their energy efficiency-related investments through equity, and their investment decision criteria are investment sum, energy saving and life cycle cost, whereas return is less important.

The uncertainty of future energy trends, proven by the rises in natural gas and petroleum, however, has motivated SMEs to reduce their energy consumption to avoid profit losses. However, even though market-leading banks have a plethora of green products, such as Green Loans, it does not apply to smaller, regional banks that SMEs usually do business with. Furthermore, many non-technical barriers remain unaddressed, such as lack of liquidity, financial capacity or the capacity to find competitive financing, lack of time, lack of information, lack of trust in potential results, low energy costs, and lack of access to finance have to be addressed.

Full energy efficiency potential, however, could be exploited when combining energy efficient technology implementation with successful energy management practices, moving from energy audit to climate & energy audit, as well as enhanced knowledge of the SME energy end-using processes. In light of this, New International Standards are being published to support SMEs (e.g. ISO 50005:202 and ISO 50009:2021).

Standardisation is important for SMEs in establishing a firm relationship between an asset owner, an intermediary (e.g. ESCO) and the financial community, as seen in de-risking programmes. Furthermore, standardisation of the energy audit approach for the SME sector and size and the development of standardised carbon saving metrics for SMEs is also very important.

Furthermore, market drivers, e.g. higher CO₂ prices, pressure from larger customers through the supply chain, and pressure from smaller customers and other stakeholders for climate action rivers, can also play a role in pushing SMEs to invest in energy efficiency. Peer-to-peer information exchange through structured knowledge-sharing networks (such as Energy Efficiency Networks) has been a successful approach for SMEs to boost energy efficiency in several countries.

Good Practices to Overcome Barriers in Energy Efficiency Renovations

Several best practices from Western Europe and Central and Eastern Europe (CEE) provide valuable insights into overcoming barriers in financing energy efficiency renovations for multi-apartment buildings:

1. **France's MaPrimeRénov:** This program offered grants for energy efficiency renovations, targeting around 700,000 households before concluding in 2022. Funded 70% by the EU's Recovery and Resilience Facility, it provided support based on income levels, covering up to 90% of renovation costs for low-income applicants.
2. **ICF Catalunya:** Aiming to construct 4,300 energy-efficient social housing units, this initiative has a budget of €327 million. It promotes accessible rental housing, demonstrating successful public investment strategies.
3. **Energy Efficient Mortgage Label (EEML):** This open-source platform aids homeowners and investors by providing transparent information on energy renovations, financing options, and potential suppliers, thereby addressing barriers related to information and decision-making.
4. **KfW Program in Germany:** The Energy Efficient Construction and Refurbishment program financed over 6.5 million housing units, resulting in substantial CO₂ savings. It integrates loans and grants with interest subsidies and debt relief, promoting ambitious energy efficiency standards and involving independent energy experts in the planning process.

5. **Romania's Green Homes Program:** This initiative has certified over 10,000 homes as energy-efficient through EU funding. The program is now being replicated in 12 countries under the SMARTER Finance for Families project.
6. **Bulgarian National Recovery and Resilience Plan:** This plan funds large-scale energy efficiency renovations and establishes a one-stop shop to simplify administrative processes related to renovation projects.
7. **EBRD Projects in Serbia:** A €12 million loan supports energy efficiency improvements in 80 public buildings, expected to reduce primary energy consumption by 53% and CO2 emissions by 56%. The EBRD also assists in harmonizing Serbian legislation with EU energy efficiency standards.
8. **Croatian Recovery and Resilience Plan:** This plan combines energy efficiency renovations with post-earthquake reconstruction, establishing one-stop shops to streamline administrative procedures.
9. **Poland's ERDF Instruments:** Financial instruments created by the EIB support projects that enhance energy efficiency in the housing sector, with various funding mechanisms including public-private partnerships and ESCO financing schemes.
10. **Latvian and Slovenian Projects:** The SUPERSHINE project showcases successful public-private partnerships for social housing renovations, leveraging local SMEs and one-stop shops to facilitate energy efficiency improvements.
11. **Lithuania's Energy Efficiency Fund:** This fund, managed by the EIB, has financed over 3,300 buildings, significantly improving energy efficiency standards in older multi-apartment buildings.

These examples highlight effective strategies and collaborative approaches that can be adapted to enhance energy efficiency renovations in multi-apartment buildings across Europe, addressing key financial and regulatory barriers.

Conclusions

In conclusion, addressing the financing needs for building retrofits is essential for meeting the EU's climate and energy goals outlined in the REPowerEU and the European Green Deal. While various funds and initiatives support energy efficiency, private sector involvement is crucial to bridging the significant investment gap. Public funds should act as catalysts to attract private finance through mechanisms like guarantees, grants, and advisory services.

Investor interest in energy efficiency is rising, but comprehensive data on public and private investments is necessary to effectively monitor the investment gap and support informed decision-making. Financial institutions play a vital role in mobilizing private investments by creating collaborative strategies and removing regulatory barriers.

A shift from an EU fund-based approach to a project-based model that includes substantial private contributions is needed. Blended financing models combining loans and grants, along with targeted financial products like energy-efficient mortgages, can simplify access to financing. Standardization and knowledge sharing are critical for driving retrofits, especially for SMEs.

Integrating the energy efficiency-first principle across all financial institutions is essential, with development banks leading by example. Financial institutions should also recognize the broader benefits of building retrofits, including improved comfort and social cohesion.

Lastly, addressing social and environmental considerations is vital for ensuring that retrofits contribute to a just transition. This involves tackling gentrification, ensuring accessible housing, and considering

ecological and social trade-offs. Enhanced cooperation among sectors will be necessary to maximize the impact of building retrofits in achieving the EU's sustainability objectives.

Recommendations

Summary of Recommendations for Energy Efficiency Financing

1. **Comprehensive Data Collection:** Establish a system to monitor public and private investments in energy efficiency, including energy performance certificates, to better identify and address the investment gap.
2. **Enhanced Private Sector Engagement:** Member States should develop co-creative investment strategies to increase private financing, removing regulatory barriers and ensuring public support mechanisms encourage rather than crowd out private investment.
3. **Project-Based Approach:** Shift from an EU fund-based model to a project-based approach that emphasizes private sector contributions, utilizing blended financing (grants and loans) to address the investment gap.
4. **Standardization and Knowledge Access:** Standardize procedures and metrics for energy efficiency projects to simplify access to financing, particularly for SMEs, and improve the speed from concept to bankable projects.
5. **Energy Efficiency First Principle:** Mainstream the energy efficiency first principle across all financial institutions, not just public banks, and ensure private banks integrate this into their lending practices.
6. **Innovative Financing Instruments:** Financial institutions should develop dedicated financing instruments for energy efficiency, inspired by successful initiatives like the Energy Efficient Mortgage Label (EEML).
7. **Valuing Multiple Benefits:** Financial institutions need to recognize the broader benefits of energy retrofits in their risk assessments and provide dedicated finance lines for energy efficiency projects.
8. **Enhancing Investor Interest:** Use tools like the energy demand index and energy performance contracts to increase private investor interest in building retrofits.
9. **New Capabilities for Financial Institutions:** Build capacity within financial institutions to identify and implement energy efficiency transactions, including providing technical assistance and participating in de-risking projects.
10. **Addressing Social Issues:** Tackle housing accessibility and gentrification through participatory approaches while considering the ecological impacts of climate transitions in renovation policies.
11. **Interinstitutional Cooperation:** Foster collaboration across sectors to maximize synergies between renewable energy and energy efficiency investments, while considering the potential negative impacts of such transitions.

These recommendations aim to enhance the financing landscape for building retrofits, aligning with climate and energy goals while ensuring social and environmental considerations are addressed.



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