



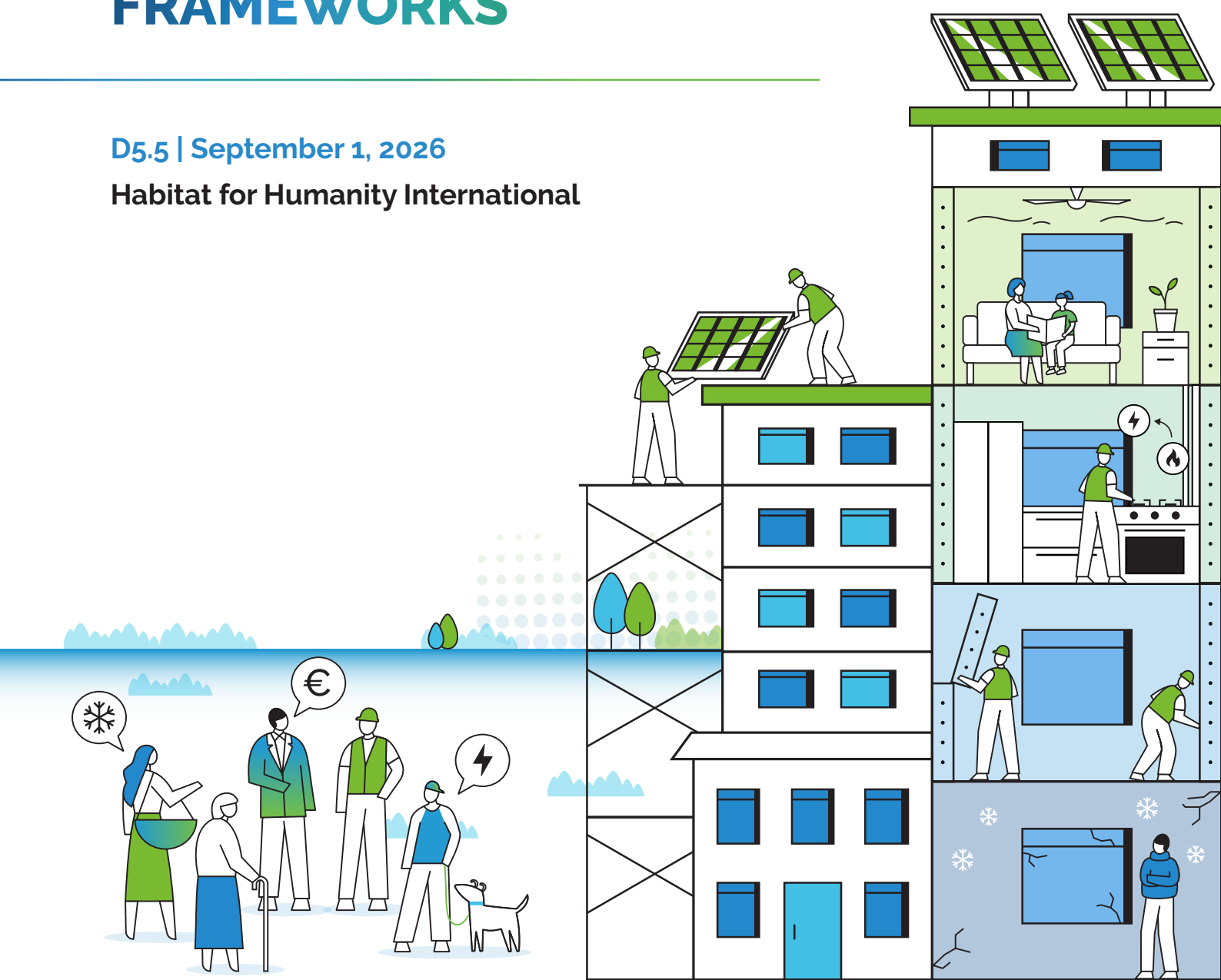
ComActivate

Enabling community action for energy sufficiency

GOOD PRACTICE REPORT ON ENABLING FINANCIAL FRAMEWORKS

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Habitat for Humanity International



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List of Acronyms

APVA	Environmental Project Management Agency
ESG	Environmental, Social and Governance
EBRD	European Bank for Reconstruction and Development
EERB	National Programme for Energy Efficiency in Residential Buildings
EERSF	Energy Efficiency and Renewable Sources Fund
EIB	European Investment Bank
EIF	Entrepreneurship and Innovation Foundation
EU	European Union
EU LIFE	L'Instrument Financier pour l'Environnement (EU Financial Instrument for the Environment)
ERDF	European Regional Development Fund
ESCOs	Energy Service Companies
GEF	Global Environment Facility
HfH	Habitat for Humanity
HoA	Homeowners Association
IBRD	International Bank for Reconstruction and Development
KfW	Kreditanstalt für Wiederaufbau (Credit Institute for Reconstruction)
MFAB	Multi-family Apartment Building
NDF	National Decarbonisation Fund
PPP	Public–Private Partnership
UAB ILTE	Lithuanian National Bank

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Methodology

This report is based on research of original sources, EU policies, documents and toolkits produced by Habitat for Humanity projects (especially ComAct and ComActivate), interviews with representatives of several ComActivate project partners (Habitat for Humanity Macedonia, Metropolitan Research Institute, Centre for Energy Efficiency EnEffect, Lithuanian Consumers Alliance) and interviews with resource centres in Hungary (Józsefváros Municipality resource centre), Lithuania (resource centres at Elektrėnai Utility Company and Kaisiadorys Municipality) and Bulgaria (Burgas Municipality resource centre). The publication also builds on one of the authors' experience from two EU funded projects – SMARTER Finance for EU and SMARTER Finance for All – where she led research, consultancy and advocacy activities on green blended finance for affordable housing. This included taking part in an international roundtable for municipalities, the private banking sector and NGOs co-organised by Habitat for Humanity as part of the Better Homes 2024 conference in Dublin, Ireland.

1 Executive summary

This publication has been developed as a part of **ComActivate**, a CINEA-funded project responding to the growing levels of energy poverty across the EU, especially in the Central and Eastern European (CEE) region.

The goal of this publication is to **provide comprehensive guidance on effective public-private partnership (PPP) models and financial frameworks that promote energy efficiency in multi-family apartment buildings (MFABs)**. It highlights good practices in the renovation¹ of privately owned MFABs, as well as placing a special focus on PPP models that create conditions for affordable energy-efficiency improvements for **energy-poor households**.

While the stakeholder structures behind blended financing can be labour-intensive to manage, they are vital for unlocking private capital for energy-poor communities. This report provides both a roadmap for those entering this demanding field and a deep dive into recent PPP renovation developments across the CEE region.

The content is divided into three main sections. The first provides an introduction to the **benefits and current trends in PPP funding for energy-efficient renovations**. It includes a short description of the most common types of PPPs and lists the most important stakeholders and their roles. It also reflects on the gender aspects of energy-efficient renovations, and on the specific PPP models available to women.

The second section includes **seven case studies of successful PPP projects** that have been implemented in or are adaptable for Central and Eastern Europe. These case studies not only provide examples of different funding mixes but also help to illustrate how stakeholder motivation and attention to detail influence the success of a project.

The final section of this publication is focused on **in-depth analysis of the potential for PPPs in the renovation of MFABs in Bulgaria, Hungary and Lithuania**. Readers can learn about recent developments in this area as well as the opportunities for development of PPP projects which would speed up the affordable energy-efficient renovation of MFABs in these three countries. This section also includes policy recommendations aimed at unlocking private finance.

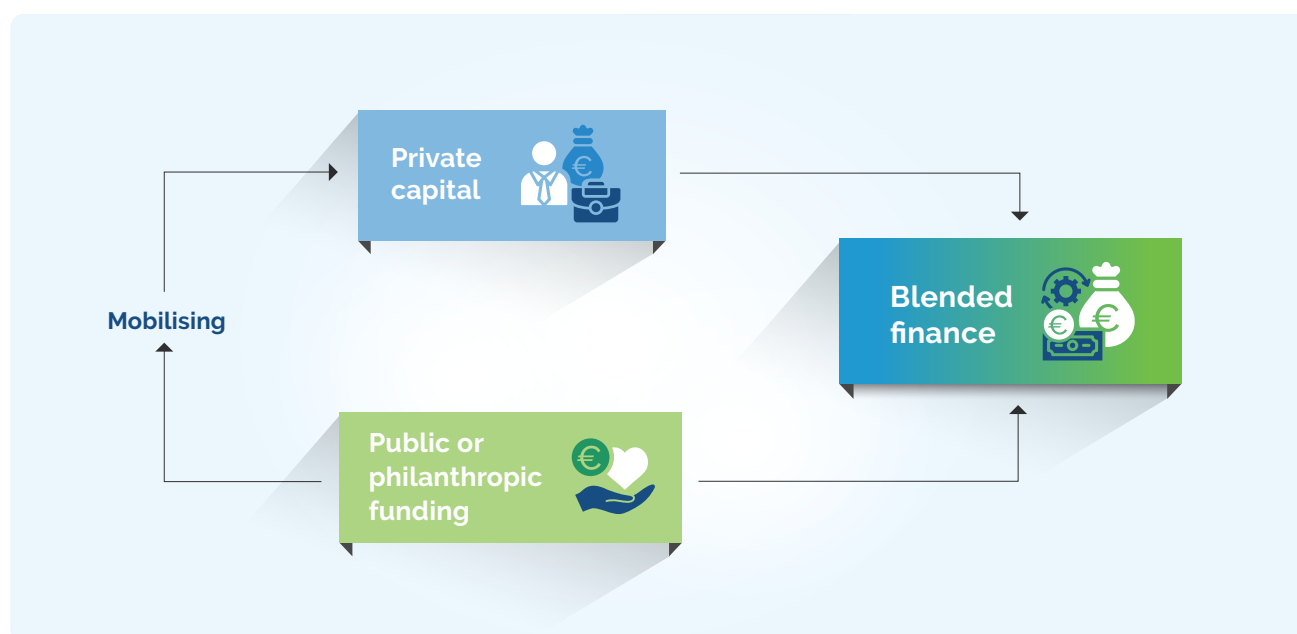
¹ Please note that where this document speaks about renovations, it refers to renovations of MFABs to improve energy-efficiency standards unless otherwise specified. The publication puts an emphasis on deep renovation while highlighting specific situations where step-by-step renovations are advisable.

2. Blended finance and renovation of MFABs

2.1 Introduction to the benefits of public–private partnerships

2.1.1 Terminology: blended finance and public–private partnerships

Blended finance uses capital from public or philanthropic sources to unlock and increase private sector investment in sustainable development. It is often used in low- and middle-income countries where development funds can be leveraged, as well as in more developed countries where it typically helps to address social issues such as energy poverty. A blended finance approach encourages public–private cooperation and can be used in many sectors, the housing sector in particular.



Visual 1: Blended finance (Source: Based on [Convergence website](#))

The blending of public and private finance is also a common feature of public–private partnership (PPP) projects, but it is not the only feature. For the purpose of this publication, we understand PPP as a collaboration which can have both financial and non-financial aspects. Non-financial contributions from public bodies (states, regions or municipalities) could come, for instance, in the form of administrative support, community work, local tax deductions, active land policies, guarantees or one-stop shops.

2.1.2 Why do we need PPPs for building stock renovations?

Around 75% of the European building stock is energy inefficient. However, **public funds alone will never be enough to renovate all the buildings to the necessary efficiency standard. According to the Bruegel Institute, achieving the energy savings targets given by the Energy Performance of Buildings directive requires additional investment of about €150 billion per year up to 2030.**² From a political perspective, renovations of energy-inefficient buildings have been seen as low-hanging fruit on the way towards carbon neutrality. **The residential sector represents over a quarter of total European energy consumption, and within it technological changes can be made in a simpler, faster and more standardised manner than in the industrial or transport sectors.** From a technical perspective, renovation trends are moving towards deep, highly energy-efficient and certified renovations which offer not only a better cost performance ratio, but also greater benefits for comfort, health and the environment – although raising quality standards naturally increases the need for funding. Finally, from a social perspective, if a state helps the majority of its citizens to access private funding, it can use most of its available resources to support marginalised and vulnerable groups threatened by energy poverty.

Unlocking private finance is therefore necessary to speed up the renovation rate and provide accessible housing to all income groups. Although private investors are slowly acknowledging the investment potential of energy-efficient buildings, in some European countries renovations of multi-family houses are still perceived as risky.

Bringing on board the **public sector** as well as **international donors** provides **derisking for private investors**, and opens opportunities for people who could otherwise not afford to invest in energy efficiency. Additionally, the involvement of state and local administrations can further increase the sustainability of financing, for example through legal guarantees; and their role in spatial planning and awareness-raising can drive demand among homeowners. The private sector can increase cost efficiency by driving on-time delivery, knowledge sharing and technological expertise. It can also play a crucial role in raising awareness and creating demand. A balanced combination of public grants and subsidies and market-based financing enables public funds to go further, providing more financing for affordable housing projects where long-term loans paid back in small instalments are an essential tool. Multiyear public schemes create predictability, which is welcomed by the financial sector.

Nevertheless, private market actors are often eager to invest into the lower-hanging fruit of energy efficiency like new builds or minor enhancements such as solar panels, which require little or no coordination among homeowners and have shorter payback times than deep renovations.

Loan schemes for renovations are often structured around the assumption that repayments will be covered by energy cost savings. However, in many European countries including Hungary and Bulgaria, energy price caps distort market prices and therefore limit the savings resulting from reconstruction. In these cases, public subsidies are a crucial tool to make private investments into renovations viable. **Public subsidies “can decrease payback periods for solvent households, making renovation projects attractive even in countries where energy prices are heavily subsidized, lowering the immediate investment costs and ensuring favourable pay-back periods”**³

To overcome these challenges, PPP developers need to find ways to make their projects attractive and safe for all parties concerned – both the public and private sector, and primarily the owners themselves.

² Bruegel (2024). How to finance the European Union's building decarbonisation plan. Accessible at: <https://www.bruegel.org/policy-brief/how-to-finance-european-unions-building-decarbonisation-plan>

³ Eneffect and collective (2021). Toolbox of financing models for energy-poor households, p 6. Accessible at <https://comact-project.eu/wp-content/uploads/2021/05/ComAct-D3.1-Toolbox-of-financing-models-final-layout.pdf>

2.1.3 Benefits of PPPs for renovations of multi-family apartment buildings

Blending finance is not the only reason for public–private cooperation. In Hungary, Lithuania and Bulgaria (as in most of Central and Eastern Europe), where the majority of MFABs are privately owned, PPPs are often the only way to remove barriers to funding.

Some of the most common barriers are:

- 1 Poorly coordinated or fragmented homeowners' associations (HoAs) – internal consensus over a major investment is challenging to facilitate between a high number of homeowners.
- 2 A high share of low-income homeowners who may block the renovation by voting against it, or who have insufficient funds or are unable to receive loans.
- 3 The presence of homeowners with special needs – for example, energy-poor homeowners, or elderly homeowners who need support to obtain and complete the necessary documentation.

In each of these cases, HoAs may require the support of professional facilitators, mentors, social workers, and financial and technical advisors, as well as additional targeted funding for low-income households. These barriers exemplify the concept of **building-level energy poverty** as a cause of energy poverty. Their respective solutions fall beyond the control of individual residents and need coordinated action; for instance, facilitation provided via a one-stop shop model.

Public sector involvement, ideally in cooperation with non-profit organisations, can help create the necessary conditions for such renovation projects to proceed. Renovating MFABs is an inherently complex undertaking, and as such it calls for a holistic approach to guidance, subsidies, and the monitoring of results. Support from a well-coordinated group of stakeholders can smooth the path for such projects, and make them financially appealing to private investors.

2.1.4 Growing interest in investing in MFAB renovations – the power of impact investments

Despite the complexity described above, public–private MFAB renovations are getting increasing attention from private investors such as pension funds and insurance companies. **Changing European legislation and societal trends are encouraging investors to pursue projects with demonstrable social and environmental impact to align with their environmental, social and governance (ESG) models and positively reflect on their brands.** There is, for instance, a significant interest in PPP renovation projects that combine the development of non-profit/public-sector-owned social housing with for-profit housing, representing a safe investment with a visible social impact.

At the core of these changes are European policy trends which are encouraging the private finance sector to **increase its financing of energy-efficient housing. The critical issue is no longer the availability of private capital, but rather the strategic deployment of public funds to incentivise private investment in complex initiatives – such as affordable MFAB renovations.**

What is driving the European financial sector's increasing commitment to energy efficiency? The core catalyst is the management of stranded asset risk. After the introduction of European legislation such as Clean Energy for All Europeans,⁴ the EU Taxonomy,⁵ the Fit for 55 package⁶ and the EU Renovation Wave,⁷ **properties can lose significant value, become unsellable or be unable to meet investors' demands if they fail to meet stricter energy-efficiency regulations** and other sustainability standards. If a bank keeps such a property on its books, it increases its exposure. A simple solution to this problem is to increase the number of investments into energy-efficient buildings.

International banks like the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB) and KfW (German Development Bank) have moved beyond viewing energy efficiency as a simple green add-on. Instead, they treat it as a fundamental business metric that dictates where they invest their capital and how they design their operations. These banks offer tested examples and models for the private sector to learn from, and the European private banking sector is naturally following their lead.

It is important to say that deep renovation of inefficient MFABs in private ownership remains on the fringes of this trend for several reasons. When making an impact investment, the impact needs to be measurable. It is easier to invest into new builds which allow fast, transparent and detailed access to data on energy performance as well as other green housing or social criteria readily accessible from a single developer than it is to coordinate data collection with multiple homeowners via HoAs. This is also why smaller, straightforward energy upgrades which do not involve structural changes – such as installing solar panels – are popular. Energy performance certificates (EPCs) are necessary, but real estate investors and lenders are increasingly calling for periodic **access to energy usage data**, preferably in direct remote access to digital meters. Some jurisdictions (for instance Australia) are currently moving to obligatory disclosure of data on a building level. More public access to this data could help with the calculation of renovation investment returns and the management of assets. The higher the level of control over the renovation process and its outcomes, the more willing the funder will be to provide tailored mortgage products or phased renovation financing.

One example that shows how renovations can attract impact investments is the EU LIFE-funded C-REAL project⁸ focused on pooling renovation-linked mortgages and targeting low-income buyers of dwellings in need of renovation (see case study 3.6).

4 More information accessible at: https://ec.europa.eu/commission/presscorner/detail/en/ip_16_4009

5 More information accessible at: https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en

6 More information accessible at: <https://www.consilium.europa.eu/en/policies/fit-for-55/>

7 More information accessible at: https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/renovation-wave_en

8 Learn more at <https://build-up.ec.europa.eu/en/resources-and-tools/articles/inclusive-pathways-renovation-blended-finance-for-just-energy-transition>

2.2 Finding the right mix – basic types of funding and stakeholder combinations

2.2.1 Basic types of PPPs

In the following subchapter we examine the most common types of public–private partnership which either directly blend public and private finance or create the necessary conditions for the private sector to invest into MFAB renovation projects that would otherwise be deemed too risky or too burdensome. Projects often utilise several of the basic types at once (see Chapter 3 for specific examples of these PPPs).

• National and international credit lines

National and international banks can offer financial credit to private commercial banks in order to create targeted loan products for use in MFAB renovations under specific conditions (for instance, with an increase of the EPC level to B, or the use of green technologies). Such loans can be made accessible to HoAs or individual owners, and paired with state subsidies. For an example of this funding, see the Latvian example in subchapter 3.2.

• Interest rate subsidy

The state can partially or fully subsidise commercial interest rates to banks so consumers can receive a fixed loan that makes their monthly payments more predictable and affordable. With this state support they can receive a low-interest or even zero-interest loan without reducing the bank's profits. Such arrangements are commonly used in combination with national credit lines or national guarantees, or as an additional incentive in combination with a subsidy. For an example of a commercial loan with a state-sponsored interest rate, see the Hungarian example in subchapter 4.2.

• International and national guarantee funds

Guarantees are provided to commercial banks to de-risk investments in renovation by covering their potential losses in cases where borrowers are unable to repay their loan on time. This allows banks to facilitate loans even to low-income clients who would otherwise be excluded. Similarly to national credit lines, national guarantees are commonly funded with the use of various EU funds established to meet climate goals. National guarantees are common in Lithuania, for instance. Sometimes the relationship is established directly between an international institution such as the EIB and a private bank selected via direct application, or a call facilitated by the state.

• National revolving funds

A national revolving fund is a self-replenishing pool of capital. Its initial capital comes either from the state budget, from international banks such as the EIB, or from EU funds. It can provide loans directly to homeowners, or through cooperation with a private bank. Without such pressure to make a profit, revolving funds can offer lower interest rates than private banks and can provide financing to low-income borrowers. Repayments from borrowers, including interest, stay in the fund and are used to fund new projects. In the long term, revolving funds constitute a highly sustainable form of support which can be easily combined with non-repayable subsidies. One example of such a fund is Estonia's KredEx, described in subchapter 3.1.

• Green mortgage schemes

The goal of a green mortgage is to provide quality green housing with verifiable performance: this enhances borrowers' loan-servicing ability, increases property value, and consequently lowers risk for banks. Lower risks allow banks to charge lower financing costs to their clients. While they are mostly used for newbuilt purchases, green mortgages are occasionally also offered for deep renovations. In addition, they can be paired with state subsidies and national credit lines commonly funded by various EU funds established to mainstream green solutions for meeting climate goals. An example of such a scheme is the New Green Savings scheme in the Czech Republic.⁹

• Energy performance contracts

Energy performance contracts are agreements to implement upgrades that guarantee reduced energy consumption and costs. Utility companies, energy suppliers, construction firms and equipment installers can be instrumental in implementing and/or financing simple energy-saving measures or full renovation projects within the energy performance contract framework. For example, using their own resources or with external investors, ESCOs may finance all the work needed up front, and enter into a contract based on performance with renovators and owners: repayment is then conditional on the delivery of the promised energy savings. Commonly, monthly energy payments will stay the same, with the loan being repaid from the savings. Another method is to add a small levy to the user's energy or service bills for the duration of the contract. In Central and Eastern Europe, ESCOs are often municipal companies. Since municipalities are commonly engaged in the distribution of public funding, municipal ESCOs are well placed to blend public and private funds in order to develop renovation projects which are accessible even to energy-poor homeowners and create a minimal administrative burden for HoAs. Even without any interest from commercial banks, ESCOs can raise necessary funds by selling future cash flows from savings (refinancing via forfaiting) to other private or public investors, for instance with the assistance of the state issuing green bonds to be bought by citizens.

Moreover, municipalities or regions heavily involved in the provision of ESCO services can create a super ESCO, an aggregation of numerous energy projects attracting investors and providing funding to local ESCOs. Scale and standardisation lower both costs and risks.

For more information about ESCO projects, see the Latvian example in subchapter 3.4.

• Municipal projects

Municipal budgets are generally not large enough to finance entire renovation projects, and are more often used to support smaller improvements or emergency repairs. However, their support can play an important role in unlocking private finance. Their limited funds can be used to provide loan guarantees rather than subsidies. Municipalities can also temporarily waive local tax or other service charges as a form of indirect financial incentive. Active land policy, extensively developed especially in the post-war Netherlands,¹⁰ is another powerful tool: by cooperating with private developers on the redevelopment of public areas (such as parks or parking spaces) in the vicinity of renovated property, municipalities can increase the interest of private investors. Finally, municipal resource centres and one-stop shops can play an important role in connecting banks offering energy-efficiency products with homeowners seeking greater knowledge of the market.

⁹ <https://novazelenausporam.cz/bezurocny-uver/>

¹⁰ For more information about active land policy in the Netherlands see for instance Buitelaar, E., van den Hurk, M., Lebbing, J., Pelzer, P. & van Karmen-beek, L. (2025). Land Policy in the Netherlands: An Ambiguous Utopia on the Move. In: Hartmann, T., Hengstermann, A., Jehling, M., Schindelegger, A. & Wenner, F. (eds) Land Policies in Europe. Springer, Cham (Accessible at https://link.springer.com/chapter/10.1007/978-3-031-83725-8_13)

• Tax incentives

The state can encourage private investments into renovations through tax reliefs such as VAT waivers on building material and services for certain projects and buyers. Tax reliefs can be directed at providers of financial services as an incentive to provide products enabling affordable renovations, at ESCO companies renovating through energy performance contracts, or at developers (including HoAs) of renovation projects. They can also come in the form of income tax relief for homeowners who have green mortgages or who invest in energy-efficient solutions. A directive allowing the reduction of VAT on green or energy-efficient solutions was introduced to EU legislation several years ago. Similar incentives are available in the UK.

• New sources of revenues

Renovations sometimes enable better commercial use of a property. Unused cellars in panel houses can be turned into storage rooms or garages, and rooftop extensions can easily create additional apartments. Renting or selling these creates additional sources of revenue which can be used as bargaining chips when obtaining a mortgage. HoAs can find financial partners for such projects in developers interested in investing in housing in a central location, or in municipalities looking for a quick solution to a lack of affordable rental housing. Wooden modular constructions, such as those used in Berlin by the municipal housing company Hogowe,¹¹ can provide a speedy way to add several high-quality apartments and increase the overall attractiveness of a location.

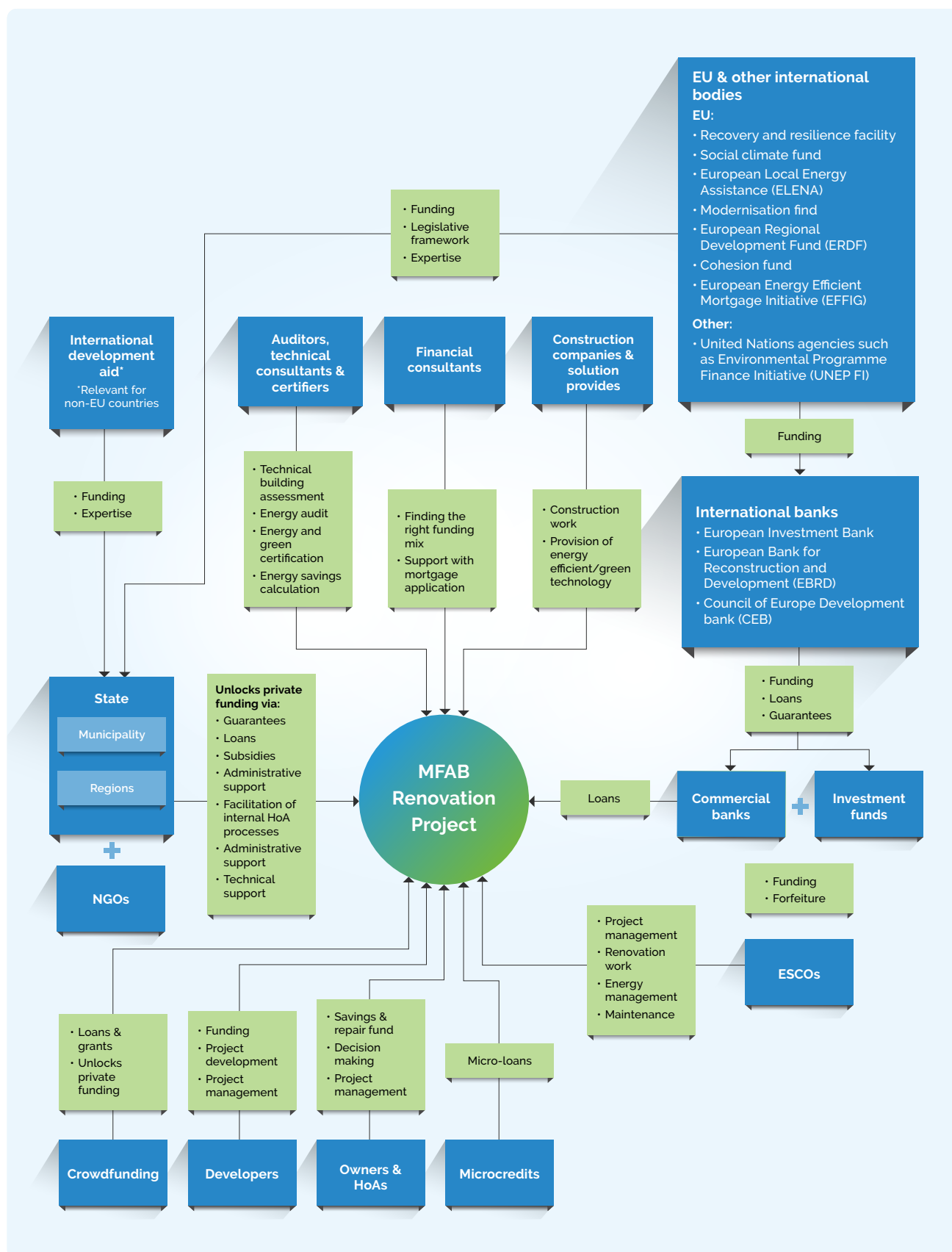
2.2.2 Stakeholder mix

Developing a PPP project for MFAB renovation entails a quest to find a holistic financial solution for a complex issue. Unlike purely public or private projects, PPPs require cooperation between multiple stakeholders on multiple levels. To succeed, MFAB renovation requires the involvement of many people with widely different levels of technical, legal and financial knowledge. As such, PPPs focused on MFABs often require stakeholders who will facilitate the exchange of information, awareness raising, conflict resolution and data collection, in addition to the stakeholders providing funding and renovation services.

PPPs often create innovative new funding models for projects which would be ineligible for purely private funding. However, this element of the unknown increases the risks associated with lending and needs to be addressed. The more stakeholders involved, the more complicated PPPs become – but the presence of additional players and guarantees also decreases the risks.

On the diagram below is a non-exhaustive list of potential stakeholders at all governance levels (international, national and local).

¹¹ Deutsche Handwerks Zeitung (2022). Mehr Wohnungen durch Aufstocken von Plattenbauten. Available at <https://www.deutsche-handwerks-zeitung.de/mehr-wohnungen-durch-aufstocken-von-plattenbauten-262509/>



Visual 2: Diagram of potential stakeholders involved in an MFAB renovation project (Source: Author)

2.3 Gender aspects of energy-efficient housing renovations

2.3.1 Women as overlooked drivers of change

Despite consensus among researchers and policymakers that energy poverty disproportionately affects women, financial mechanisms targeting women's energy and energy-efficiency needs are extremely rare, and there is a significant gap in research on how PPP models and financing mechanisms impact men and women differently. Rare studies addressing gender and energy efficiency focus mostly on energy consumption¹² habits and daily decisions such as small DIY energy-efficiency improvements.¹³

While women often drive their household's behavioural changes in energy efficiency as well as in the consumption of sustainable products, cultural norms tend to place energy renovations in the male sphere of interest. Moreover, women are often primary energy users, and are more receptive to the non-financial benefits of energy-efficiency renovations. Research shows that women in Eastern Europe typically have equal decision-making power in their relationships, and partners with a higher level of education or income are likely to have a bigger say regardless of their gender. In difficult financial situations, women are even more likely to take the lead.¹⁴ Dismissing women as decision-makers has repercussions for the entire energy-efficiency business sector, and private investors risk missing out on an important market if female consumers are not specifically targeted.

In the affordable housing sector, women constitute a significant number of potential beneficiaries. Women's life expectancy is longer than men's. They also more often perform unpaid work as primary carers for their children or relatives, and as a result receive smaller pensions than men. Therefore, elderly women living alone and female-headed households are especially vulnerable to energy poverty. As an illustration, in 2017 Bulgarian women received pensions that were 2.5 times lower than men's, while in the same year, women over 65 were three times more at risk of poverty than Bulgarian men.¹⁵

According to data obtained from ComActivate municipal partners **in Hungary, Lithuania and Bulgaria, women are more likely than men to seek out services and attend events at their resource centres (one-stop shops).** Interviewed employees observed that women tend to be more active in information sessions, and are more often involved with compiling the documentation necessary for subsidy applications (although in Lithuania men tend to be in the majority at events oriented towards technical topics). Resource centres could build on this knowledge and adjust their services accordingly, for instance by offering information sessions held in child-friendly spaces.

The communication, advocacy and marketing strategies of PPP stakeholders such as public officials, energy auditors, finance advisors and financial institutions should take female perspectives and needs into consideration. **This is not only to provide possible women beneficiaries with equal access to opportunities, it is also to harness their potential to be the drivers of energy-efficiency renovations in their families and communities.** Initiatives could include the provision of child-friendly spaces in their premises, or making information and services more accessible to people with mobility, hearing or reading difficulties (for instance, by offering an option for communication via post using large-print materials).

¹² World Bank (2015). Toward Gender-Informed Energy Subsidy Reforms: Findings from Qualitative Studies in Europe and Central Asia. Accessible at <https://openknowledge.worldbank.org/server/api/core/bitstreams/044756ae-01c0-5eff-858b-c1cd9990d401/content>

¹³ Bartiaux, F. (2022). Gender roles and domestic power in energy saving home improvements. Buildings and Cities, 3(1): 824–841. Accessible at <https://journal-buildingscities.org/articles/10.5334/bc.232>

¹⁴ Mader, K. & Schneebaum, A. (2013) The gendered nature of intra-household decision making in and across Europe. Vienna University of Economics and Business. Accessible at <https://research.wu.ac.at/ws/portalfiles/portal/17754736/wp157.pdf>

¹⁵ World Bank (2015). Toward Gender-Informed Energy Subsidy Reforms: Findings from Qualitative Studies in Europe and Central Asia. Accessible at <https://openknowledge.worldbank.org/server/api/core/bitstreams/044756ae-01c0-5eff-858b-c1cd9990d401/content>

Finally, as much as targeted financial support remains the key tool for including women from low-income households in the renovation of MFABs, communication of the non-financial benefits of energy efficiency (e.g. health) and the inclusion of community elements such as the revitalisation of common areas (meeting places, playgrounds, community gardens) can provide additional motivation for women to become actively involved.

2.3.2 Access of women to renovation finance

The gender pay gap (and subsequent pension gap) often translates into less favourable mortgage conditions for women, as their lower average earnings can restrict their borrowing capacity and result in higher interest rates. When it comes to public funding, women in Central and Eastern Europe are disadvantaged by their continuing underrepresentation in decision-making roles.

European legislation attempts to address these gaps. The Resolution of 5 July 2022 on women's poverty in Europe states that the Fit-for-55 policy package and the Social Climate Fund should be "designed and implemented with a clear gender dimension, so that they benefit women as equally as they benefit men". The World Bank's environmental and social policies include addressing gender disparities in accessing project benefits. Nevertheless, despite this high-level recognition, gender mainstreaming remains relatively rare in national policymaking.

In Central and Eastern Europe it is not common for public renovation support programmes to include additional incentives for vulnerable groups such as women or the elderly. Two exceptions discussed further below are the Romanian Regional Operational Programme which specifically targets needs of women, children and Roma minorities (including by targeting investments into community projects supporting women threatened by energy poverty) and the Lithuanian APVA (Environmental Project Management Agency).

The UK "Boiler on Prescription" governmental initiative is unusual in highlighting the links between the increased health care costs of elderly citizens and their energy poverty.¹⁶ The name of the Czech programme "Repair Grandma's House", which provides grants to owners of old family houses, directly refers to the fact that elderly women can be rich in assets and still vulnerable to energy poverty. There are only a limited number of financial stakeholders whose renovation loan products target women.

Microloans, typically provided in the international development sector, are one of the few products which have historically targeted women, and energy renovations are among their most common uses. While they do not provide enough funding for deep renovations, they can help with building renovation, improving the financial experience and credit score of female homeowners.

Crowdfunding is another sector frequently favoured by women developers and entrepreneurs as well as by women investors. Research suggests that women-led campaigns are 57% more successful in reaching their target than those led by men,¹⁷ due to women's ability to create a sense of inclusivity and community. A similar pattern can be seen at Crowdfunder, one of the largest UK crowdfunding platforms. Some 64% of its Social Enterprise projects are run by women, and the success rate for these is 49% compared to a category average of 43%.¹⁸

¹⁶ Learn more about the first pilot at <https://www.theguardian.com/environment/2014/dec/09/boiler-on-prescription-scheme-transforms-lives-saves-nhs-money>

¹⁷ Female Founder Space (2026). 5 Crowdfunding Campaigns of Female Founders and their Key to Success. Available at <https://femalefounder-space.com/5-crowdfunding-campaigns-of-female-founders-and-their-key-to-success/>

¹⁸ Crowdfunder (2022). Empowering Women: The Impact of Crowdfunding. Available at https://www.crowdfunder.co.uk/uploads/crowdfunder_women_success_power.pdf

3 Case studies: Successful PPP schemes applicable in Central and Eastern Europe

This chapter presents best practice examples illustrating various PPP structures. By analysing specific case studies, it aims to clarify basic PPP models. In addition, the chapter reviews the developmental stages and recent updates of these projects – some of which have spanned over a decade – while highlighting instances of successful adaptation and facilitation of complex collaboration. Each subchapter introduces a case study with a key information matrix and the rationale for its selection.



3.1 Revolving fund

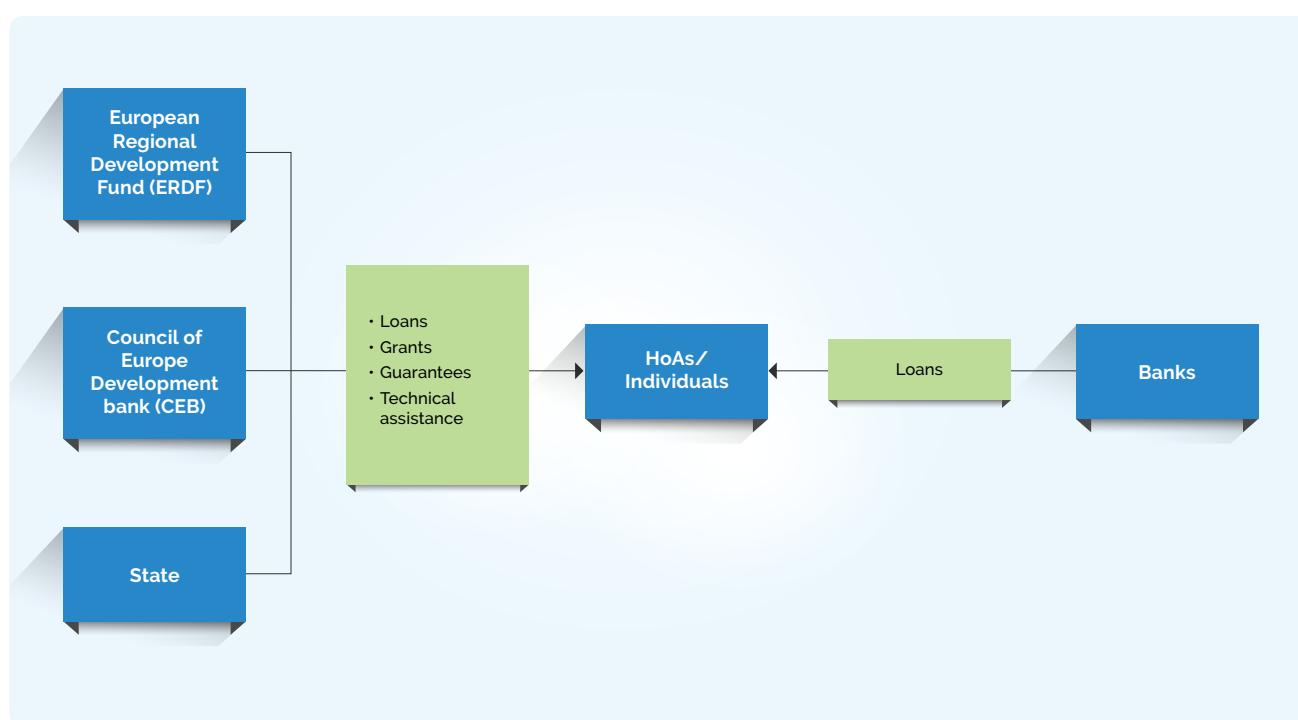
Name of the project	KredEx / Entrepreneurship and Innovation Foundation (EIF)
Country	Estonia
Type of PPP	Revolving fund combining loans, grants and guarantees
Year	2009, ongoing
Good practice	Pioneered use of international development funds in renovation funding
Key source	https://eis.ee/avaleht-elamumajandus/?context=eluase-eestis

Good practice

In 2009 Estonia introduced KredEx,^{19,20} a revolving loan scheme which was the first of its kind in the EU. For the first time, the Estonian government **used international development funds to enable private investments**. At the time of its creation, KredEx (which was later renamed to Entrepreneurship and Innovation Foundation, EIF) was revolutionary in its active coordination of relationships between banks and HoAs.

Financial approach

KredEx combined finance from the European Regional Development Fund (ERDF), the Council of Europe Development Bank and the state, **providing HoAs with affordable loans later combined with small grants (available since 2001), guarantees and technical assistance** to encourage large-scale renovations.



Visual 3: Basic funding scheme (Source: Author)

¹⁹ Programme website accessible at <https://eis.ee/avaleht-elamumajandus/?context=eluase-eestis>

²⁰ More details about past performance are accessible at https://comact-project.eu/pilot_content/toolbox-of-financing-models-for-energy-poor-households/ (p. 66).



Overview of the current programme

Currently, EIF offers multiple solutions for HoAs, municipalities and citizens (such as low-income families with children) to help them find the right mix of funding for their situation. As a priority, the Foundation creates the conditions needed for citizens to pursue private funding and steps in only to fill the gaps.

The currently open **Apartment Building Renovation Loan**²¹ is an example of a sustainable approach to affordable funding. It is aimed at HoAs that have received a negative response to their loan application from the bank or those who have been offered "unreasonable terms (e.g. a very short term or significantly higher interest than usual)".²² A loan of between €15,000–3 million comes at the 6-month average Euribor interest rate plus 2%, has a term of 30 years, and allows payment holidays as needed. Repair fund payments are used as collateral. The flexibility and accessibility of this loan is especially suitable for HoAs with high numbers of energy-poor households, due to which they are unable to obtain a loan from the private sector.

To maximise the chance of receiving a bank loan, EIF provides **guarantees to HoAs** whose risk is assessed by the bank as "higher than usual". This could be caused, for instance, by a high proportion of debtors or the location of the building. The EIF guarantee covers up to 80% of the loan and can be obtained directly through participating banks. Besides renovation, the guarantee also covers other comfort and safety improvements, such as landscaping.

The loan can be combined with **Regional Reconstruction Grants**²³ (2022–2027) which offer subsidies for renovations and the replacement of heating systems in specific types of MFABs (such as heritage protected apartments or neighbourhood projects, particularly in more remote areas), providing grants of 30–50% of the project cost..



Challenges

Although the strict technical requirements of KredEx helped to establish energy efficiency and green architecture principles as a new standard, in some cases its new demands led to the manipulation of construction prices.²⁴ In response, HoAs previously inexperienced with energy-efficient reconstructions had to develop more robust procurement processes to avoid being taken advantage of.



Takeaways

The EIF example shows that **states can establish robust and long-lasting renovation programmes even without substantial initial state investment**. Indeed, an ability to provide stable conditions for private funding via long-term loans is a contribution as valuable as a financial subsidy.

21 Learn more at <https://eis.ee/teenused/renoveerimislaen/?context=eluase-eestis#laenuka-finantseeritavad-renoveerimistood>

22 Ibid.

23 Learn more at <https://eis.ee/teenused/kodudkorda/>

24 ERR News (2024). 'Pealtnägija': Estonian prosecutors suspect collusion behind Kredex grants. Accessible at <https://news.err.ee/1609239537/pealtnagija-estonian-prosecutors-suspect-collusion-behind-kredex-grants>



3.2 Double-track loans

Name of the project	Heating Efficiency Measures at Multi-residential Buildings and other ERDF-funded programmes
Country	Latvia
Type of PPP	Revolving fund combining loans, grants and guarantees
Year	2004, ongoing
Good practice	Learning from ex-ante assessments; one-stop shop administration body
Key source	https://www.fi-compass.eu/sites/default/files/publications/ERDF_EE_FIs_in_Latvia_case_study.pdf



Good practice

Like Estonia's EIF, in 2004 Latvia piloted renovation funding which combined public funds with private finance. The Latvian experience is worth highlighting because it shows **a programme which gradually grew and improved its effectiveness by addressing challenges discovered on the way**. The establishment of a **robust state-owned development finance institution** ensured continuity while allowing changes in funding streams and adaptation to the changing needs of different stakeholders.



Financial approach

The 2004 pilot provided municipalities and HoAs with loans using funding from KfW, the German Development Bank. This PPP project was jointly implemented by the Latvian government and Hipoteku Bank. In 2007 Latvia scaled up with ERDF funding followed by more calls for finance, also using the Recovery and Resilience Facility (RRF) in combination with private funding. **The ability to plan beyond the individual ERDF and RRF funding periods** while using them both to provide almost uninterrupted funding for nearly 20 years is a great example of how to unlock private funding and interest in renovation loans via the **provision of long-term stable conditions**.



Challenges

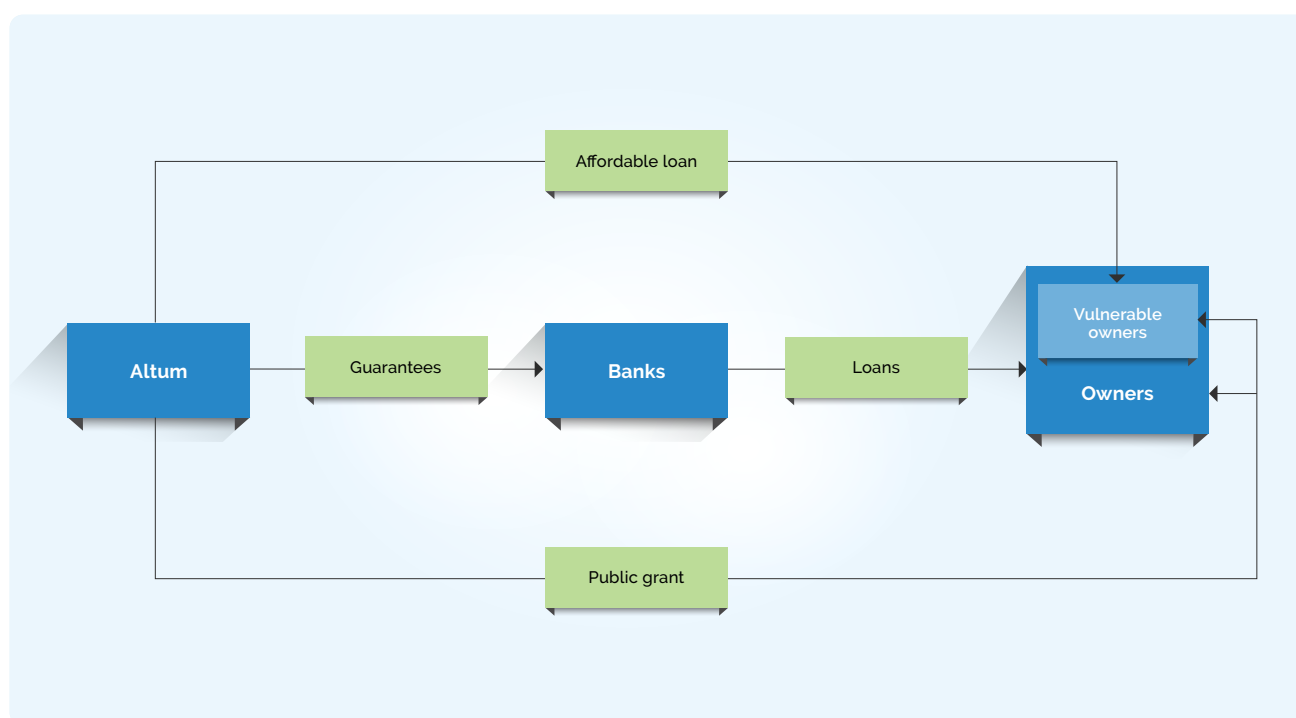
Assessments at the end of the 2007–2013 financing periods helped to establish that interest of commercial banks is lower than expected, especially in case of MFABs in less popular locations. To open the funding to HoAs outside bigger cities, loans were subsequently paired with guarantees and small grants, reducing the payback period of the energy-efficiency measures.



Overview of the current programme

Latvia's "Energy Efficiency Programme for Multi-apartment Buildings,"²⁵ launched in 2016, took post-assessment recommendations on board. Altum, Latvia's state-owned development finance institution, introduced **guarantees (of up to 80%) to secure private renovation loans**. These loans were provided to final recipients by four major commercial banks operating in the country (Citadele, Swedbank, Luminor and SEB Banka). **In cases where commercial banks still declined to provide a loan, Altum provided an affordable loan directly, offering an interest rate of 3.5% and a 20-year term.**

Finally, **both public and private loans were eligible to be paired with a public grant** (of up to 50%), increasing buy-in among apartment owners. To smooth the application process, Altum provided **free one-stop shop consultancy** for HoAs and an online tool for payback calculations used by HoAs and banks alike. Streamlining the process via one comprehensive support agency allowed Altum to administer resources with a "commercial mindset, offering a more effective process compared to an administrative approach used by agencies".²⁶



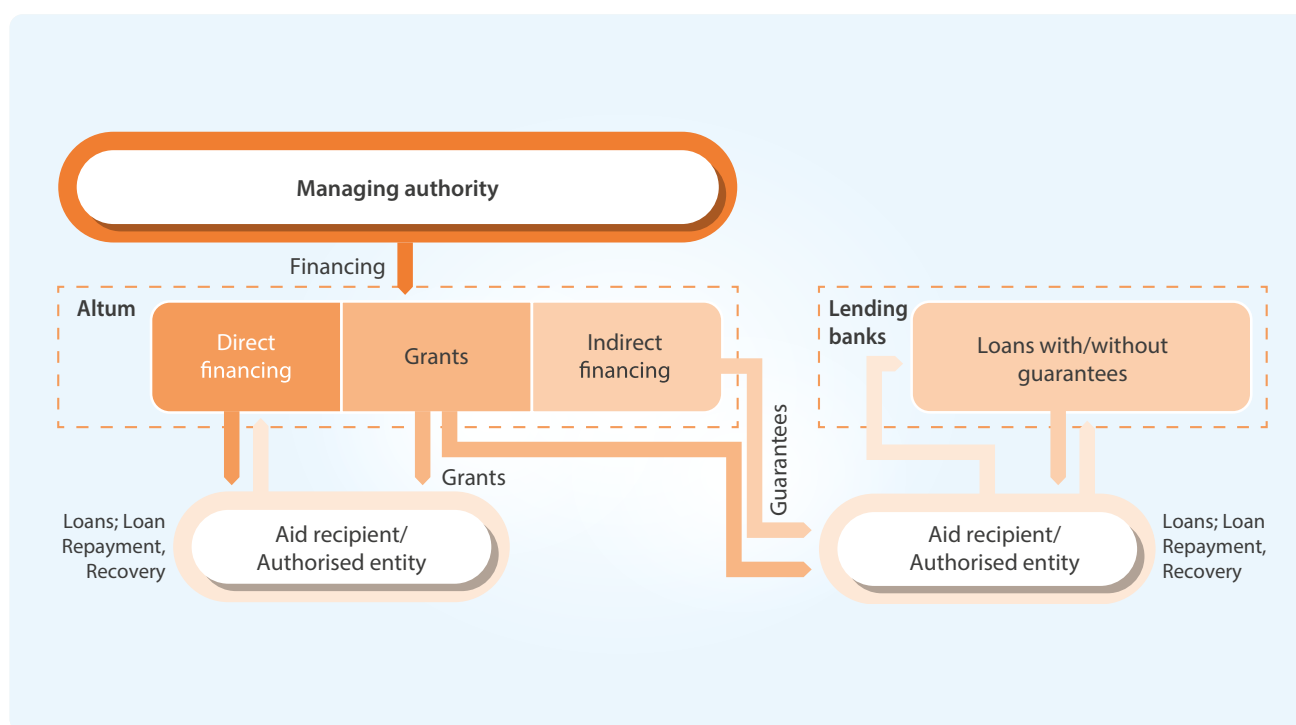
Visual 4: Energy Efficiency Programme for Multi-apartment Buildings funding scheme (Source: Author)

25 European Investment Bank (2024). Financial instruments and grants combination for energy efficiency of multi-apartment buildings in Latvia, pp 6–8. Accessible at https://www.fi-compass.eu/sites/default/files/publications/ERDF_EE_FIs_in_Latvia_case_study.pdf

26 Ibid., p. 17

Providing loans to those ineligible for private funding made the project resilient to changes in the local economy, and kept it running even during Covid-19 when banks became more reluctant to provide loans for renovations. Altum's share of loans therefore fluctuates depending on the stage of the economic cycle.²⁷

In the last (and still ongoing) phase of the programme, rather than increasing grants, Altum introduced a capital rebate for repayment of part of the loan principal, turning a part of the unrepaid loan into a grant as an incentive for meeting set conditions. The capital rebate – activated when the relevant renovation works have been completed and the planned energy efficiency achieved – triggers greater commitment from HoAs and a positive effect on the level of trust from banks.



Schematic description of the Energy Efficiency Programme for Multi-apartment Buildings (Source: https://www.fi-compass.eu/sites/default/files/publications/ERDF_EE_FIs_in_Latvia_case_study.pdf)

Takeaways

Similarly to Estonia's KredEx, the success of Altum lies in **direct and long-term cooperation between the state and private banks under one platform**, allowing homeowners to receive a complex financial service in one place without the need to search for a suitable banking product on their own. This approach increases their willingness to participate and improves their chances of financing their renovations via a loan.

²⁷ Ibid.



3.3 NGO-owned revolving fund

Name of the project	Habitat for Humanity projects: "Energy Efficient Homes" and "One-Stop Shop HABITAT"
Country	North Macedonia
Type of PPP	NGO revolving fund providing loans combined with municipal support
Year	2009, ongoing
Good practice	MFAB-level facilitators enabling low-income homeowners
Key source	https://comact-project.eu/toolbox_schemes/habitat-for-humanity-macedonia-energy-efficient-homes-2/ https://osshabitat.mk/en/about/#goal



Good practice

In 2009 Habitat for Humanity North Macedonia (HfH Macedonia) established a **revolving fund providing finance for MFAB renovations, specialising in energy-poor beneficiaries**. The goal of combining small-scale loans with municipal subsidies is to build HoAs' credit scores, experience and confidence so they can pursue more complex renovations in the future. At the same time, HfH Macedonia's programming increases public trust in microfunds as a renovation financing option.



Financial approach

The average size of the loan provided by HfH Macedonia's revolving fund is €2,000; loan size is flexible depending on the needs and creditworthiness of beneficiaries. Its term is around 3 to 7 years, at an interest rate of 3–6%. Loans are mixed with municipal subsidies and can be used for the replacement of windows, doors, façade insulation, roofs and floors. HfH Macedonia also partners with local microfinance institutions MFI Horizonti and Moznosti, providing more sustainability to HfH's model and expanding it beyond MFABs.



Overview of the current programme

The revolving fund, established under a project called Energy Efficient Homes,²⁸ provides small low-interest loans to energy-poor homeowners (especially pensioners). However, the services provided to borrowers are as valuable as the loan itself.

Besides financial support, the project provides valuable facilitation of communication between homeowners, HoAs and municipalities, and enables vulnerable groups of homeowners to handle both the financial and the administrative burdens of MFAB renovation. Facilitators are there throughout the process, starting with awareness-raising among homeowners, acquiring their consent, assessing creditworthiness, involving local municipalities, and monitoring the renovation process, energy savings and repayments.

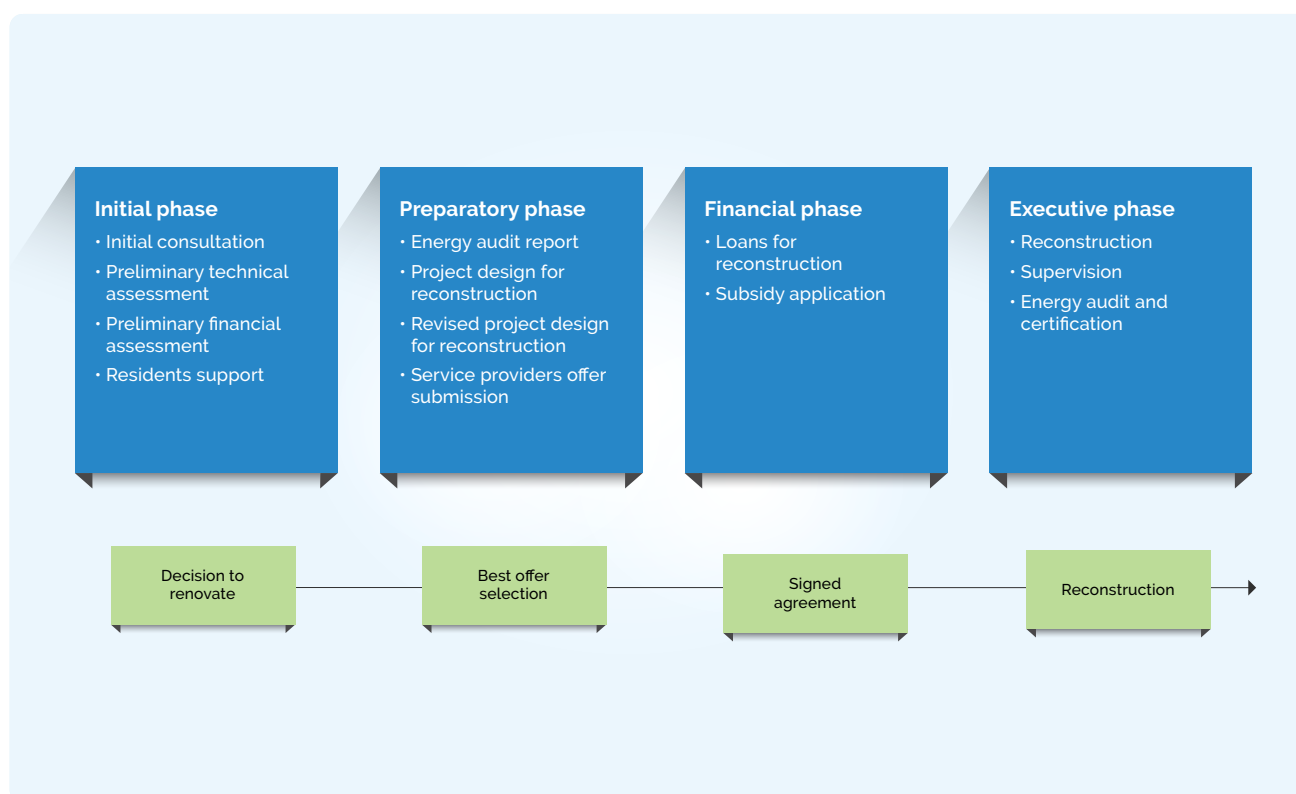
The revolving fund is still in use in 2026. To date, it has financed the renovations of 72 MFABs. Moreover, HfH Macedonia has built on this experience and continues to professionalise its guided decision-making services. Since 2024, in three pilot cities (Skopje, Kumanovo and Kochani) a new EU LIFE-funded One-Stop Shop HABITAT project²⁹ has been providing technical and administrative support as well as assistance in accessing financing. Its team expects to renovate 200 residential units and individual homes by the end of 2026.

Besides locally available loans and subsidies, the One-Stop Shop HABITAT team identified two international financial instruments providing low-interest loans on renewable and efficient energy technology via North Macedonian banks and microfinance institutions: the EBRD's Green Economy Financing Facility for the Western Balkans, and the United Nations' Green Financial Instrument for Improving Air Quality and Combating Climate Change in North Macedonia. The HfH Macedonia team delivers individual step-by-step support with the submission of subsidy applications and requests for offers to commercial banks and microfinance institutions.

²⁸ Learn more at https://comact-project.eu/toolbox_schemes/habitat-for-humanity-macedonia-energy-efficient-homes-2/

²⁹ Learn more at <https://osshabitat.mk/en/about/#goal>





Visual 5: Key phases of one-stop shop HABITAT approach (Based on [Source](#))

Challenges

The core tension in microfinance is balancing financial inclusion with the risk of borrower insolvency. While investment proceeds and interest rates help microcredit facilities to stay in the black, certified energy-efficiency solutions and repayments tied to energy savings can bring more long-term sustainability.

Takeaways

The success of HfH Macedonia's approach is due to its level of commitment to facilitation. This one-stop shop support goes far beyond information sessions and leaflets in mailboxes. It includes multiple visits to individual households, household-level technical checks, field officers dedicated to specific HoAs, a database of energy auditors, final quality assurance of work and many other small steps to build trust and help with orientation in a complex market. Such hands-on guidance is extremely important, especially for vulnerable and elderly beneficiaries who may need more time and assistance to work with the information received and make an informed decision.



3.4 Energy performance contracting for deep renovations

Name of the project	SUNShINE and follow-up project Accelerate SUNShINE
Country	Latvia
Type of PPP	Energy performance contract between ESCO and HoA
Year	2015–2020
Good practice	No upfront payment; guaranteed savings mitigate financial risks of homeowners allowing deep renovations at affordable monthly cost
Key source	https://cordis.europa.eu/project/id/649689



Good practice

Energy performance contracting is a suitable solution for MFABs which are reluctant or unable to access a commercial loan or subsidy. With the energy performance contract, the **ESCO provides funds for renovations, guarantees energy savings and uses money saved on energy bills to cover renovation costs, opening access to high-quality housing even to HoAs with a high number of low-income homeowners. This was the case in the Save your bUILDiNg by SavINg Energy (SUNShINE)**³⁰ project, which serves as a good example of energy performance contracting used for the renovation of old panel residential apartment blocks.

SUNShINE was launched in 2015 to address common challenges blocking the renovation of these MFABs. Besides the lack of available funding, it addressed the lack of awareness and technical knowledge among homeowners as well as their perception of high risk and their reluctance to take on debt financing.



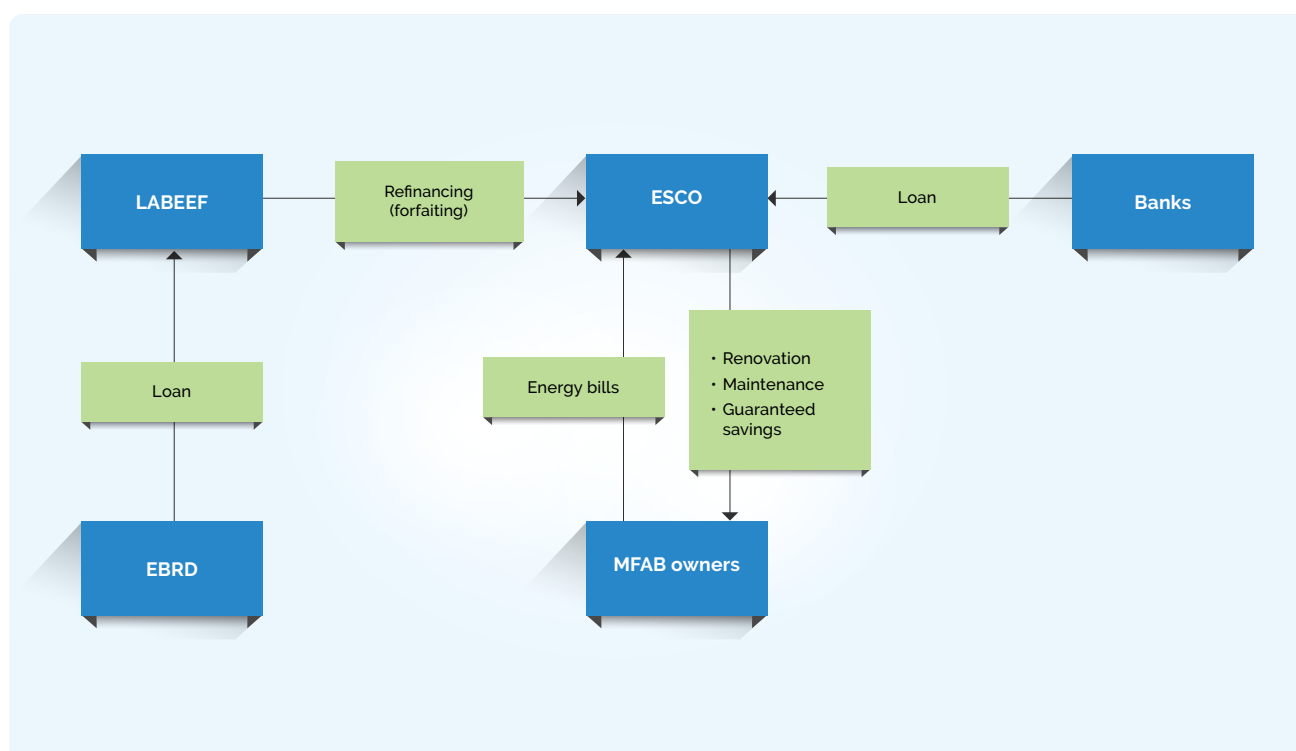
Financial approach

Using EU Horizon 2020 funding, between 2015 and 2020 SUNShiNE enabled 31 projects across Latvia, triggering private investments into renovations worth €25.5 million. It supported the expansion of existing public and private ESCOs into deep renovations, after which the ESCOs guarantee energy savings for 15–20 years. During the guarantee period ESCOs provide all maintenance. Homeowners agree to fixed increased energy payments over a timeframe of approximately 18 years which are about 15% higher than the original energy bill.³¹

³⁰ Project website accessible at <https://cordis.europa.eu/project/id/649689>

³¹ Jörling, K. & Schäfer, M. (2018). LABEEF in Latvia, p. 7. Navigant. Available at https://www.euki.de/wp-content/uploads/2019/09/20181205_LV_LA-BEEF_Study.pdf

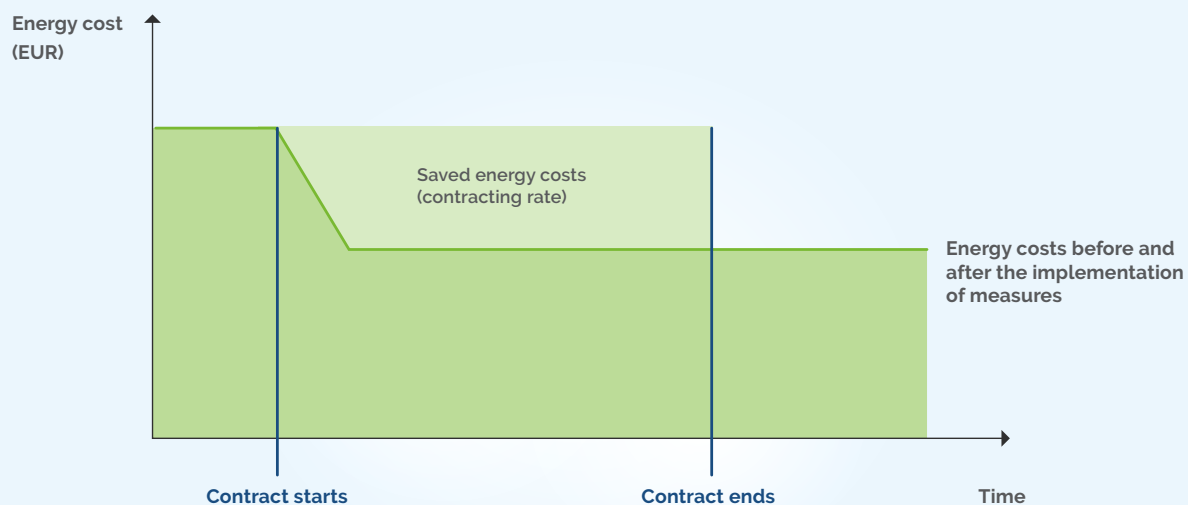
"The proposed approach is simple, yet very innovative: most ESCOs have limited balance sheet capacity and are not able to support much long-term debt. So **re-financing is usually achieved by selling future cash flows** (receivables). Unfortunately, in emerging energy performance contracting markets like Latvia, there are not enough track records, so banks are not yet ready to offer these services to ESCOs. **The project delivers the same service by establishing a special purpose fund** for energy performance contracts."³² The role of energy performance contract accelerator fund was played by the Latvian Baltic Energy Efficiency Facility (LABEEF),³³ an EBRD-loan-backed company which helped ESCOs with refinancing by buying their projected (guaranteed) energy savings.



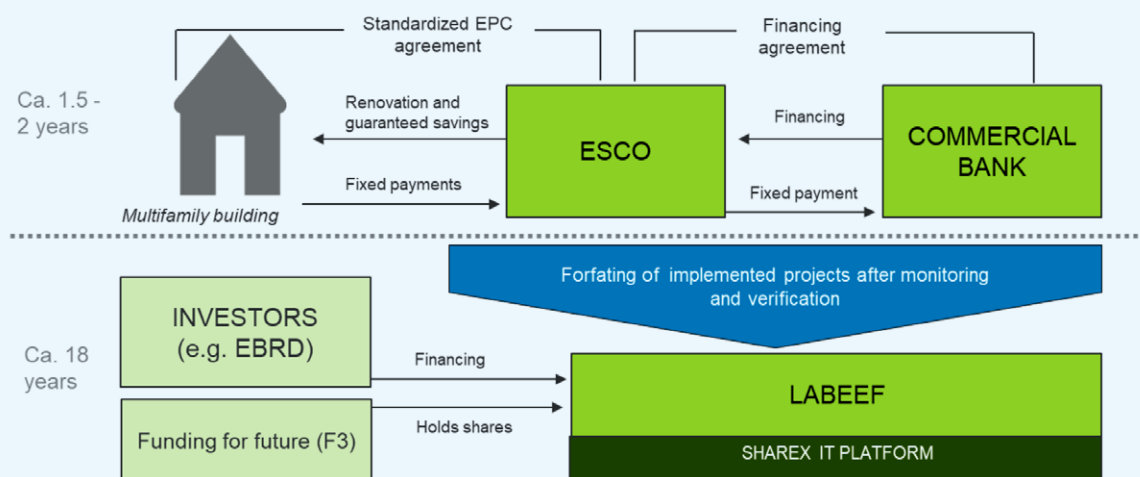
Visual 6: SUNShINE financing model (diagram source: author)

³² Citation of the official project description available at <https://cordis.europa.eu/project/id/649689>

³³ SUNShINE (n.d.). European Bank for Reconstruction and Development plans to be one of the investors of the newly established building renovation fund. Accessible at https://ekubirojs.lv/wp-content/uploads/2020/04/Press_release_Launch_of_LABEEF_SUNShINE.pdf#:~:text=Nicholas%20Stancioff%2C%20co%2Dfounder%20and%20Board%20Member%20of%20LABEEF%20%E2%80%9CLABEEF%20will%20simultaneously%20be%20a&text=Last%20year%2C%20the%20project.



Visual 7: Energy performance contract model (diagram source: based on [Euki.de](https://euki.de))



Source: [Euki.de](https://euki.de)



Challenges

Deep renovation using state-of-the-art technologies can decrease energy consumption by more than 75 %;³⁴ however, the initial investment is high and the payback period is long. In countries with no history of energy performance contracting, banks are hesitant to venture into this type of investment. Refinancing moved the financial risks to LABEEF. The project also struggled to include municipal ESCOs due to a lack of consistency among regulatory frameworks.³⁵



Overview of the current programme

Even after the conclusion of SuNShINE, **LABEEF is still in place – with one significant change. It increasingly uses private impact funding to move away from dependency on the EBRD.**³⁶

However, the financial model developed by SuNShINE is still the same. An ESCO identifies an MFAB and acquires the agreement of its owners. LABEEF signs an energy performance contract with owners and the ESCO. The ESCO's responsibility is to guarantee specific energy savings as well as an improved micro-climate, comfort and affordability. "The ESCO then enters into a financing agreement with a commercial bank to cover the upfront investment costs for the renovation measures. The agreement with the bank is supported by LABEEF, which guarantees to assume the financing risks after the measures are completed, monitored and verified."³⁷ After that, LABEEF forfeits the energy performance contract. Due to its involvement from the very start LABEEF has a power of oversight, improving project management, transparency and quality control. It also connects ESCOs with interested banks.



Takeaways

The project has helped to shape Latvians' understanding of how to finance energy-efficient renovations beyond the common approach of using public grants. LABEEF's presence proved instrumental in the standardisation of energy performance contracts in the country and in building trust in the new type of financing. The popularity of energy performance contracting has continued to grow even after the end of the project, and the forfaiting model is now being tested in several other European countries.

34 Global Buildings Performance Network (2013). What is a deep renovation definition? Accessible at https://www.gbpn.org/wp-content/uploads/2021/06/08.DR_TechRep_low.pdf

35 European Commission (2021). Reducing the risk and capital associated with deep energy efficiency renovations#:~:text=Accelerate%20SUNShINE's%20EPC%20scheme%20gave%20ESCOs%20another%20option&text=(LABEEF)%20established%20for%20this%20purpose.

36 Learn more at the LABEEF website, accessible at <https://labeef.eu/>

37 Jörling, K. & Schäfer, M. (2018). LABEEF in Latvia, p. 12. Navigant. Available at https://www.euki.de/wp-content/uploads/2019/09/20181205_LV_LABEEF_Study.pdf



3.5 NGO as a facilitator of PPP

Name of the project	REELIH
Country	Bosnia and Herzegovina
Type of PPP	Public subsidies combined with guaranteed micro-loans and international funding
Year	2012–2021
Good practice	NGO as the developer of a stakeholder network
Key source	https://getwarmhomes.org/project/reelih/ https://www.ecoserveis.net/wp-content/uploads/2019/02/Atlas-of-energy-poverty-initiatives-in-Europe.pdf



Good practice

The goal of this multi-country project implemented between 2012 and 2021 was to increase energy efficiency in the residential sector, with a special focus on energy-poor households. The Bosnian part of the project featured close cooperation between the NGO sector (Habitat for Humanity and Caritas), municipalities, regional-level administration, and private consultancy company Enova. It is a good example of an NGO-driven renovation project that blended technical support and other forms of facilitation from multiple stakeholders. Even **with limited public funds, REELIH partners developed a financial model which made co-financing loans accessible to low-income families.**



Financial approach

After a feasibility study and pilot renovation of 33 apartments in four buildings funded by Habitat for Humanity and USAID, the project established cooperation with Tuzla Canton and Sarajevo Canton. During the project, these cantons provided up to 50% co-funding in at least 15 municipalities.

The Federal Environmental Fund provided technical support for the development of a loan-based fund active in the Federation of Bosnia and Herzegovina. This included analysis of the domestic banking and microfinance sector to assess the current energy efficiency lending product structure. Participating municipalities contributed financially; however, their most impactful contribution was in the form of guarantees. In cases where even this combination was not sufficient to access private loans, REELIH provided support with applications for non-profit zero-interest loans.

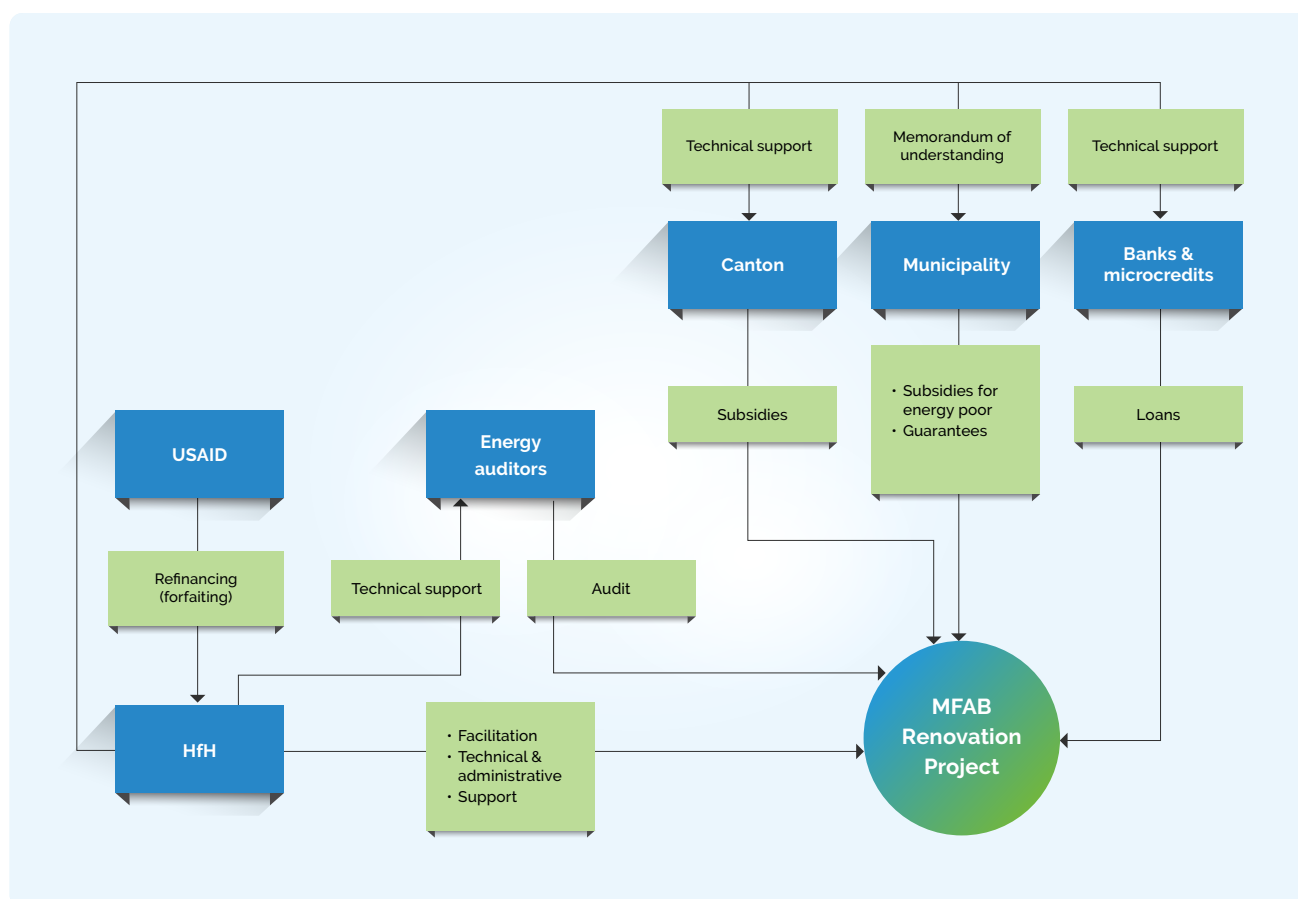


Overview of the programme

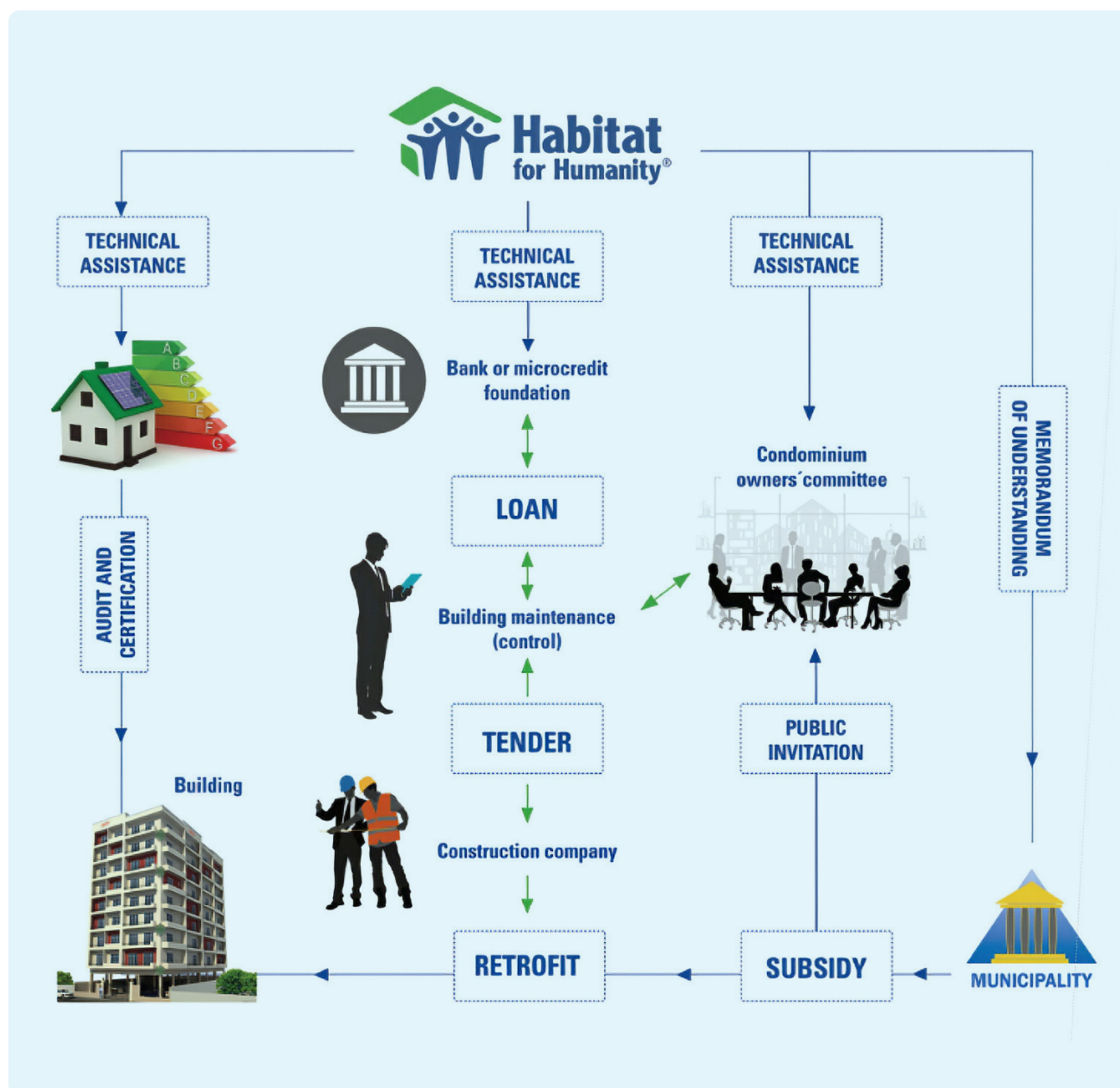
Similarly to One-Stop Shop HABITAT, Habitat for Humanity played the role of a **hands-on facilitator, encouraging and guiding HoAs in participating municipalities through the application process.**

Besides facilitating discussion and decision-making among homeowners, REELIH helped owners to find reliable construction companies and trained them in the maintenance of energy-efficient buildings. Where HoAs were not established, REELIH helped homeowners to collect funds through the building maintenance manager.

Besides providing direct support to homeowners, Habitat for Humanity played a crucial role in **pooling funds** from municipal, cantonal and federal levels, as well as in research of relevant funding calls from development agencies (including USAID, Germany's Gesellschaft für Internationale Zusammenarbeit and the Swedish International Development Cooperation Agency) and EU funds. No less important was its work with municipalities, which it helped to become better informed about private co-financing opportunities.



Visual 8: Basic description of the facilitation process (source: Author)



The eco-system of stakeholders in Bosnia and Herzegovina in the REELIH project ([Source](#))



Challenges

The project was implemented at a time when energy efficiency and green housing concepts were unknown to the majority of the Bosnian population, and when data about the state of the Bosnian housing stock were largely unavailable. The baseline research for this project was therefore as important a deliverable as the construction part, since it has provided a foundation for several future international and public projects in this area. Given the small financial scale of the project and its focus on energy-poor households, a step-by-step scalable approach was chosen over deep renovations, which are generally recommended for their many financial and technical benefits. However, according to HfH, as owners and loan providers saw the bankability of small-scale interventions, their trust in more extensive investments grew.



Takeaways

Given that, at the start of the project, only about half of the nation's citizens had a bank account,³⁸ the **way in which it opened up financial participation in renovation represented a significant step forward, creating long-term possibilities for the gradual renovation of homes previously excluded from the loan market.** Despite the lack of involvement of commercial banks (offering, for instance, small-scale consumer loans for energy efficiency) which could have helped to scale up the project to higher income groups, the pilot constructions, data and stakeholder network left behind by REELIH have triggered further development projects to mainstream energy-efficient housing in Bosnia and Herzegovina.

³⁸ Habitat for Humanity (2019). Microfinance in Practice: MCF Sunrise Bosnia and Herzegovina, p. 3. Accessible at https://www.habitat.org/sites/default/files/documents/Case-study_Microcredit-Foundation-Sunrise.pdf



3.6 Renovation mortgages for low-income owners

Name of the project	C-REAL
Country	Belgium
Type of PPP	Impact investment platform financing house renovations
Year	2020, ongoing
Good practice	One-stop shop service merging renovation advice, public subsidies and private finance
Key source	https://www.re-leafproject.be/nl/c-real



Good practice

An example proving that renovations can attract impact investments is Belgium's EU Life-funded **C-REAL project**³⁹ (and its follow-ups RE-LEAF and LEG-UP), which is focused on **pooling renovation-linked mortgages**, applying standardised renovation trajectories, and attracting impact-oriented investors. Although its target is low-income buyers of dwellings in need of renovation, C-REAL is an inspiration for one-stop shops supporting MFAB renovations.



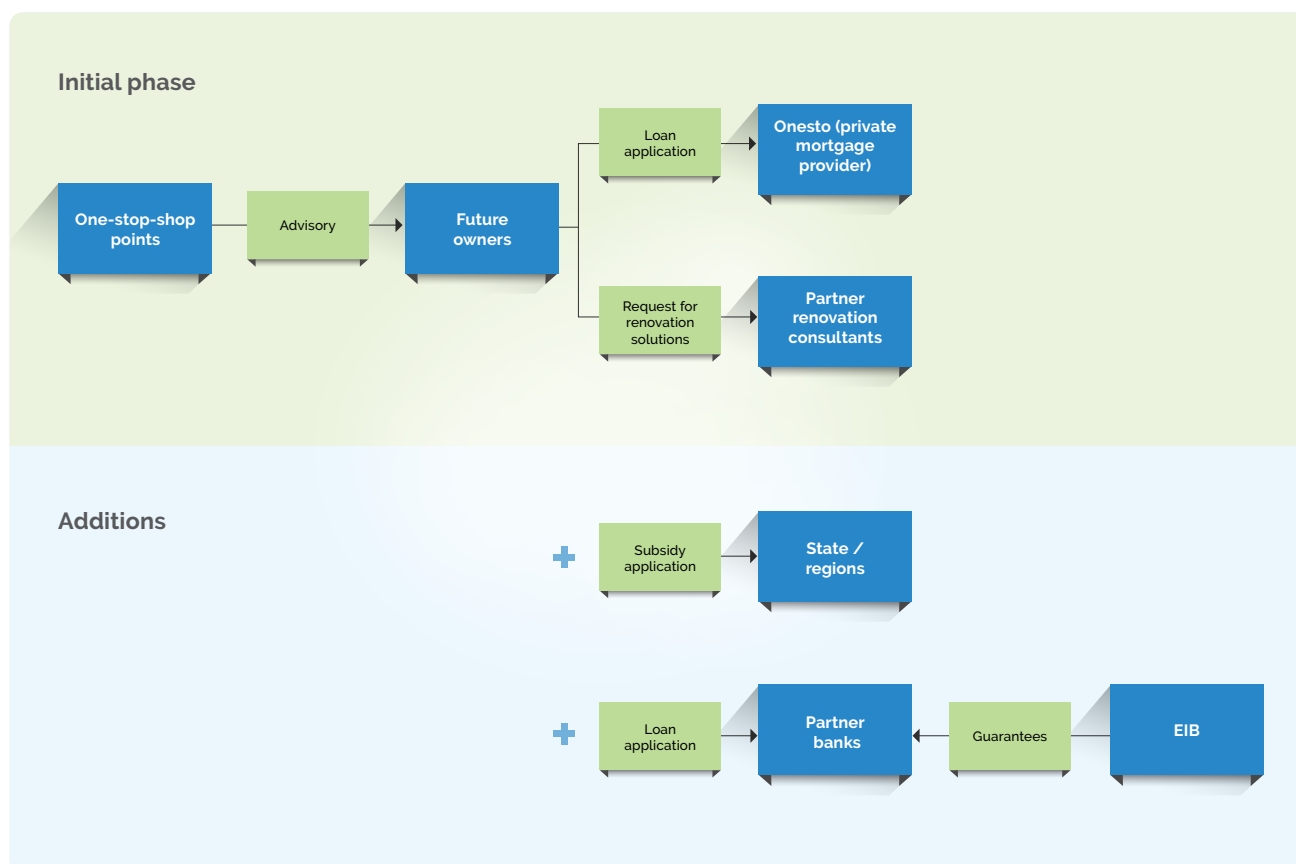
Financial approach

Via a one-stop shop approach, C-REAL piloted a service **combining renovation advice, public grants, regional incentives and private mortgage finance**. To scale up its operations, the project secured the participation of European public financial institutions such as the EIB. These provided an **upper-layer guarantee mechanism as well as additional co-financing facilities to allow the financing of deep renovations with a long-term return period**. Notably, the project embedded a regional loan for HoAs provided by the Flemish government and conditioned by obligatory credit insurance. The loan provided €60,000 per building (which could be increased by €25,000 per residential unit), with a term of 25 years.⁴⁰

39 Vermeulen, H. & Piette, J. (2025). Inclusive Pathways to Renovation: How Blended Finance Can Drive a Just Energy Transition. Onesto. Accessible at <https://build-up.ec.europa.eu/en/resources-and-tools/articles/inclusive-pathways-renovation-blended-finance-for-just-energy-transition>

40 Project website accessible at <https://cinea.ec.europa.eu/featured-projects/c-real-creation-holistic-methodology-renovation-advice-focus-lending-solutions-differentiated-target-en#:~:text=The%20C%20REAL%20project%20materialised%20a%20structural%20collaboration,renovation%20consultant%20Dubolimborg%20in%20the%20framework%20of>

The process was piloted in Limburg. Here, one-stop shop Energy House Limburg provided administrative support and information about subsidies, and connected future owners with renovation consultants and a private lender named Onesto who specialised in affordable loans. In its RE-LEAF stage, the project scaled up to Flanders and beneficiaries received even more targeted financial models fitting their unique situation, including long-term investment and building management plans. LEG-UP added an additional layer of international guarantees from EIB, which increased interest among commercial banks. Going forward, project partners believe that collective neighbourhood renovations could optimise the costs and coordination even more.



Visual 9: Basic description of the facilitation process (source: Author)



Overview of the programme

The goal of this project is to provide complex support to buyers of dwellings in need of renovation who could be at risk of falling into energy poverty. Via financing, renovation support, local incentives and risk-sharing mechanisms the project aims to not only support low-income owners who need to carry out renovations, but to also play a **'preventative' role at the moment of purchase to ensure vulnerability to energy poverty will not be created in the first place**. The project works with lenders who factor in the price and value of renovation, and provides them with derisking infrastructure including technical guidance, a direct connection to available subsidy schemes, and credit insurance. Homeowners purchasing a dwelling know exactly what renovation work needs to be done, how much it will cost, and how it will be financed. The project gives them peace of mind at the moment of purchase, as the long-term value, comfort and affordability of their property is protected.



Challenges

The project aims to tackle the Green Taxonomy paradox. While it was introduced to trigger investments into green and energy-efficient housing, Green Taxonomy-compliant loans can only be given to buyers of already-green dwellings. "Even when renovation is planned...the Taxonomy does not recognise the value of this trajectory."⁴¹ By adding additional layers of risk protection, the project means investors can see – and trust in – the future value of a property.



Takeaways

This project is proof that despite the initial challenge of coordination, PPPs can provide a long-term sustainable financing model for even the most difficult renovation projects and for vulnerable groups who would otherwise be excluded. The project's authors neatly summarise the role of PPPs in renovation: "Public funds are used strategically, not to replace market finance but to unlock it – ensuring that vulnerable buyers can access affordable credit under conditions that safeguard renovation quality and repayment capacity."⁴²

⁴¹ Vermeulen and Piette, 2025

⁴² Ibid.



3.7 Impact crowdfunding and crowdlending

Name of the project	Abundance and other projects
Country	Multiple countries
Type of PPP	Affordable loan provided to HoA or non-profit developer via crowdfunding platform
Year	2020, ongoing
Good practice	Gives projects a broader impact through leveraging small-scale contributions to unlock larger funds
Examples of impact crowdfunding platforms	https://www.ethex.org.uk/about-us (UK) https://fr.lita.co/fr/opportunities (Belgium) https://www.smallchange.co/ (US) https://www.invesdor.com/#/ (Netherlands)



Good practice

Crowdfunding has a well-established place in both real estate and philanthropy. Therefore, it is only natural that there has been a dynamic increase of crowdfunding platforms focusing on the intersection between these two sectors, attracting smaller and bigger impact investors.

Impact crowdfunding offers civic engagement combined with investment opportunities to investors who want to support a project that resonates with their values. In the case of housing projects, this could be as a result of outstanding green standards, unique architecture, or value for the local community and its beneficiaries.

Funds pooled via crowdfunding can be used in the form of a loan (crowdlending) or a non-repayable grant. It can be used on its own for small-scale projects or as **matching funding to unlock private loans or meet conditions for public subsidies**. "A successful campaign signals public confidence, making it easier to attract larger co-financing from banks or EU institutions."⁴³

⁴³ Leverage Accelerator (2026). Collaborative Alternative Financing for Deep Renovation. Accessible at <https://eurocrowd.org/collaborative-alternative-financing-for-deep-renovation/>



Financial approach

With increasing access to online finance and growing consumer experience with online investing, crowdfunding platforms have become commonplace in Europe and have unlocked finance from small investors. In 2021, the EU laid down uniform rules for investment and lending-based crowdfunding platforms. This had a strong effect on the growth and professionalisation of the platforms. The entry of large developers and commercial banks opened up possibilities for larger housing projects such as MFAB renovations. In 2024 alone, crowdfunding platforms accredited in the EU raised over €4 billion.⁴⁴

Crowdfunding is a unique opportunity for municipalities to engage with citizens while filling the gaps in the financial mix. In the words of the European Crowdfunding Network, "when designed carefully, crowdfunding can transform deep renovation from a bureaucratic headache into a community-driven opportunity."⁴⁵



Examples of crowdfunding for affordable renovations

Crowdfunding can be an effective **way of raising renovation funds for buildings with added value for the local community**, such as for elderly owners of historical apartments in a gentrified locality or for a community housing-oriented renovation. Although the majority of real estate-oriented crowdfunding platforms target the development of new properties, there are exceptions – such as the UK platform **UOWN**, the Dutch platform **Invesdor**⁴⁶ and the US platform **Small Change**⁴⁷ – which facilitate **investments into energy-efficient renovations with a story to tell**. UK-based UOWN, for instance, co-financed the renovation of an old bakery into owner-occupied flats.⁴⁸

A leading example of a **municipal lending**-focused platform is the **UK-based Abundance**, which since 2011 has provided over £150 million in loans for green energy projects such as the **installation of energy efficiency measures in municipal community centres, social housing and schools**.⁴⁹ Another UK platform called **Concept Invest** focuses on buy-to-let investment into subsidised rental housing managed by municipalities.⁵⁰ Impact crowdfunding is also suitable for full-scale renovations, and no project is too big with the right story and guarantees. In **Magdeburg, a civil society group used crowdfunding to raise donations matching a public grant to renovate a 19th century fortress** owned by the local municipality and used as a cultural centre.⁵¹

44 Based on reporting from 181 active platforms across 21 EU/EEA Member States (accessible at <https://eurocrowd.org/esma-crowdfunding-market-data-2024/>)

45 Leverage Accelerator, 2026.

46 Learn more at <https://www.invesdor.com/funding/real-estate#/>

47 Learn more at <https://www.smallchange.co/projects/BIPOC-Homeownership>

48 Learn more at <https://app.uown.co/properties/the-bakery>

49 Learn more at <https://www.abundanceinvestment.com/>

50 Learn more at https://conceptinvest.co.uk/supported-housing-investments/?gad_source=1&gad_campaignid=20574828941&gbraid=0AAAAA-Cy90g9q5UqMUNCuJxmtfQ8XOepvA&gclid=CjoKCQjwkMjOBhC5ARIsADIdb3cyvd8HjQ5mLElW04OuAW8foC5u2FSvvEPkQfBUjtrYggj1bRc4NW-caAtAvEALw_wcB

51 FINCH (2020). Combination of crowdfunding with a grant to finance the restoration of historical facilities. Accessible at <https://www.interregeurope.eu/good-practices/combination-of-crowdfunding-with-a-grant-to-finance-the-restoration-of-historical-facilities>

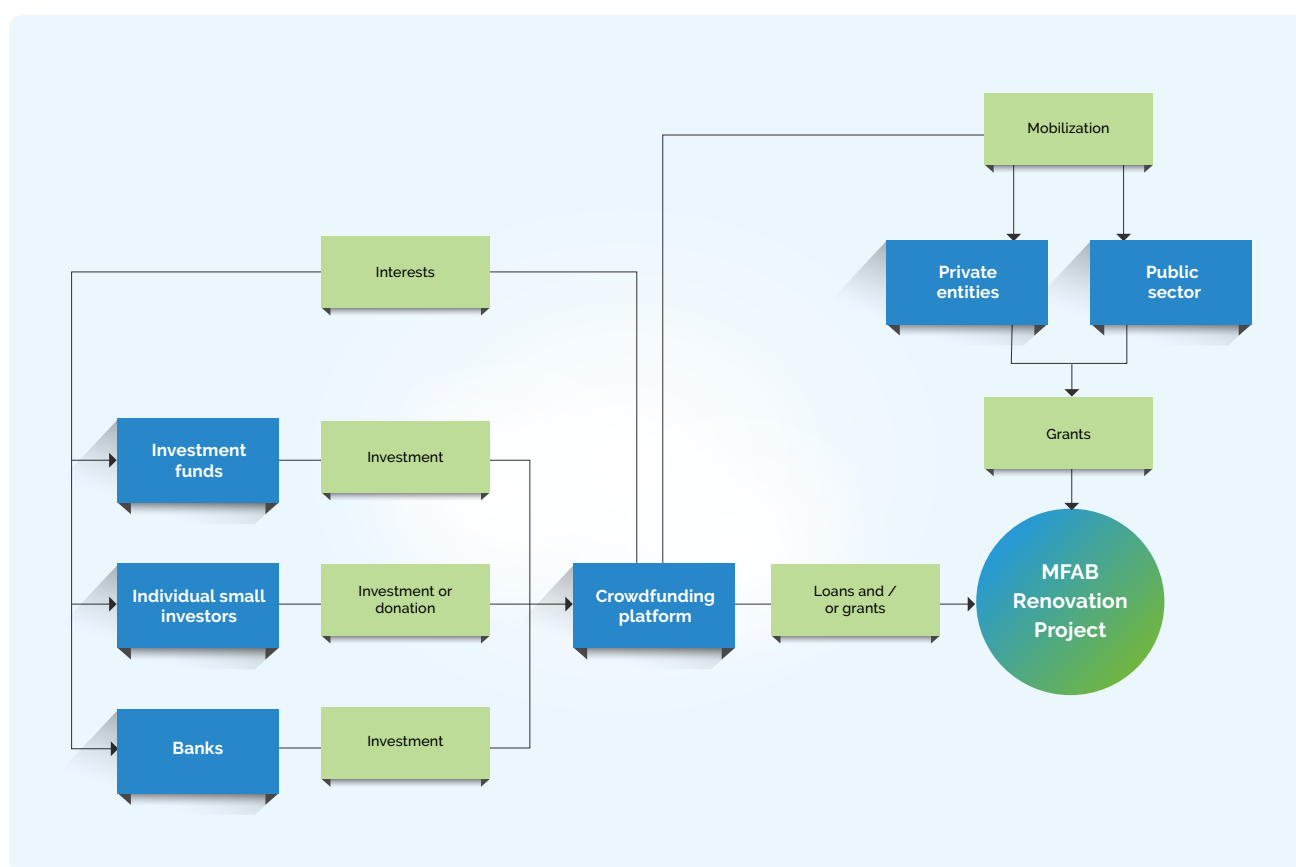
Challenges

Although the investment risk is partially mitigated by the large number of small investors, the key struggles for affordable renovation projects are quality and repayment guarantees. This is why **municipality-owned housing remains preferred by investors, and why other forms of municipal or NGO involvement are commonly needed to make crowdfunding work for HoAs.**

However, even without a guarantor, homeowners can still benefit from the affordable **consumer loans for energy-efficiency improvements offered by many impact crowdfunding platforms** (such as the Czech Republic's Zonky).⁵² As with energy performance contracting, the energy savings achieved in effect create a cash flow for repayments.

Takeaways

Crowdfunding platforms are an ideal **way to fill smaller gaps in a funding mix** or to pilot small-scale energy-efficiency improvements. They can be an effective tool to cover the expenses of the most vulnerable energy-poor households who could otherwise block an entire MFAB renovation. Although renovations of privately-owned buildings are currently on the fringes of investors' interest, a willingness to crowdfund for energy-efficient housing is growing. With a group of dedicated facilitators and financial partners, the model is fully applicable to renovations of MFABs in private ownership.



Visual 10: Example of a crowdfunding model suitable for MFAB renovations (source: Author)

⁵² Learn more at <https://www.zonky.cz/setrne-bydleni/>

4. PPP potential in Bulgaria, Hungary and Lithuania

The following chapter looks into MFAB renovation funding opportunities in Bulgaria, Hungary and Lithuania, and provides a summary of current or potential PPP solutions as well as policy recommendations for their further development.

Despite country-specific differences, there are several trends present in all three countries:

- 1 **A lack of long-term private loans for HoAs** is limiting deep renovation investments; this is partially caused by the dominance of state subsidy programmes which only slowly embed private funding elements.
- 2 **There is potential for municipal ESCOs.** Municipalities are already closely involved with HoAs, either through their role in the provision of heating services, in managing state subsidy applications, or in building management. Cooperation between municipal ESCOs and HoAs on renovations of MFABs seems like a logical next step.
- 3 **A change of mindset is needed** – as in other Central and Eastern European countries with privatised housing stock, some Bulgarian, Hungarian and Lithuanian homeowners still perceive the maintenance and renovation of their dwellings as a public service rather than as the owner's responsibility. While they understand the benefits of renovations, these homeowners are not proactive enough to seek funding opportunities or to build the assets and financial reputations of their HoAs.
- 4 **Green mortgages** have a stable place in all three markets. This indicates that the private sector is ready to invest into highly energy-efficient housing – an important precondition for the development of blended schemes where green standards take a risk-mitigating role next to state guarantees.
- 5 **There are a lack of platforms for public-private cooperation.** The public sector, at both national and local level, needs to build its awareness of private funding products and liaise with leading financial institutions to understand their needs.



4.1 Bulgaria



Burgas, Bulgaria © Lidia Stawinska / Unsplash

Financing of MFAB renovations – historical context

Almost 90% of Bulgarians live in their own home. Bulgarian HoAs trying to finance a renovation are, however, in a very difficult position. Since the 2008 economic crisis the country has been slow to catch up with the rest of the EU, and faces regional and income inequalities and one of the highest levels of poverty in Europe.⁵³ Unlike in Hungary or Lithuania, in Bulgaria there are still some **unofficial HoAs which are not registered as a legal entity**. Nevertheless, according to local experts, even registered HoAs are considered to be a lending risk by local banks. Despite the common existence of (non-mandatory) repair funds, these are rarely used to save for renovations other than urgent repairs. HoAs are also very big, which makes their internal administration difficult. Due to the size of MFABs, one HoA can often consist of at least 60 or 70 owners. **Energy prices are capped** and are approximately 50% lower than the EU average;⁵⁴ as a result, renovation investment returns are slow.

Although Bulgaria has successfully implemented several renovation subsidy programmes, their generosity has discouraged the private sector from developing renovation products for MFABs, and homeowners from pursuing other types of funding. In recent years Bulgaria has been through a period of up to **100% non-repayable subsidies**, which despite governmental promises⁵⁵ do not seem to be significantly decreasing.

53 European Investment Bank (2020). The potential for investment in energy efficiency through financial instruments in the European Union – Bulgaria in-depth analysis. Accessible at <https://www.fi-compass.eu/erdf/potential-investment-energy-efficiency-through-financial-instruments-europe-an-union/bulgaria?page=1>

54 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics

55 As per Julian Popov's (former minister of environment) 2023 statement: "It is not natural to expect 100% financing of renovation projects, the normal values are 20–25% and we will inevitably move in this direction". EnEffect (2023). The renovation program continues with 80% state subsidy, which will not be increased. Accessible at <https://www.eneffect.bg/en/news/1233/the-renovation-program-continues-with-80-state-subsidy-which-will-not-be-increased>. A similar prediction was made by Deputy Prime Minister Tomislav Donchev in 2025: EnEffect (2025). Despite massive new funds for renovation until 2032, only one in ten buildings will benefit. Accessible at <https://www.eneffect.bg/en/news/1362/despite-massive-new-funds-for-renovation-until-2032-only-one-in-ten-buildings-will-benefit>

The unwillingness to reduce this public subsidy may be explained by the fact that Bulgaria has experienced nine parliamentary elections in the past ten years: being in a constant campaign mode does not create the right conditions for restructuring funding to shift renovation responsibilities onto homeowners. Moreover, even if restructuring takes place, homeowners seem to be determined to wait for the return of better conditions. As illustrated by data from Burgas Resource Centre, after a change of subsidies from 100% to 80%, the number of applications for funding decreased from 200 to 14.

Public subsidies to HoAs were in the past distributed via two programs, one of which is still ongoing.

The EU-funded **Regions in Growth**⁵⁶ operational programme implemented between 2015 and 2019 provided 100% subsidy support to HoAs as part of efforts to reduce regional development disparities. There is no indication of a follow-up programme.

The National Programme for Energy Efficiency of Residential Buildings (EERB) is the key state subsidy scheme for renovations of MFABs available to HoAs. The scheme has been running since 2015, and since then the non-repayable subsidy support has been kept at 80–100%. The application process, evaluation, approval, funding and monitoring of the implementation has been administered by municipalities, which sometimes lack a certain strictness (or capacity) in their assessment of energy performance results. The generosity of the programme causes high excess demand. In its first phase the EERB satisfied only 700 out of 3,068 proposals – unsurprisingly, between 2015 and 2025, the programme helped to renovate only 4% of the 70,000 MFABs in the country.⁵⁶ Commendably, the EERB provides funding for all phases including the structural and energy audit, design, construction works and supervision. However, given the wide financial disparities in Bulgarian society and the popularity of this programme, it is puzzling that the EERB does not limit the participation of high-income households.

Bulgaria has limited experience with **renovations by municipal ESCOs**; these were piloted with the help of the National Trust Ecofund and projects such as FinEER-Go Dom,⁵⁷ and fully embedded into the legal framework in 2023. Despite its potential (municipal companies provide distinct heating services in many cities), **on-bill financing remains somewhat overlooked due to the popularity of state subsidies**. The Alliance for Energy Efficiency,⁵⁸ the only representative association of ESCOs in the country, has not published an update on its activities since 2023.

Public funding of MFAB renovations available in spring 2026

The government has announced a new phase of the **EERB**, financed mainly from the EU Recovery and Resilience Mechanism, which should be available between 2026 and 2029⁵⁹). The programme, which will likely offer 100% subsidy support, is expected to be in high demand. The funding is expected to cover the renovation of more than 1,000 MFABs,⁶⁰ contributing to the government's target of renovating 60% of the building stock by 2050 – a highly ambitious goal, which foreshadows the further continuation of the EERB.

⁵⁶ "Regions in Growth" operational programme, "Support for Energy Efficiency in the Peripheral Regions" axis.

⁵⁷ Eneffect, 2025

⁵⁸ Project website available at <https://www.alliance-ee.bg/english/>

⁵⁹ Darik news (2025). Зафиров: Новата програма за енергийна ефективност ще разполага с 2,5 млрд. лв. Available at <https://dariknews.bg/novini/bylgariia/zafirov-novata-programa-za-energiina-efektivnost-shte-razpolaga-s-25-mlrd.-lv-2421076>

⁶⁰ Ministry of Regional Development and Public Works (2025). The policy for energy efficiency and renovation of the building stock becomes a constant priority for our country. Available at <https://www.mrrb.bg/en/the-policy-for-energy-efficiency-and-renovation-of-the-building-stock-becomes-a-constant-priority-for-our-country/>

There is only one blended finance opportunity from which Bulgarian HoAs can benefit, even if only indirectly: **the Energy Efficiency and Renewable Sources Fund (EERSF)**, established in 2004. This legal entity manages the financial resources received by the Republic of Bulgaria from the Global Environment Facility (GEF) through the International Bank for Reconstruction and Development (IBRD) and other donors, and provides it to energy-efficiency projects (including partial renovations such as window replacement or heating modernisation) implemented by municipalities, commercial clients and private individuals. These groups of lenders can benefit from interest rates of 4–6% and loans of more than €1.5 million with only 10% minimal participation and a repayment period of ten years.⁶¹ There is a special guarantee scheme⁶² which helps ESCOs to service their debts with private lenders in case of cash flow disruptions. This **combination of loans and guarantees is ideal for municipalities eager to establish or expand their ESCOs and provide renovation support to HoAs via on-bill financing**. Initial investments, made partially with an EERSF loan and a private loan (guaranteed by the EERSF), can be repaid from energy savings.

In December 2025, the Bulgarian Ministry of Energy kicked off the transition of the EERSF into the **National Decarbonisation Fund (NDF)**,⁶³ which aims to leverage a broader capital base. By combining IBRD funding with additional EU funding, the ministry intends to extend the current fund's focus to affordable housing. At the first meeting of the NDF's donors, owners of single-family houses were singled out as a particular target group. So far it remains unclear what this restructuring means for MFABs and their owners; according to Burgas Resource Centre, some level of support for HoAs will likely stay in place.

Relevant private banks and products for HoAs

As mentioned above, **the private sector does not supply HoAs with targeted loans, because they are perceived as risky clients**. Needless to say, with the possibility of receiving 100% funding from the state, there is a low demand for such products to start with.

Although energy efficiency and green energy products are available, the focus is either on first buyers, small consumer loans or large businesses. Unicredit Bulbank provides investment loans guaranteed by the EBRD,⁶⁴ but these are advertised more for energy upgrades in industry rather than in housing. Examples of other available products include consumer loans for renewables provided by FinBank⁶⁵ and Procredit,⁶⁶ and green mortgages provided by the International Asset Bank⁶⁷ and UBB⁶⁸ among others.

61 <https://www.bgeef.com/en/financial-products/loans/>

62 <https://www.bgeef.com/en/financial-products/guarantees/>

63 Ministry of Energy (2025). Първо заседание на Общото събрание на Националния фонд за декарбонизация. Accessible at <https://www.me.government.bg/news/parvo-zasedanie-na-obshtoto-sabranie-na-nacionalniya-fond-za-dekarbonizaciya-3742.html>

64 European Bank for Reconstruction and Development (2025). EBRD agrees €50 million green portfolio guarantee facility for UniCredit Bulbank. Accessible at <https://www.ebrd.com/home/news-and-events/news/2025/ebrd-agrees--50-million-green-portfolio-guarantee-facility-for-u.html#>

65 Consumer loan "Green energy for households" (Information available at <https://www.fibank.bg/en/personal-banking/loans/consumer-loans/consumer-loan-green-energy-for-households>)

66 Photovoltaics loan (Information available at <https://www.procreditbank.bg/en/private-individuals/kredit/green-loans/loan-for-photovoltaic-installation>)

67 Housing loan Asset Energy Efficiency (Information available at <https://www.iabank.bg/en/individuals/loans/in-mortgage-loans/promotional-housing-loan-asset-energy-efficiency>)

68 Mortgage loan for Energy Efficient Home (Information available at <https://www.ubb.bg/en/individual-clients/credits/ipotechen-kredit-za-energiyno-efektiven-dom>)

Recommended PPP mix and policy recommendations

Bulgaria's generous support for MFAB renovations is a double-edged sword. On the one hand, a subsidy of nearly 100% makes renovations available to low-income owners. On the other, due to the limited number of successful applications and the effect it has on private funding opportunities, the programme can discourage HoAs with higher numbers of low-income owners from pursuing state subsidies.

In recent years, one solution for speeding up the renovation of Bulgaria's housing stock has been repeatedly discussed by governmental representatives and experts alike: **public subsidies need to be lowered and blended with a repayable component** in order to provide affordable funding to a larger number of beneficiaries. In the words of Dragomir Tsanev, Executive Director of EnEffect, "It's time to treat people as partners, not passive recipients of aid...Nine out of ten buildings need renovation, and most already know they won't benefit from the programme until at least 2032. Yet their roofs are leaking, windows need replacing, façades are crumbling – they can't afford to wait. This is real investment interest. We must meet it with real instruments, where and when it arises, not rely on another form of charity that reaches only a few."⁶⁹

There are several options for how to redistribute the money if the subsidy were decreased. Part of the funds would need to go into private loan guarantees or interest subsidies to stimulate private sector interest. Another part could be used to increase the number of accepted applications. Alternatively, depending on the future offer from the National Decarbonisation Fund, funds could potentially be reallocated towards the mainstreaming of municipal ESCO renovation schemes. In any case, a significant decrease of state subsidies would require the establishment of targeted support for energy-poor families.

A step in the right direction was the EBRD-funded **Residential Energy Efficiency Credit Facility (REECL)**,⁷⁰ which between 2014 and 2019 provided credit lines to Bulgarian banks to provide low-risk loans to individuals, HoAs and service providers such as ESCOs, for use in energy-efficiency improvements. However, the programme failed to realise its potential, due to high competition from 100% grants.

Following the 2026 parliamentary elections, the new government's approach to blended finance remains unclear. The most **important role is played by the civil society sector (one-stop shops), which should cooperate with the banking sector to provide more holistic guidance on investing in renovations.** Consumers need to understand that **waiting for state subsidies comes at a cost, and that a lack of investment into communal areas and facilities decreases the value of their own apartments.** Indeed, through inaction they may lose money (inflation on uninvested savings, high energy bills, fast-increasing costs of work and material), health and years of living in comfort. If civil society motivates homeowners to start at least with small repairs funded through non-profit micro-loans (such as those provided by HfH Bulgaria),⁷¹ HoAs **can slowly build their credibility and confidence as borrowers** so they are more ready to apply for private funding. If state funding remains unchanged and the state sector does not take opportunities for closer cooperation with the private sector, NGOs will need to step in instead and cultivate relationships between HoAs and private investors. Similarly, many municipalities such as Burgas already provide long-term renovation advisory services for subsidy applicants, and clearly understand the needs of individual HoAs. The inclusion of basic financial advice could further improve HoAs' access to private funding.

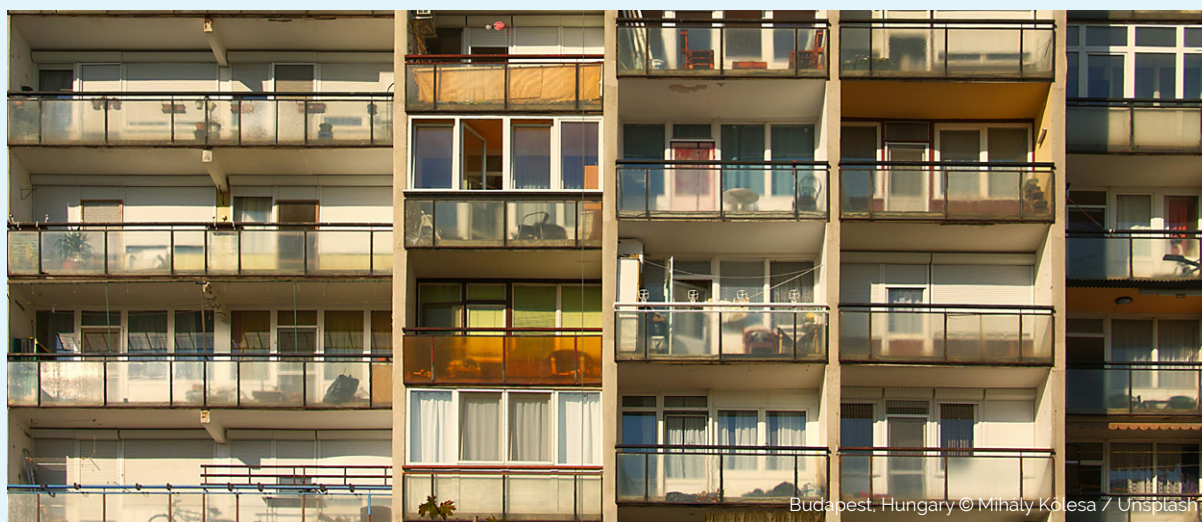
69 EnEffect (2025). Despite massive new funds for renovation until 2032, only one in ten buildings will benefit. Accessible at <https://www.eneffect.bg/en/news/1362/despite-massive-new-funds-for-renovation-until-2032-only-one-in-ten-buildings-will-benefit>

70 Official website available at <http://reeclog/en/about-us/>

71 <https://hfh.bg/en/lending-of-home-improvements-2>



4.2 Hungary



Budapest, Hungary © Mihály Kolesa / Unsplash

Financing of MFAB renovations – historical context

In the 1990's the Hungarian housing stock underwent a full-scale privatisation, which led to the development of two types of HoAs: **condominiums**, representing the vast majority of the owner-occupied buildings, and **cooperatives**. While in condominiums private owners (or municipalities) own flats and share ownership of the common spaces, in cooperatives flats are owned by private owners and the common spaces are owned by the cooperative in which the flat owners have a share.

Both types of **HoAs are well developed legal entities which are recognised by local banks as trustworthy and safe borrowers**. This is not only due to their ability to use future revenue (such as retail space rent income) from their common spaces as collateral, but also thanks to experience – built up over more than 30 years – of working with generous public subsidies, providing a relatively stable environment for the development of the private market renovation loans targeting HoAs. This financing environment stayed in place even after the subsidies were gradually reduced after 2010.

Programmes like The Warmth of Home or Panel Programme I. and II. used to provide subsidies covering as much as 30–50% of reconstruction costs. As a result, the banking sector focused mainly on loans with a limited size and payback time. Generous subsidies together with capped energy prices and a slow shift in the sense of ownership among residents (historically used to the fact their property is managed by a public actor) caused a certain level of passivity, in society and in the private finance sector alike. In a system like this, many stakeholders prefer to wait for the next subsidy call rather than find ways to maximize their available tools and assets. Without a sustainable subsidy scheme, the lack of long-term loan products for energy renovations will quickly become the key vulnerability of the otherwise well-developed renovation market.

Public funding of housing available in spring 2026

In the months leading to the parliamentary elections of April 2026, several subsidy schemes were introduced on top of other energy-related benefits. Although these are mostly aimed at homebuyers, they could have a significant influence on the future development of the renovation market if implemented in a sustainable manner.

A commercial loan with a state-sponsored 3% interest rate, launched in September 2025, is a good example of the type of state support available to Hungarians. It equips first-time buyers and SMEs with a much-needed long-term loan to purchase a new or used dwelling. According to information gathered during interviews for this report, the expansion of the use of these loans for energy-efficiency renovations has already been discussed at ministerial level and could be further developed under the new government. According to same source, despite its benefits, the current scheme has already led to an increase in property prices.

Several currently available programmes target families with children, especially in smaller settlements, who wish to purchase their first property. For instance, the newly-launched **CSOK plus** (Családi Otthonteremtési Kedvezmény Plusz) provides funding for new builds as well as small-scale renovations for homeowners in settlements of under 5,000 inhabitants. However, it is provided in the form of reimbursement and requires prefinancing on the side of homeowners, and **eligibility is limited to apartments in multigenerational houses**. A **workers' loan** programme launched in 2025 provides people aged between 17 and 26 with long-term low-interest loans combined with grants and other benefits for young families. According to local media, in January 2026, the government launched an **annual housing support scheme** targeting another specific group, public service workers, who can receive HUF 1 million (around €2,500) to use for mortgage repayments or down payments.

Only three public programmes provide funding which can be used for renovations by condominiums and cooperatives:

- 1 **Interest rate subsidies**
- 2 **Municipal subsidy schemes**
- 3 **Energy Efficiency Obligation Scheme**

For decades, **interest rate subsidies** have been the most popular form of MFAB renovation funding. The state subsidises 70% of the commercial interest rate in the first five years and 35% in the second five years. Most HoAs access this subsidy via OTP Bank, the largest commercial bank in Hungary (formerly owned by the state). However, due to rising inflation final interest rates are highly volatile. Moreover, the subsidy **can only be used to finance renovations of the shared parts** of the building, such as the roof or facade.

Municipal subsidy schemes are common across Hungary. Schemes originally established to co-finance the Panel Programme continued even after its closure. Despite being gradually phased out, these programmes offer a mix of modest non-repayable and repayable products providing funds for the small-scale renovations of MFABs, mostly for **highly urgent repairs**.

The Energy Efficiency Obligation Scheme was launched in 2021 to meet the goals of the National Energy and Climate Plan. This scheme obliges energy companies to decrease final energy consumption every year.⁷² Renovations in the households of final energy consumers are low-hanging fruit helping to reach this goal. Those who exceed the savings quota can sell their savings to other stakeholders who struggle to fulfil theirs on a certified energy savings market (known as *hitelesített energiamegtakarítások* or HEM). The scheme prompted providers of insulation services to offer homeowners **simple small-scale renovations such as attic insulation** at highly discounted rates, since they can easily sell energy savings to energy companies. While this practice provides access to affordable renovation, local experts have pointed out that the lack of a holistic approach and often-rushed execution focusing merely on savings potential can in certain cases do more harm than good.

Relevant private banks and products for HoAs

Some HoAs use joint funds to bring together the finances necessary to meet eligibility requirements for a loan. Although repair funds are not obligatory by law, they are widely recognised as the key tool for accumulating savings. Other HoAs use their shared property as collateral. Both approaches contribute to their trustworthiness in the eyes of banks.

Banks including OTP⁷³ and MBH⁷⁴ provide **renovation loans using joint funds as collateral**. They provide loans combining the state-subsidised interest rate (mentioned above) for common parts of the building with a favourable rate for non-common parts.

Another way to accumulate the necessary funds is through a **home saving fund (building society)**. This product is available both to individuals and to HoAs, and combines a savings account with the potential of receiving a **fixed rate loan**. Between 1997 and 2018 the state offered a 30% non-refundable subsidy on top of monthly savings.⁷⁵ Since this popular incentive is no longer in place, interest in the product has decreased. However, there are financial institutions such as the market leader Fundamenta-Lakáskassza Zrt.,⁷⁶ OTP and Erste Bank which try to retain their clients using special fidelity bonuses of between 10% and 30% as a substitute for state incentives.⁷⁷

Recommended PPP mix and policy recommendations

The Hungarian market for renovations which increase the energy efficiency of MFABs is one of the most developed in Central and Eastern Europe, and HoAs are recognised as partners and renovation drivers by the state and the private sector alike. At first glance it would appear that public-private cooperation is already encouraged via various private loans with a public subsidy/interest rate subsidy component. Is there a need to further encourage PPPs? The short answer is yes. **On closer examination, the current system does not give sufficient support to the deep renovation of MFABs. This could be fixed by increasing and slightly modifying the involvement of the private sector.**

72 Hungarian Energy Efficiency Institute (MEHI) (n.d.). EEO (Energy Efficiency Obligation Scheme). Accessible at <https://mehi.hu/en/eeo-energy-efficiency-obligation-scheme/>

73 <https://www.otpbank.hu/portal/hu/tarsashaz/hitelek/thermo-stilus>

74 <https://www.mbhbank.hu/lakossagi/maganszemelyek/patriatakarek-lakossagi-tarsashazak-es-lakasszoveketek-reszere-nyujthato-hitel>

75 ComAct (2020). Toolbox of financing models. Bausparkasse scheme ("Lakás-takarékpénztár"). Accessible at <https://comact-project.eu/toolbox-schemes/bausparkasse-scheme-lakas-takarekpenztar/>

76 https://www.unicreditbank.hu/en/individual/saving/saving_program/fundamenta_savings.html

77 More information available for example at <https://tudastar.money.hu/ismerteto/lakastakarek-megeri-meg-ltp-t-kotni-allami-tamogatas-nelkul/>

The biggest issue to address is the lack of a predictable long-term state scheme to incentivise the deep renovation of MFABs. The banking sector already provides loans to HoAs, but decades of generous non-repayable subsidies have left loans with repayment periods of longer than 10 years underdeveloped. Modifying current interest rate subsidies to include renovations of non-common building parts could potentially solve this issue. The current 70% interest rate subsidy could be replaced by a **less generous programme covering a longer period of time, allowing HoAs to make repayments using finance generated by energy savings.**

Given the fact that Hungarian HoAs have a good track record with repayments, the state component could be fully or partially switched for a **state loan guarantee** for private banks in order to make public/EU money go further.

The key to increasing the sustainability of affordable funding is to shift financial responsibility from the state to homeowners. A modest state interest rate subsidy provided for 20+ years, or a self-sustaining revolving fund with minimal grant support with a similar repayment period (see the KredEx case study in subchapter 3.1) would create the predictability needed for the development of the private renovation loan market. In this way, public finance could be primarily allocated to low-income households, while those who are able to repay if given a sufficiently long period of time would be able to secure most of their funding via private loans.

In this context, the **removal of all state support from the Home Savings Fund seems like a lost opportunity.** The fact that at least three financial institutions continue to offer the product, and have even partially replaced the state support with bonuses, indicates that for both banks and customers this model is still financially advantageous. With an additional state component to allow the repayment period to be extended, this already well-known and trusted type of product could be an ideal option for renovations.

As well as risk mitigation and a predictable environment, greater involvement of banks would require measurable quality standardisation in renovation projects. As discussed in Chapter 2, the sustainability of materials and processes are being mainstreamed into the investment policies of European banks in line with the EU taxonomy, along with energy performance. State support for the development of technical documentation should therefore stay in place.

Finally, as volatility in the state support system may continue, homeowners should try to maximise the full investment potential of their buildings and pursue cooperation with private investors. Besides the potential use of common areas for commercial purposes, a **rooftop extension creating additional flats could provide additional sources of income.** Given the close involvement of Hungarian municipalities in the provision of affordable housing, such a model could also be a way of providing more municipal social housing in city centres. Inspiration can be found in Germany, where the state-owned Berlin housing company Hogowe transformed prefabricated panel MFABs from the 1970s into modern green standard housing.⁷⁸ Municipal one-stop shops are well placed to act as focal points connecting HoAs with interested investors, who could be recruited even among prospective homebuyers.

⁷⁸ Deutsche Handwerks Zeitung (2022). Mehr Wohnungen durch Aufstocken von Plattenbauten. Available at <https://www.deutsche-handwerks-zeitung.de/mehr-wohnungen-durch-aufstocken-von-plattenbauten-262509/>



4.3 Lithuania



Financing of MFAB renovations – historical context

The Lithuanian state sector developed a robust programme for the renovation of MFABs, which represent over 60% of dwellings in Lithuania. The programme is administered by the **Environmental Project Management Agency (APVA)**. APVA operates under the Ministry of Environment of the Republic of Lithuania, and is responsible for implementing environmental, climate and energy-efficiency projects financed by the EU and the state. Using mainly EBRD funds, APVA has a track record of cooperating with private financial institutions to provide financial support to HoAs, combining non-repayable grants and low-interest loans. The programme has been running for several years now, and although the grant element has gradually decreased from 50% to its current 20%, it still represents a cornerstone of renovation finance.

The programme has many features which can serve as good examples for other countries. First, it has a **component which provides 100% subsidies to energy-poor low-income families**. Second, during previous funding calls APVA **cooperated directly with selected banks** to provide state-guaranteed low-interest loans. Third, its **core focus is on MFAB renovations**.

Public funding of housing available in spring 2026

The latest 2024–2026 APVA call “for quotations for apartment building modernisation projects,”⁷⁹ which was open until 1 April, benefits from EIB funds. Its goal is to achieve energy efficiency class B or higher while mainstreaming the digitalisation of renovations, and it includes non-energy elements such as the enlargement of windows and balconies to make renovations more attractive to homeowners.

⁷⁹ Call guidelines accessible at https://apvis.apva.lt/paskelbti_kvietimai/daugjabuciu-namu-modernizavimo-projektu-ikainio-kvietimas

Non-refundable support for energy-efficiency works amounts to 20–30% of the costs (including project, supervision, administration and architectural works), as long as the thermal energy cost is decreased by at least 40%. In addition, applicants can receive a **preferential 20-year loan with a fixed 3% annual interest rate**. The loan is provided via UAB ILTE (the Lithuanian national development institution) and is secured by the EBRD.⁸⁰ Previous APVA calls provided preferential loans via private banks including Artea and Swedbank.

State support of 100% is provided to several groups of citizens, such as victims of the 1991 USSR aggression and indigent owners of apartments eligible for heating cost compensation.⁸¹ The rules are, however, rather strict: applicants' monthly income must be under €800, and they cannot own any other properties (not even a garage).

According to local partners, this funding is known for its high success rate among applicants. If the call is suspended before the deadline, existing applications that exceed the amount are usually prioritised in the next call.

With the 2027 call already announced, state grants combined with preferential loans are likely to continue in the foreseeable future. Despite the decreasing state subsidy (which affects the lower middle class the most), APVA calls remain the most popular form of renovation funding.

Relevant private banks and products for HoAs

Similarly to the Hungarian market, generous subsidies from the Lithuanian state enabled the creation of a private market for private loans, but these rarely offer payback periods of more than 10 years and provide only limited finance at rates which are more than twice as high as ILTE's 3% loan.

For this reason, banks providing renovation loans mostly focus on renewable energy upgrades such as heat pumps, solar panels and small wind turbines. Among the few banks providing funding for energy-efficient renovations are **Luminor Bank** and **Citadel**.⁸²

It appears that the only bank providing renovation **loans directly to HoAs** is **Artea**, the largest private player on the building renovation market. In November 2025 Artea announced⁸³ that for the third time it had been selected by the EIB as a financial intermediary to receive resources from the Holding Fund Lithuania 2021–2027.⁸⁴ The goal of **Artea's apartment building modernisation fund** is to attract an additional €525 million on top of the €100 million allocated by the EIB: this should enable the renovation of 850 MFABs with three or more apartments built before 1993. Artea provides 20-year loans at a fixed interest rate of 3% for the first five years then at the EURIBOR 6-month average plus 3% for the remaining 15 years.

80 European Bank for Reconstruction and Development (2025). ILTE UAB – Energy efficiency loans securitisation. Accessible at <https://www.ebrd.com/home/work-with-us/projects/psd/55315.html#customtab-fg98cccbe-item-efd37bf505-tab>

81 See guidelines for the detailed rules, accessible at https://apvis.apva.lt/paskelbti_kvietimai/daugiabuciu-namu-modernizavimo-projektu-ikain-io-kvietimas

82 Learn more at <https://www.citadele.lt/en/private/renovation>

83 Financial Times (2025). Artea Bank is Selected to Launch Third Multi-Apartment Building Modernization Fund. Accessible at <https://markets.ft.com/data/announce/detail?dockey=1330-1001141256en-4DVH5GUOLK968481J38AVI8R8N>

84 European Investment Bank (2021). Holding Fund Lithuania 2021–2027. Accessible at <https://www.eib.org/en/products/mandates-partnerships/shared-management-funds/holding-fund-lithuania>

Many Lithuanians are however willing to wait for another governmental loan rather than taking the less favourable private one, as the latter lack the level of guarantees provided by the state if they are unable to repay their loans. This may not be purely a financial decision, but perhaps also reflects a fear of stepping out of the comfort zone. Many Lithuanians, especially older people, are not willing to take out loans.⁸⁵ As noted in interviews with local project partners, after decades during which building management was provided by the state, many owners lack proactivity in the management of their assets. Such a sentiment was common in focus groups organised by HfH in 2025, with one statement particularly standing out: "In our building of 100 flats, it was hard enough to get that many people to agree to renovate a building that was clearly falling apart".⁸⁶

An excellent example of public–private cooperation was the RenOnBill project (residential building energy renovations with on-bill financing) implemented in Lithuania in 2022. This project's aim was to "scale deep energy renovations of residential buildings by promoting the development and implementation of on-bill schemes, based on the cooperation between energy utilities and financial institutions".⁸⁷ Inspired by the SUNSHINE project (described in subchapter 3.4), RenOnBill developed business models for this type of cooperation and piloted them with Kaunas' city municipal company Kauno energija AB, among others.

Recommended PPP mix and policy recommendations

Given the fact that HoAs are seen as trustworthy and well-regulated partners and lenders with the means to accumulate capital (obligatory repair funds), the Lithuanian renovation market has potential to attract investments into PPP projects. Moreover, there are banks with PPP experience and the ability to benefit from international financial instruments provided by the EU. Finally, the trend of state support is moving towards prioritising affordable loans over non-repayable subsidies. Since many homeowners seem reluctant to take out private loans, PPPs represent an opportunity for private banks to tap deeper into the renovation market. For potential first-time borrowers PPPs could offer a safer space and better conditions than private loans.

There are two areas particularly worth exploring: municipal ESCOs and impact crowdfunding.

Important and **somewhat underutilised stakeholders are municipalities** which run companies managing district heating networks, providing building maintenance services to many HoAs. Moreover, some municipalities have a stake in joint ventures managing private residential buildings, or directly manage MFABs as administrators in a similar way to HoAs.

The trust and established communication channels that exist between HoAs and municipal companies present an opportunity for the development of municipal ESCOs that could provide renovation services to HoAs and be paid back through savings on energy bills (see section 2.1.4).

85 Pažėraitė, A. & Gatautis, R. (2025). SUNRISE Project. Needs assessment of homeowner associations (HOAs) and homeowners for implementation of smaller RE measures in Lithuania. Accessible at https://vartotojaujansas.lt/wp-content/uploads/2025/03/2025_SUNRISE_Lithuania-3.pdf

86 Ibid., p. 10

87 Project website accessible at <https://renonbill.eu/>

A transformation of municipal companies of this kind would be an opportunity for third-party investors. Lithuania already uses the ESCO model in the public sector,⁸⁸ and RenOnBill is a good example in the private sector. The state should build on this experience and support this highly sustainable financing method by co-investing into ESCO companies at the municipal level, especially in smaller cities whose citizens benefit less from APVA calls than those in bigger cities.⁸⁹ Combining renovations with the mainstreaming of green energy solutions is a private investment opportunity that is well worth exploring. As observed in HfH's Sunrise project, "The existing grid struggles to accommodate the fluctuating nature of solar energy, leading to constraints in connecting new solar power plants".⁹⁰ The modernisation of district heating combining renovations of MFABs with renewable energy improvements also presents attractive private investment opportunities. It could be of interest to banks, green pension funds or issuers of green bonds – investors in a position to provide backing and share risks with ESCOs.

Lithuania ranks among the top five EU member states for total crowdfunding volume (in terms of capital raised).⁹¹ The country was among the first member states to adopt the EU Crowdfunding Regulation protecting investors in cross-border EU investments. **Real estate platforms such as Profitus**⁹² and impact investments such as **Greenit Crowd**⁹³ (oriented towards sustainable energy) or **InSoil**⁹⁴ (specialised in agriculture) are driving this rapidly growing sector. Crowdfunding focused on affordable loans for MFAB renovations is exactly the type of ESG-compliant project which could appeal to both financial institutions eager to "green" their portfolios as well as to small individual investors. Crowdfunding companies could work on a similar basis to social enterprises, providing finance to HoAs and municipal joint ventures. The state sector could play a key role in the establishment of such crowdfunding platforms, for instance by providing tax incentives for not-for-profit crowdfunding platforms or technical support for loan applicants. Impact-oriented crowdfunding could also play a role in the development of small loans for HoAs.

88 Energy Holding Ignitis Group, specialising in the provision of renewable energy and operating in the whole Baltic region, is predominantly owned by the Ministry of Finance of the Republic of Lithuania.

89 APVA (2020). Daugiabučių renovacija: 2025 m. 35 modernizuoti namai įsirengė atsinaujinančius energijos šaltinius. Accessible at <https://apva.lrv.lt/lt/naujienos-24316/daugiabuciu-renovacija-2025-m-35-modernizuoti-namai-isirenge-atsinaujinancius-energijos-saltinius-h3T/>

90 Pažėraitė & Gatautis, 2025

91 European Securities and Market Authority (2025). ESMA Market Report. Crowdfunding in the EU. Accessible at https://www.esma.europa.eu/sites/default/files/2025-12/ESMA50-481369926-30854_ESMA_Market_Report_Crowdfunding_in_the_EU_2025.pdf

92 Learn more at <https://thecrowdspace.com/platform/profitus/>

93 Learn more at <https://www.greenit.lt/lt/projektai>

94 Learn more at <https://insoil.com/>

5. Conclusions

PPPs are a response to financing challenges. What defines them is a determination to find a workable solution for projects deemed too complicated, too time-consuming or too risky. PPP projects are about finding a way where others see none, and providing solutions for those who would otherwise be left behind.

PPPs are not the easiest tool in the box. PPP renovations of MFABs are inherently more complex and likely more time-consuming in the initial phase than fully public or fully commercial projects. However, when used well, PPPs are capable of transforming a difficult situation into a success:

- 1 As a financial model, PPPs allow public funds to be stretched by unlocking private finance and allocating money where it is needed the most.
- 2 PPPs empower homeowners to finance renovations themselves by creating the right conditions for them to do so.
- 3 Unlike time-limited public funding calls, PPPs such as revolving funds are more likely to stay sustainable for a longer period of time.

In Central and Eastern Europe, the most successful programmes have benefited from initial international support to local banks in the form of guarantees, loans or grants (e.g. from the EIB or EU). Second, consolidating the management of grants and guarantees under one comprehensive support agency (such as KredEx, ALTUM or APVA) has streamlined the processes and enabled long-term cooperation between the public sector and commercial banks and other investors (e.g. ALTUM, APVA).

More specifically, in Bulgaria, Hungary and Lithuania the development of PPPs depends on the availability of long-term low-interest private loans. Redistributing public finance from almost fully-funded renovations limited to a small group of successful applicants to financial schemes providing guarantees, interest rate subsidies and other incentives to banks willing to develop a line of affordable renovation loans for MFABs would create affordable funding conditions for a large number of MFABs. In combination with the high funding potential of energy performance contracting (municipal ESCOs), PPPs can create a path to a sustainable and swift transition to energy efficiency, even for energy-poor households.

Finally, a successful MFAB renovation starts with an informed decision taken at the building level. In many households in Central and Eastern Europe a "doorstep mentality" still persists from the old days when the state owned everything: homeowners take great care of everything inside their apartment, but feel like the rest of the building – such as the roof, the hallways and the elevators – is not their problem. These homeowners do not fully appreciate that maintenance of their MFAB is their responsibility and directly impacts the value of their own apartment. Work by municipal or NGO one-stop shops and facilitators is essential to change this perception and keep homeowners engaged, connected with renovation sector stakeholders, and supported throughout the whole renovation process.



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