



ComAct

Community
Tailored Actions
for Energy Poverty
Mitigation

POLICY BRIEFING

Financing models adapted to the needs of energy-poor households & policy recommendations

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We have work to do: “One size fits all” is not an option to tackle energy poverty

There is no silver bullet for mitigating energy poverty in multifamily buildings: historical trajectories, operating financing schemes and political contexts require a carefully designed individual approach, tailored to the local conditions

The financing approaches for multifamily building renovations in Eastern and Central Europe, despite similar building stock typologies and ownership models, exhibit considerable diversity. Legal and institutional frameworks, access to financial resources, and distinct post-communist development trajectories contribute to this divergence. From Bulgaria’s 100% renovation grant to Lithuania’s market-based schemes, the spectrum reflects the necessity of tailored strategies.

The pressing need to boost renovation rates is evident across all pilot countries, calling for increased public financing in Hungary, North Macedonia, and Ukraine, distribution of resources among a broader range of beneficiaries in Bulgaria, and increased public engagement in Lithuania. However, the success of these endeavours hinges on sustained political will, a fact illustrated by constant disruptions in public support in Bulgaria and Hungary, which had tangible negative consequences on both renovation rates and the public discourse. In this context, the role of local authorities is crucial but constrained by limited resources and dependence on central government policies.

The primary focus of this policy brief lies in examining the accessibility of financing for building renovation for energy poor households. This remains a central concern due to the persistently unclear national definitions of energy poverty, hindering the development of accessible financing, as current policy efforts still largely revolve around the applicable concept of vulnerability. While each of the analysed financing schemes to some extent presents viable approaches to involve vulnerable households, such as the elderly, the disabled, and single-parent families, it is imperative to broaden the discourse to explore possibilities for engaging other low-income citizens. Encouragingly, there is tangible progress in this regard, seen in a systematic approach with a dedicated definition, as observed in Bulgaria, as well as in the enhancement of access to commercial financing through the introduction of risk-sharing mechanisms, a common feature across several countries. This is especially crucial given the constraints on disposable incomes, particularly in light of rising energy prices, limiting opportunities for investments in deep energy retrofitting projects.

Competing approaches to address energy poverty mitigation

Clearly, it is better to eliminate the reasons for energy poverty rather than hopelessly fight the consequences

Enhancing the energy efficiency of the building stock holds particular significance, not only for its immediate impact on socially vulnerable groups, but also for its enduring contribution to poverty alleviation by addressing the root causes. It is crucial, however, to differentiate between these two types of benefits, considering their distinct contexts and objectives. Heating allowances are the primary instrument of social policies targeting energy poverty mitigation of vulnerable groups by focussing on meeting basic heating needs. Targeted energy renovation grants, on the other hand, cater to low-income property owners who may not qualify for heating benefits. Vulnerable owners or tenants are not concentrated in specific areas and are typically dispersed within multi-family buildings alongside more affluent owners. This makes differentiating between these two target groups essential, for example through detailed criteria for assistance, as renovation grants are directed towards buildings with established management regimes under condominium law. To address the different needs of affluent and vulnerable households, integrating additional renovation grants for vulnerable into social and/or municipal policy is necessary to support individuals lacking financial means to participate in programs requiring co-financing. In the presence of such targeted support, local authorities gain flexibility to manage large-scale residential building stock renovations by overcoming the resistance of insolvent homeowners, while limited public funds are optimally leveraged to attract investments by affluent households.

The need for a working definition

Without a functional definition of energy poverty integrated into renovation grants, tools are missing to allow vulnerable households access to funding

Years of discussions regarding energy poverty at the household level have identified three primary factors that must be addressed either individually or simultaneously: 1) the low income of households, 2) the high energy prices, and 3) the insufficient energy efficiency of homes and appliances. As growth and income policies typically have a long-term horizon and volatility of energy markets is constantly putting national economies under serious stress, implementing energy efficiency interventions in the building stock is imperative for sustained energy savings and the long-term reduction of energy bills. In this situation, defining energy poverty is crucial to ensure the precise targeting of scarce public resources to support building renovation. By establishing well-defined criteria, subsidies can be strategically directed toward households facing genuine energy-related hardships; conversely, more affluent homeowners, who may not fall within the energy poverty category, can be encouraged to explore market-based financing schemes. This dual-pronged strategy seeks to optimize the impact of public subsidies while enabling a diversified financing landscape, aligning with the specific needs of different homeowner demographics. Examples of a working definition are provided by the ComAct project, both on household and building level.¹

¹ For more information visit: <https://comact-project.eu/wp-content/uploads/2024/01/ComAct-D1.3-.pdf>



Actually, do we know what we want to achieve?

Lifting as many low-income households as possible out of energy poverty is the final goal: but how can we maximize impact and measure it?

Having a definition to differentiate homeowners in need for additional support to join renovation programmes is a must to ensure appropriate allocation of public resources; however, we also need an effective methodology to identify the beneficiaries and measure the impact. To alleviate the worst excesses of energy poverty, household data like disposable income and energy expenditure to maintain reasonable comfort levels are essential.

As highlighted in Figure 1 and 2 below, grant eligibility requirements should be tailored to meet the needs of decile group I to group IV, as the reductions in energy expenditures following the renovation of the building lead to significant reductions, essentially, enabling an entire group (IV) to be lifted out of the situation of energy poverty.

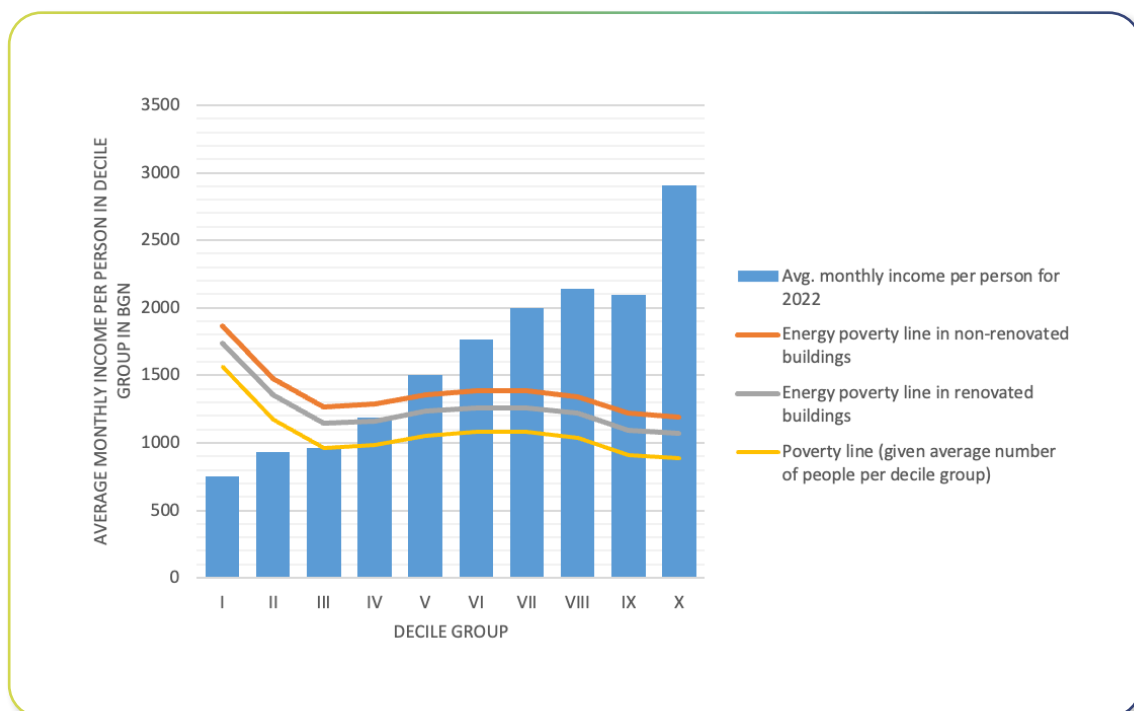


Fig.1 Reducing the risk of energy poverty through building renovation measures by income decile in Bulgaria. Source: Analysis done for a Bulgarian multi-family apartment building by EnEffect.

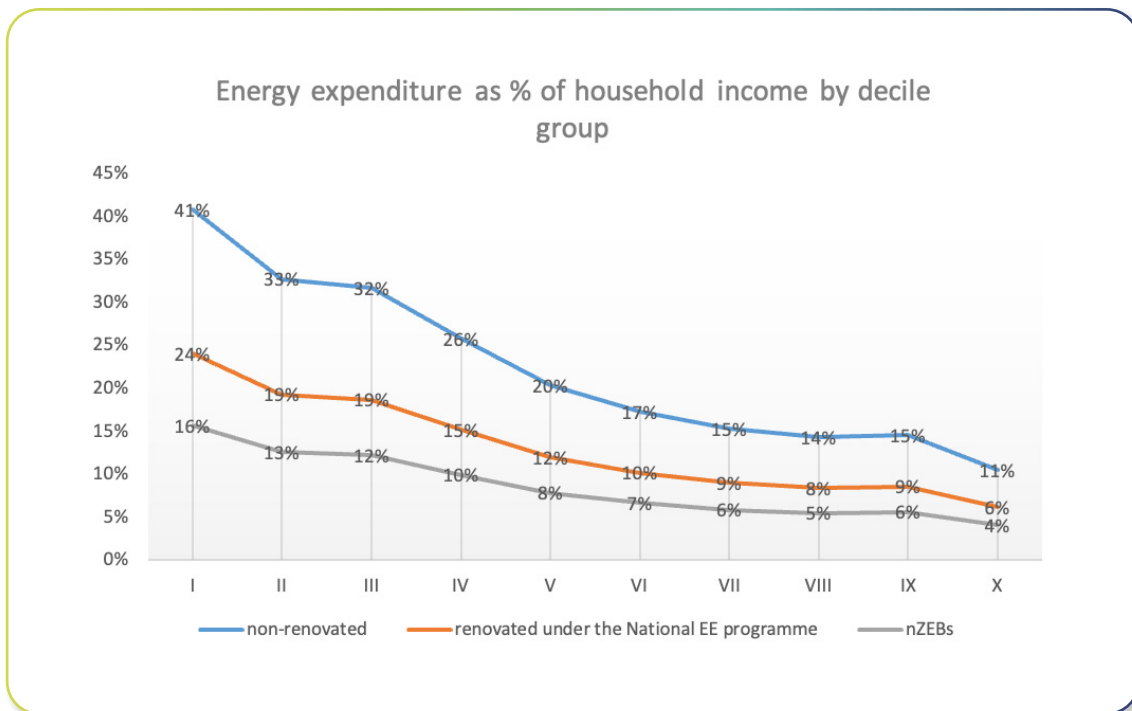


Fig. 2 Energy expenditure as a share of household income by decile group in Bulgaria. Source: Analysis for a Bulgarian multi-family apartment building.

Subsidies or market-based financing?

We need more of both – and in a sustainable, long-term fashion, as any investment initiative should be addressed adequately when and where it gets designed

In navigating the complex terrain of financing multifamily building renovations, a balanced combination of subsidies and market-based financing emerges as a pragmatic approach. Subsidies for building renovation play a pivotal role in addressing the immediate needs of energy-poor households, ensuring that these interventions reach those who most in need. In smaller rates, subsidies for renovations are also necessary decrease payback periods for solvent households, making renovation projects attractive even in countries where energy prices are heavily subsidized. On the other hand, market-based financing schemes offer an avenue for more affluent homeowners to participate actively in building renovations, creating a diversified and sustainable funding landscape. Soft credits in particular can enhance the appeal of market-based financing by providing accessible and favourable terms, encouraging wider participation. The synergy between subsidies and soft credits is crucial, as it not only contributes to the achievement of attractive payback periods but also ensures that financing options can be tailored to the diverse needs of homeowners. This dual approach, lowering the immediate investment costs and ensuring favourable pay-back periods, is key to fostering a sustainable and inclusive strategy for building renovation initiatives.

Innovative financing instruments for renovation of multifamily residential buildings

De-risking, optimally leveraging of public resources, and involving the supply chain and local actors

Reflecting the insights gathered from the discussions held during the financing workshops and stakeholders' engagement activities within the ComAct project, a curated list of innovative financing instruments is presented below. This compilation aims to offer a comprehensive overview of applicable financial mechanisms tailored to address the specific needs of building renovation initiatives addressing energy poverty in multifamily apartment buildings. The list reflects the diverse perspectives and expertise shared by stakeholders throughout the project's collaborative efforts.

1. Specialized credit lines

Specialized credit lines, typically facilitated by International Financial Institutions (IFIs) like the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB), offer a potent mechanism for channelling financing towards energy-efficient building renovations. These credit lines from the IFIs, usually designed for collaboration with local banks, empower such financial institutions to extend dedicated loans to residential and commercial borrowers keen on investing in energy efficiency projects. Local banks, leveraging the specialized credit lines, assume the responsibility of extending commercial loans to eligible borrowers for energy-efficient renovations. What distinguishes these credit lines from conventional loans is the potential inclusion of a partial grant component, a crucial element that significantly alleviates the financial burden for end customers. To qualify for this financing, prospective projects must adhere to specific technical criteria and demonstrate a substantial minimum level of energy savings, typically requiring a significant reduction in energy consumption post-project completion. This tailored approach, applied in Lithuania, North Macedonia, Estonia, and many other countries, not only encourages energy-efficient initiatives but also provides financial incentives to applicants, fostering a robust framework for sustainable building renovations.

2. Specialised revolving funds

Revolving funds, whether initiated by the central government, or potentially by the local authorities, remain a valuable mechanism to provide soft loans for building renovation to end users. These soft loans, characterized by low- or zero-interest rates, lenient collateral requirements, and extended repayment terms, resemble those offered under specialist credit lines from IFIs, but come with a distinct feature. The repayment of these loans is reinvested by the revolving fund to invest in additional energy efficiency projects. Essentially, these funds operate as a sustainable cycle, continuously providing concessional loans for a range of eligible energy efficiency initiatives, including technological enhancements of heating, cooling, lighting systems, building envelope renovations, and the installation of renewable energy systems. The Bulgarian Energy Efficiency and Renewable Sources Fund (EERSF) and the Estonian KredEx fund underscore the potential of revolving funds to complement the financial market, financing viable projects that commercial banks might perceive as too risky or small. Moreover, recognizing the social return of a project is considered also relevant as its financial counterpart, ensuring a balanced and inclusive approach. The Bulgarian and Latvian experience suggests that to enhance the effectiveness of fund management and communication, disbursements should take place at the regional level. Lastly, exploring possibilities for co-financing from international financial institutions like the European Regional Development Fund (ERDF), EBRD, and EIB further amplifies the impact and reach of these revolving funds.

3. National guarantee funds

Establishing national guarantee funds represents a promising avenue to de-risk the investments in renovation and to facilitate soft credits from commercial banks. These funds essentially act as a backstop, providing assurance to banks that potential losses will be covered, thus reducing their perceived and actual risk. This, in turn, incentivises banks to extend loans with more favourable conditions, such as lower interest rates and longer repayment periods, making soft credits more accessible to homeowners undertaking renovation initiatives.

These guarantee funds can be strategically designed in collaboration with government agencies, financial institutions, and relevant stakeholders. Governments can play a crucial role in seeding these funds, injecting initial capital to instil confidence in commercial banks and encourage their active participation. Additionally, governments can provide regulatory frameworks and policy support to guide the functioning of these funds.

Moreover, the establishment of national guarantee funds aligns with broader national objectives related to energy efficiency, as it encourages widespread participation in building renovation initiatives. By fostering a conducive environment for soft credits, these funds contribute to achieving attractive payback periods for homeowners, making energy-efficient renovations financially viable. Overall, national guarantee funds are a viable mechanism to unlock the potential of soft credits for building renovation, bridging the gap between financial institutions and homeowners while advancing energy efficiency goals. A notable development is observed in the case of the EIB-managed Leverage Fund in Lithuania. This Leverage Fund moved away from financial intermediaries as agents to disburse ERDF and national funds and instead provides an ERDF-backed guarantee to banks, who will use only their own funds to give out loans for energy efficient renovations of multi-family apartment buildings. Unfortunately, despite being a major part of the discussions, functioning examples are rare in CEE countries, with the exception of available schemes offered by e.g. EERSF in Bulgaria and the State Housing Development Fund in Slovakia.

4. Green mortgages

A green mortgage, also known as an energy-efficient mortgage (EEM), operates similarly to a conventional mortgage but distinguishes itself by offering applicants more favourable loan terms such as lower interest rates and fees or a higher loan amount if they undertake energy efficiency measures. This approach provides a compelling incentive for integrating energy efficiency improvements into buildings in case they are not initially planned. The key rationale behind EEMs lies in the belief that these improvements positively affect borrowers' disposable income, enhance their loan-servicing ability, increase property value, and consequently lower risk for banks. Notably, banking regulators, including the Basel Committee, the European Banking Federation, and the European Commission, recognize the lower risk profile of green mortgages, potentially leading to re-examination of EU-wide banking regulations. Moreover, there is considerable potential in linking EEMs to the Building Renovation Passport (BRP) for residential buildings, creating a comprehensive record of energy efficiency history that informs mortgage pricing, property valuation, and construction decisions. The BRP, with its documented improvements and future recommendations, stands as a valuable tool for maximizing property potential in a cost-effective manner and facilitating recognition of the 'green value' of energy upgrades by real estate valuers.

While green mortgages are quickly gaining pace on the financial markets in Romania, Hungary, Bulgaria, and even Ukraine, their application for renovation projects is still limited. However, with the new requirements of the EU taxonomy for the financing institutions, this situation is expected to change in the nearby future.



5. On-bill/on-tax financing

On-bill financing mechanisms offer a promising avenue for financing building renovation initiatives, providing a streamlined and user-friendly approach. This innovative method integrates the associated costs directly into the energy bills of end-users, simplifying the repayment process. Energy efficiency improvements, such as building renovations or the installation of renewable energy systems, can be financed through a loan that is repaid incrementally by adding the loan instalments to the user's energy bill. This not only eases the financial burden by spreading costs over time but also establishes a direct link between the investment and subsequent energy savings. These benefits already attract attention by the national authorities, as evidenced by the special regulation for this method recently adopted in Bulgaria.

Alongside on-bill financing, exploring on-tax financing schemes is another avenue worthy of consideration. On-tax financing involves leveraging tax mechanisms to support and incentivise energy efficiency projects. This approach allows for the allocation of tax incentives or credits to individuals or entities engaged in building renovation activities. By incorporating both on-bill and on-tax financing strategies, a comprehensive and versatile financing framework can be established, catering to the diverse needs of end-users and promoting widespread engagement in sustainable building renovations.

6. Energy performance contracts / ESCO schemes

Energy performance contracts (EPCs) and Energy Service Company (ESCO) schemes present a strategic approach for renovating multifamily buildings with distributed ownership among different apartment owners. ESCOs, comprising entities such as utility companies, energy suppliers, construction firms, and equipment installers, play a pivotal role in implementing and often financing energy-saving measures within the framework of Energy Performance Contracts (EPCs). EPCs operate on the principle of repaying investments through the energy savings realized over time. This approach proves particularly advantageous for projects with limited investment potential, where payback periods for certain energy efficiency measures might be extended. In the context of multifamily buildings with distributed ownership, EPCs facilitate an optimal allocation of technical, operational, and financial risk among parties best equipped to manage these complexities. Thus, this approach is currently being investigated to support the transformation of the Bulgarian renovation programmes, and enjoys strong interest, especially in leading municipalities as ComAct frontrunner Burgas.

To stimulate the EPC market, governments can establish a Super ESCO, typically a state-owned institution serving as a transaction aggregator and financing source. A Super ESCO addresses industry challenges by aggregating numerous EPC projects, attracting investors, and providing funding to local ESCOs. This strategic approach not only streamlines the availability of contracts on the market but also ensures strict monitoring of energy-saving measures' implementation and achievement, fostering a robust market for ESCO services in the multifamily building context.

It is not just about the money

Even the best financing scheme could be compromised if there are not sufficient tools for its implementation

The success of any building renovation financing scheme critically depends on key policy components such as monitoring of the results, effective communication, technical assistance, and the availability of skilled labour. These components are indispensable, ensuring the tangible realization of energy savings, facilitating streamlined processes, and providing the technical expertise necessary for successful and sustainable renovations. Without these elements, even the most innovative financing scheme is susceptible to failure.

Monitoring of the results

The success of renovation policies and the effective application of innovative financing mechanisms, as discussed above, hinge crucially on the meticulous monitoring of energy savings. Appropriate monitoring serves as the linchpin for assessing the real impact of implemented measures, ensuring that the projected energy savings are realized. This not only substantiates the efficacy of policies and financial instruments but also instils confidence among stakeholders, be they policymakers, financial institutions, or end-users. A robust monitoring framework not only validates the success of energy-efficient renovations but also provides valuable insights for refining future strategies, fostering a continuous cycle of improvement and sustainability in the realm of building energy efficiency initiatives.

Communication campaigns

Dedicated communication campaigns at both national and local levels are paramount, particularly in light of the insights derived from comprehensive monitoring efforts. The tangible results obtained from monitoring energy savings serve as compelling evidence of the impact of renovation policies and innovative financing mechanisms. By disseminating these results through targeted communication campaigns, policymakers can effectively showcase the success stories, building credibility and trust among the public. Such campaigns not only inform citizens about the tangible benefits of energy-efficient renovations but also play a pivotal role in shaping perceptions, encouraging wider participation, and fostering a collective sense of responsibility toward sustainable building practices. Additionally, local-level campaigns can be tailored to address specific community needs and nuances, ensuring that the information resonates effectively and motivates diverse stakeholders to engage in energy-saving renovations.

One-stop shops and renovation consultants

The role of one-stop shops and renovation consultants is pivotal in empowering homeowners' associations to initiate building renovations and convincing vulnerable or energy poor households in the benefits of renovation – even making them renovation's strongest protagonists. Renovation consultants play a crucial role in guiding associations through the decision-making process, helping them navigate innovative financing options, and offering technical expertise to optimize energy savings. The synergy between effective communication, technical guidance, and streamlined access to resources positions one-stop shops as key facilitators, empowering homeowners' associations to make informed decisions and successfully execute sustainable building renovations, thus helping homeowners avoid or at least mitigate the multiple risks associated with the high energy costs for a comfortable indoor temperature.

Availability of skilled workforce

Unfortunately, the availability of skilled construction professionals is becoming one of the main barriers for the successful implementation of renovation programs. The quality of the construction services is instrumental in translating renovation plans into tangible, high-quality improvements that contribute to the long-term success of energy efficiency initiatives – without them, even the best financing scheme would become irrelevant. Thus, public investments in training and education become a key factor for the success of the renovation policies.



The key to all doors: inter-institutional coordination

The building is the meeting point of energy, climate, environmental, regional development, social, economic and fiscal policies, and they should be well coordinated for maximum impact

Building renovation stands at the intersection of diverse policy realms encompassing energy, climate, environmental, regional development, social, economic, and fiscal domains. The significance of streamlined policy coordination cannot be overstated, as it ensures a harmonious integration of various policy initiatives and financing instruments crafted by different ministries and agencies. Avoiding competition and contradictions between these policies is paramount, fostering synergy to collectively support large-scale building stock renovation. This coordinated approach not only optimizes the impact of renovation efforts but also maximizes the benefits across multiple policy areas. From energy efficiency gains and emissions reductions to regional development, economic stimulation, and enhanced social well-being, the interconnectedness of these policy dimensions underscores the need for collaborative and synchronized policymaking, culminating in a comprehensive and impactful strategy for building renovations.

Policy recommendations

Based on the conclusions drawn from the ComAct financing workshops and stakeholders' engagement activities, the following policy recommendations are proposed for the Central and Eastern European (CEE) region:

1. Promote political coordination and systematic approaches:

To ensure a comprehensive and efficient process, reducing barriers to participation and increasing the overall impact of renovation initiatives, countries should strengthen the national and regional political coordination of the planning, design, and implementation of energy efficiency policies.

2. Clear national definitions of energy poverty:

To address challenges arising from unclear national definitions of energy poverty, countries in the CEE region should adopt clear and standardized definitions. This will facilitate targeted and effective policies to assist energy-poor households and ensure more accurate assessments of eligibility for financing programs.

3. Increase public financing:

Governments in the CEE region should prioritize the enhancement of renovation rates by increasing public financing under the right conditions and through different types of instruments. Learning from successful cases like North Macedonia and Ukraine, allocating more funds to building renovation projects will encourage participation and accelerate the energy efficiency transformation.

4. Broaden distribution and improve access:

Countries, such as Bulgaria, have demonstrated the importance of broad distribution of funds to different societal groups and for different end goals (renovation of cultural, sport, healthcare facilities, schools, kindergartens, etc) and improved access to alternative support instruments, combining financial and technical assistance with educational and capacity building initiatives. Policymakers in the CEE region should explore similar strategies to ensure that a larger number of households benefit from renovation initiatives, thus contributing to the overall energy efficiency goals.

5. Stimulate interest for participation:

Drawing from the experiences in Hungary and Lithuania, efforts should be made to stimulate interest and active participation in building renovation projects. Implementing incentives, awareness campaigns, and community engagement initiatives can encourage homeowners and housing cooperatives to invest in energy-efficient measures.

6. Prioritize long-term commitment and continuity:

The success of building renovation initiatives is highly contingent on political will and continuity. Governments in the CEE region should prioritize long-term commitment to such programs, avoiding interruptions that could have negative consequences on renovation rates and public discourse.

7. Empower local authorities:

Recognizing the crucial role of local authorities, efforts should be made to empower them with sufficient resources and autonomy in decision-making about the investment of renovation funds. In highly centralized governance systems, providing local authorities with the necessary tools and flexibility will enable more effective and tailored building renovation strategies.

8. Adopt risk-sharing mechanisms:

Building on the progress observed in countries like Bulgaria, other nations should explore adopting risk-sharing mechanisms to improve access to commercial financing. This can involve partnerships between public and private entities to mitigate financial risks and attract more investors to support building renovation projects.

9. Promote systematic approaches and full project financing:

Countries should consider adopting consistent, long-term approaches, ensuring a comprehensive and efficient process, reducing barriers to participation and increasing the overall impact of renovation initiatives.

10. Facilitate intensive policy discussions and stakeholder engagement:

Governments should actively facilitate an engagement platform for public and private financing institutions. The experience of ComAct in organizing stakeholders' workshops can serve as a model for involving relevant actors, validating financial schemes, and fostering widespread adoption of proposed solutions. This collaborative approach can unlock the considerable potential for energy-efficient renovation in the CEE region.



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