RenovAID report:
Conclusions from Stakeholder Consultations on the Most Prevalent Issues & Barriers in the Buildings Sector

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This project is part of the European Climate Initiative (EUKI) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK).

The project “RenovAID - Multi-level Structural Support for Improving Energy Efficiency in Buildings in Kosovo and Albania” aims to enhance the energy efficiency of buildings in these regions. Energy efficiency is crucial for reducing greenhouse gas emissions, lowering energy costs, and ensuring sustainable development. This report consolidates findings from comprehensive studies conducted in Kosovo and Albania, providing insights into current barriers and proposing actionable recommendations for policy frameworks and practical implementations to improve energy efficiency in buildings.

The report presents an overview of the current status, challenges, and recommendations for improving energy efficiency in buildings in Kosovo and Albania. Key findings reveal significant barriers such as financial constraints, lack of public awareness, and inadequate policy frameworks. The report emphasizes the need for substantial financial support, enhanced public awareness campaigns, and stricter regulatory enforcement to achieve energy efficiency goals. Collaborative efforts between government bodies, private sectors, and international organizations are essential to drive the energy efficiency agenda forward in line with European standards.

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RenovAID

Multi-level structural support for improving energy efficiency in buildings in Kosovo and Albania

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1. Introduction

1.1. RATIONALE

1.1.1. Report goal

The purpose of this report is to contribute to the ongoing efforts of the RenovAID project to improve the energy efficiency of buildings in Kosovo and Albania. To this end, the report aims to uncover practical insights and provide concrete recommendations for policy makers, stakeholders and practitioners involved in the building sector.

The ultimate goal is to support the development of a long-term renovation strategy that will improve energy efficiency, reduce energy poverty, increase security of supply and contribute to Albania's and Kosovo's climate goals.

Energy efficiency has become a critical focus in addressing some of the most pressing global challenges, including climate change, energy security, and economic development. The RenovAID project is a strategic initiative to increase energy efficiency in the construction sector in Albania and Kosovo, which is crucial for several reasons, including combating decarbonising the housing sector and contributing to economic savings.

The results of this research will enable the development and implementation of policies and programs that can significantly improve the energy performance of buildings in Albania and Kosovo, ensuring a more sustainable and resilient future for the country. The RenovAID project aims to develop and implement a robust Energy Performance Certificate (EPC) system and create one-stop shops for home renovation, making it easier for residents to access the information and services they need for energy-efficient renovations.

This report consolidates the findings from the various project activities in the WP I: "Develop the capability of local and national governments in Kosovo and Albania to improve their policy frameworks for building renovation", providing a comprehensive analysis of the current challenges and proposing solutions to increase energy efficiency in these regions.

1.1.2. Research questions

The primary research questions guiding this report are:

- **What are the most prevalent issues and barriers in the buildings sector in Kosovo and Albania?** This question seeks to identify the key obstacles

that hinder the implementation of energy-efficient practices in buildings. Understanding the barriers is essential for developing targeted strategies to address them effectively.

- **What solutions can be implemented to address these issues and barriers?** Building on the identification of barriers, this question aims to explore viable solutions and best practices that can be adopted to overcome these challenges.
- **How can these solutions be effectively integrated into current and future policy frameworks?** This question focuses on the practical integration of identified solutions into existing and prospective policy frameworks. It examines how recommendations can be operationalized within the legal and regulatory structures of Kosovo and Albania. The goal is to ensure that these solutions are not only theoretically sound but also feasible and sustainable in the long term.

By addressing these research questions, the report aims to uncover actionable insights and provide concrete recommendations for policymakers, stakeholders, and practitioners involved in the building sector.

The findings from this research will inform the design and implementation of policies and programs that can drive significant improvements in the energy performance of buildings across Kosovo and Albania, ensuring a more sustainable and resilient future for the country.

Corresponding to these research questions, the report hypothesizes that the primary barriers to energy efficiency in the buildings sector are financial constraints, lack of public awareness, and inadequate policy implementation. It further hypothesizes that addressing these barriers through targeted financial incentives, educational campaigns, and robust regulatory frameworks will significantly improve energy efficiency outcomes.

1.2. METHODOLOGY

1.2.1. Justification of the methodology

A robust research methodology was necessary to comprehensively understand the multifaceted issues and barriers related to energy efficiency in the construction sector in Albania and Kosovo. The RenovAID project used a mixed-methods approach, combining online questionnaires and face-to-face or Zoom meetings with key stakeholders. This approach was chosen for several important reasons listed below.

A mixed-methods approach allows these diverse perspectives to be taken into account. Energy efficiency in buildings affects a wide range of stakeholders,

including government bodies, construction companies, building administrators, experts, NGOs and the general public. Each group offers unique insights and experiences that are key to a good understanding of the issues at hand.

While quantitative data from surveys can provide broad trends and highlight common barriers, qualitative data from interviews and meetings can provide deeper insights into the underlying causes. Qualitative methods enable the exploration of complex issues that may not be fully captured by structured surveys.

Combining different data collection methods ensures that the study covers both the breadth and depth of stakeholder experience. This triangulation of data sources enhances the reliability and validity of the findings, providing a more comprehensive picture of the current state of energy efficiency in Albania's and Kosovo's building sectors.

Given practical constraints such as time limitations and participant availability, the mixed-method approach provides flexibility. Online questionnaires can quickly reach a larger number of respondents, while face-to-face and Zoom meetings can be adapted to the schedules and availability of key stakeholders.

The overall goal of these surveys is to inform policy makers and provide practical recommendations. The mixed-methods approach generates rich, detailed data that support evidence-based policy-making. This allows to identify specific challenges, understand stakeholder needs and preferences, and propose tailored solutions.

1.2.2. Description of the methodology

The methodology employed in this report combines qualitative and quantitative approaches to gather comprehensive insights:

- **Quantitative Analysis:** The survey data were analyzed to identify common trends, patterns, and statistical correlations. This analysis provided a broad overview of the key issues and barriers to energy efficiency in buildings.
- **Qualitative Analysis:** The qualitative data from meetings were analyzed thematically. Key themes, insights, and narratives were identified and synthesized to complement the quantitative findings. This holistic analysis enabled a deeper understanding of the complexities and nuances of the issues at hand.

The research methodology comprised two main components: an online questionnaire and face-to-face or Zoom meetings. The use of surveys and focus groups allowed for a detailed understanding of the perceptions, challenges, and recommendations from key stakeholders involved in the energy efficiency sector. These methods provided a robust framework to capture both the breadth and depth of issues and potential solutions. Each component was carefully designed and implemented to maximize the quality and relevance of the data collected. Key aspects of this methodology include:

- **Participant Selection.** Participants were selected to represent a cross-section of stakeholders from central and local government institutions. This included ministries, energy efficiency agencies, and municipalities across different regions of Albania.
- **Meeting Format.** The meetings were conducted either in person or via Zoom. This approach allowed for greater flexibility and ensured that a wide range of participants could be included.
- **Guiding Questions.** The meetings were structured around a set of guiding questions designed to explore key themes such as government engagement, citizen involvement, renovation challenges, and potential solutions. These questions facilitated focused and productive discussions, generating valuable qualitative data.

1.2.3. Data collection: Albania

Online Questionnaire:
The online questionnaire was designed to gather quantitative data from a broad range of stakeholders involved in the building sector. Key features of this component include:

- **Targeted stakeholders.** The questionnaire targeted construction businesses, building administrators, energy efficiency experts, and NGOs. These groups were chosen due to their direct involvement and expertise in building renovation and energy efficiency initiatives.
- **Survey content.** The questionnaire covered various topics, including demographic information, challenges and barriers to energy efficiency, stakeholder roles and engagement, and potential solutions. The questions were designed to elicit both specific responses and general perceptions about energy efficiency in buildings.
- **Response rate.** A total of 40 respondents participated in the survey, exceeding the initial target of 35. This robust participation rate provided a solid foundation for quantitative analysis and ensured a diverse range of perspectives.

Consultative meetings:
In addition to the online questionnaire, meetings were conducted with Government institutions (face-to-face and Zoom meetings) to obtain qualitative data and deeper insights into the issues identified through the questionnaire. These meetings involved representatives from various government institutions and municipalities. Key aspects of this methodology include:

- **Participant selection.** Participants were selected to represent a cross-section of stakeholders from central and local government institutions. This included ministries, energy efficiency agencies, and municipalities across different regions of Albania.

- **Meeting format.** Due to time constraints and the practical challenges of scheduling, these meetings were conducted either in person or via Zoom.
- **Procedures applied.** The meetings were structured around a set of guiding questions designed to explore key themes such as government engagement, citizen involvement, renovation challenges, and potential solutions. These questions facilitated focused and productive discussions, generating valuable qualitative data.

1.2.4. Data collection: Kosovo

Surveys:
The survey was conducted from 8-18 July 2024. Key features of this component include:

- **Participant selection.** Participants were selected based on their professional involvement in the construction and energy efficiency sectors to ensure that the survey captures a wide range of expert opinions and experiences. The survey involved professionals from the construction sector, including architects, engineers, energy experts, building managers, professors, and representatives from relevant NGOs and key material manufacturers.
- **Meeting format.** The survey included closed and open-ended questions designed to gather information on challenges, needs, and potential solutions in the field of energy efficiency.
- **Procedures applied.** Data from the surveys were collected, processed, and analysed to identify key themes and trends that inform the report's findings and recommendations.

Focus Groups:
The focus group was held on 1 July 2024. Key aspects of this methodology include:

- **Participant selection.** Participants were selected to represent a diverse range of stakeholders with significant influence and insight into energy efficiency policies and practices. The focus group comprised high-level representatives from important institutions and organizations involved in energy efficiency, such as the Ministry of Economy, Ministry of Environment, Spatial Planning and Infrastructure, GIZ, and representatives from private companies like ESCO Solar.
- **Activities performed.** The focus group involved structured discussions on key issues, barriers, and potential solutions related to energy efficiency in buildings. Discussions were documented and analysed to extract critical insights and expert recommendations.
- **Procedures applied.** The focus group discussions were transcribed and analysed thematically to highlight important themes and expert perceptions, contributing to a comprehensive understanding of the energy efficiency landscape.

2. Results

2.1. ALBANIA

2.1.1. From the interviews and focus groups

The findings from the online questionnaire and consultative meetings highlight the major issues and barriers faced in the building sector in Albania. These include financial constraints, lack of information, and insufficient government engagement, as identified by various stakeholders.

2.1.2. The answers they provide to the research questions

What are the most prevalent issues & barriers in the buildings sector in Albania?

In the buildings sector in Albania, several barriers significantly hinder the adoption of energy-efficient practices. Financial constraints are among the most prominent challenges, as the initial costs associated with retrofitting buildings are prohibitively high. Many property owners struggle to afford the necessary materials, technologies, and labor, and the lack of accessible financing options for energy-efficient renovations exacerbates this issue. Additionally, the regulatory framework in Albania is complex and insufficient to support large-scale energy efficiency improvements, with existing regulatory framework failing to provide clear guidelines, incentives, or enforcement mechanisms to drive compliance and adoption of energy-efficient practices. This creates a discouraging environment for stakeholders, who find the bureaucratic hurdles and lack of regulatory clarity daunting.

Another significant barrier is the reliance on outdated and inefficient technologies within many buildings. The lack of access to modern energy-efficient technologies, coupled with a lack of expertise in implementing and maintaining them, poses a considerable challenge. Furthermore, the design and structure of older buildings often complicates the integration of new technologies, requiring substantial modifications. The existing infrastructure, including power grids and heating systems, is frequently incompatible with energy-efficient upgrades, requiring comprehensive overhauls.
Social factors also play a role in hindering progress. Public awareness and engagement in energy efficiency initiatives are low, with many individuals and communities lacking an understanding of the long-term benefits. This results in minimal prioritization of energy-efficient practices, compounded by cultural resistance to change and a preference for traditional building methods.

What are the solutions to those issues & barriers?

To effectively address the barriers in Albania's building sector, a comprehensive set of solutions has been proposed. Financially, introducing subsidies and grants specifically targeted at energy-efficient renovations can help reduce the financial burden on property owners and encourage wider adoption of these practices. Additionally, providing low-interest loans through government programs or partnerships with financial institutions can make it easier for stakeholders to invest in energy efficiency improvements.

On the regulatory front, Albania needs a robust policy framework that offers clear guidelines, incentives, and enforcement mechanisms to support energy-efficient practices across all sectors. Streamlining regulatory processes and reducing bureaucratic hurdles would make it easier for stakeholders to navigate the system and implement energy-efficient measures.

Technologically, facilitating access to modern energy-efficient technologies through government programs or public-private partnerships can help address the barriers in this area. This could involve tax incentives for importing energy-efficient products or subsidies for purchasing these technologies. Moreover, investing in apacity building and training programs for professionals in the building sector can bridge the knowledge gap. These programs should focus on the latest technologies, best practices, and maintenance of energy-efficient systems.

Promoting building designs that are retrofit-friendly is another key solution. Encouraging new constructions to incorporate energy-efficient designs from the outset would make future upgrades easier and more cost-effective. For existing buildings, investing in infrastructure upgrades, such as improving power grids and heating systems, is necessary to support the integration of modern energy-efficient technologies. These upgrades would ensure that the existing infrastructure can handle the increased load and function efficiently.

How can these solutions be effectively integrated into current and future policy frameworks?

To integrate these solutions into current and future policy frameworks, Albania must take a strategic approach. First, enhancing the policy framework is essential. This includes developing comprehensive, enforceable policies that provide financial incentives, clear guidelines, and streamlined regulations to facilitate easier compliance and adoption of energy-efficient practices. Policies should also be designed to be adaptable, allowing for updates as new technologies and practices emerge.

Strengthening financial support mechanisms is another critical step. The government should establish funding schemes, such as subsidies, grants, and low-interest loans, that are specifically targeted at energy efficiency projects. These mechanisms would help overcome the barrier of high initial costs, making energy-efficient renovations more financially viable for property owners.

Investing in capacity-building programs is equally important. By supporting training and professional development for those working in the building sector, Albania can ensure that there is a skilled workforce ready to implement and maintain energy-efficient technologies effectively. This investment in human capital is crucial for the long-term success of energy efficiency initiatives.

Public engagement should also be a priority. Launching extensive public awareness campaigns to educate citizens about the benefits of energy efficiency, both environmental and economic, will help foster a culture of energy efficiency. Engaging communities through participatory approaches, such as public consultations and workshops, will ensure that energy efficiency measures are aligned with the needs and preferences of the population, increasing the likelihood of successful implementation.

Finally, upgrading infrastructure is vital to support the adoption of modern energy-efficient technologies. Investments in improving power grids, heating systems, and other critical infrastructure will ensure that these systems are capable of handling the demands of energy-efficient technologies, thereby facilitating their integration. By addressing these key areas, Albania can create a supportive environment for the widespread adoption of energy-efficient practices, ultimately leading to significant improvements in the building sector.

2.1.3. The degree to which the answers corroborate the research hypothesis

The research hypothesis was that the primary barriers to energy efficiency in the building sector are financial constraints, insufficient public awareness, and an inadequate regulatory framework. The results from the interviews and focus groups strongly corroborate this hypothesis: financial constraints were consistently identified as the most significant obstacle, with stakeholders emphasizing the high costs and limited access to funding. Additionally, the lack of public awareness and engagement was highlighted as a critical issue, further validating the hypothesis. While the hypothesis correctly identified these key barriers, the research also uncovered additional challenges, such as technological limitations and structural issues within existing buildings, which were not explicitly anticipated in the original hypothesis. However, these findings do not contradict the hypothesis; instead, they expand the understanding of the diverse and interconnected obstacles to improving energy efficiency in Albania.

Overall, the data collected from the interviews and focus groups support the initial hypothesis and offer a more detailed insight into the specific challenges and potential solutions for enhancing energy efficiency in Albania's building sector. The results indicate a recognition of the primary barriers, particularly financial constraints, but also reveal that overcoming these challenges will require a comprehensive approach that includes technological upgrades and infrastructure improvements, alongside better financial and regulatory support.

2.2. KOSOVO

2.2.1. From the interviews and focus groups

The interviews and focus groups conducted as part of the RenovAID project provided valuable insights into the energy efficiency landscape in Kosovo. Participants included a diverse range of stakeholders, such as government officials, construction professionals, energy experts, and representatives from NGOs. The data collected revealed a comprehensive understanding of the current state of energy efficiency in buildings, highlighting several critical issues and potential solutions.

2.2.2. The answers they provide to the research questions

What are the most prevalent issues & barriers in the buildings sector in Kosovo?

One of the most significant barriers identified was the financial constraints faced by stakeholders. The high initial costs of implementing energy-efficient measures, coupled with limited access to funding and financial incentives, were highlighted as major obstacles. Survey data indicated that over 70% of respondents identified financial problems as the primary barrier to energy efficiency improvements. This financial burden is further aggravated by the high initial costs of energy efficiency investments and the low average energy price, which hinder private sector involvement.

While efforts have been made to develop a legal framework for energy efficiency, the implementation and enforcement of these regulations remain problematic. Focus group discussions revealed that despite having adequate laws, the capability of Kosovar society to meet legal requirements is limited.

There is also a lack of clear guidelines and enforcement mechanisms to ensure compliance with energy efficiency standards. The primary issue is the need for legislative regulation, specifically the energy performance of buildings law. Recent actions include the adoption of the European directive on energy performance, with the new law coming into force on July 29, 2024.

Another significant barrier is the low level of public awareness and engagement regarding the benefits of energy efficiency. The survey and focus group participants noted that many building owners and occupants are not fully aware of the potential cost savings and environmental benefits associated with energy-efficient practices. This lack of awareness hinders the adoption of energy-efficient technologies and practices. Awareness campaigns are necessary to educate the public about the importance and benefits of energy certification.

Outdated and inefficient technologies in many buildings were also identified as a barrier. Lack of access to modern, energy-efficient technologies and limited knowledge of their benefits and implementation methods further exacerbate this problem. Kosovo's building stock, mostly built after the 1960s, is not energy efficient by modern standards. In addition, the structural features of existing buildings, especially those built before the establishment of modern energy standards, present challenges for retrofitting.

There is a need to identify existing buildings and create a database of them, which is a major challenge, but is essential for strategic planning. However, organisational barriers such as limited coordination between stakeholders and insufficient training for energy efficiency professionals were highlighted by respondents as issues to be addressed. The small number of staff involved in these projects is causing delays.

What are the solutions to those issues & barriers?

To address the financial barriers, participants recommended introducing more robust financial incentives, such as subsidies, grants, and low-interest loans. These financial mechanisms can help reduce the initial cost burden on property owners and encourage the adoption of energy-efficient practices. Additionally, creating financing campaigns and increasing public awareness about available financial support can drive further engagement.

Enhancing the regulatory framework to provide clearer guidelines, incentives, and enforcement mechanisms is crucial. This includes finalizing and implementing the legal and regulatory framework to address energy efficiency issues effectively. Ensuring that these regulations are well-publicized and enforced can help increase compliance and drive improvements in energy efficiency. The national registry must include all new and existing buildings, ensuring they comply with certification requirements.

Implementing comprehensive public awareness campaigns to educate citizens about the benefits of energy efficiency is essential. These campaigns should highlight both the environmental and economic benefits, thereby fostering a culture of energy efficiency. Engaging community leaders and using various media channels can help reach a broader audience.

Facilitating access to modern energy-efficient technologies through government programs or public-private partnerships can help overcome technological barriers. This includes providing subsidies or tax incentives for the purchase of energy-efficient appliances and retrofitting technologies.

Investing in capacity-building and training programs for professionals in he construction and energy sectors is vital. These programs should focus on the latest technologies, best practices, and the maintenance of energy-efficient systems. Enhancing the skills and knowledge of these professionals can ensure the effective implementation of energy efficiency measures.

Enhancing coordination among stakeholders through better communication and collaborative platforms can address organizational barriers. Establishing clear roles and responsibilities, and fostering partnerships between government agencies, private sector entities, and NGOs can drive collective action towards energy efficiency goals. Encouraging private sector participation, particularly through ESCO (Energy Service Companies) models, is essential.

Developing a comprehensive renovation strategy for buildings is crucial for meeting energy efficiency targets. Collaboration with international organizations like LuxDev and EBRD is vital for drafting and implementing effective strategies. Campaigns to legalize unregistered buildings and include them in energy efficiency initiatives, along with special grants and incentives to bring these buildings into compliance with energy performance standards, are necessary steps.

How can these solutions be effectively integrated into current and future policy frameworks?

The insights gathered from the surveys and focus groups in Kosovo provide a comprehensive roadmap for integrating solutions into current and future policy frameworks to increase energy efficiency in buildings. The significant financial barriers identified by the majority of respondents highlight the urgent need for financial incentives. These incentives should be incorporated into both current and future national budgets, providing streamlined application processes and ongoing funding to support ongoing energy-efficient renovations.

In addition, the need for a robust regulatory framework was highlighted, with a focus on finalising and enforcing building energy performance regulations, increasing the capacity of regulators and establishing a transparent monitoring and evaluation system.

Awareness campaigns emerged as a key solution, given the low level of awareness identified as a major barrier. Immediate steps should include launching nationwide campaigns using various media channels and engaging community leaders to educate citizens on the benefits of energy efficiency. Future initiatives should integrate energy efficiency education into school and community programs, ensuring that awareness-raising efforts are continuous and adaptable to new technologies and practices.

Access to modern technology and capacity-building programs for professionals is also essential, requiring the implementation of tax incentives, subsidies and specialised training programs to increase skills and knowledge in the energy efficiency sector.

Improved organisational coordination and strategic planning for renovation were also key recommendations. Establishing inter-agency task forces and fostering public-private partnerships can enhance collaboration and leverage resources and expertise. The development of a comprehensive national renovation strategy

with clear goals and timelines will be key to aligning with international standards and best practices. These integrated efforts will create a solid policy framework that will support sustainable energy efficiency improvements in Kosovo's building sector.

2.2.3. The degree to which the answers corroborate/falsify the research hypothesis

The research hypothesis was that the main barriers to energy efficiency in the building sector are financial constraints, lack of public awareness and inadequate policy implementation. The results of the interviews and focus groups strongly support this hypothesis: financial constraints were overwhelmingly identified as the most important barrier. Additionally, lack of public awareness and involvement was highlighted as a critical issue, further supporting the hypothesis.

While the hypothesis correctly identified the main barriers, the research also revealed additional challenges, such as technological and structural barriers, which were not explicitly identified in the hypothesis. However, these findings do not refute the hypothesis, but rather broaden the understanding of the multifaceted nature of barriers to energy efficiency in Kosovo.

Overall, the data collected from the interviews and focus groups support the initial hypothesis and provide a nuanced understanding of the specific challenges and potential solutions to improving energy efficiency in Kosovo's building sector. The results of both the survey and the focus group indicate a well-informed community in Kosovo with a strong understanding of how to improve energy efficiency. Nonetheless, there are still significant barriers, primarily financial constraints, that impede progress. The survey data and focus group discussions reveal that while there is a strong awareness of the challenges and improvements needed, effective solutions are hampered by a lack of adequate financial support and enforcement.

3. Conclusions

3.1. THE WIDER IMPLICATIONS FOR ALBANIA'S AND KOSOVO'S LEGISLATIVE ENVIRONMENT AND SOCIAL CONDITIONS

3.1.1. Albania

The findings from the research have significant implications for Albania's legislative environment and social conditions. The identified barriers, particularly the financial constraints and regulatory inadequacies, suggest that without substantial legislative reform, progress in improving energy efficiency in the building sector will remain limited. Albania's current legal framework lacks the necessary provisions to encourage and enforce energy-efficient practices across the building sector. The absence of strong incentives and clear guidelines means that stakeholders, including property owners and construction companies, have little motivation to adopt energy-efficient technologies.

Moreover, the lack of public awareness and engagement, as highlighted by the research, points to a broader social challenge. There is a clear need for the Albanian government and other stakeholders to invest in educational campaigns and community engagement programs that can shift public perception and behavior towards prioritizing energy efficiency. Without addressing these social conditions, legislative changes alone are unlikely to achieve the desired outcomes. This underscores the importance of a holistic approach that integrates legal, financial, and social interventions to drive meaningful progress in this area.

3.1.2. Kosovo

The RenovAID project has so far provided a comprehensive assessment of the current state of energy efficiency in buildings in Kosovo through extensive surveys and focus groups. The findings highlight significant barriers to energy efficiency, including financial constraints, regulatory and policy challenges, low public awareness, outdated technologies, and structural and organizational issues. Despite these challenges, there is a well-informed human resource base in Kosovo with clear ideas on how to improve energy efficiency.

The research indicates that without substantial financial assistance, it will be difficult to overcome the barriers to achieving energy efficiency goals. Financial incentives such as subsidies, grants, and low-interest loans are crucial for making energy-efficient solutions more accessible. Additionally, the need for a robust regulatory framework, including the finalization and enforcement of the energy

performance of buildings law, is paramount. Public awareness campaigns and capacity-building programs are essential to educate citizens and professionals about the benefits and methods of energy efficiency. Improving organizational coordination and facilitating access to modern technologies will further support the integration of energy-efficient practices.

3.1.3 Discussion and synthesis of the findings

The findings from Albania strongly support the research hypothesis, highlighting financial constraints, lack of public awareness, and inadequate policy implementation as the primary barriers to achieving energy efficiency in the building sector. These challenges are further complicated by regulatory and technological obstacles, which were consistently emphasized by participants in interviews and focus groups. Despite a widespread understanding of the benefits of energy efficiency and a willingness to adopt sustainable practices, the lack of adequate financial resources and a robust regulatory framework remains a significant hindrance to progress.

The findings from Kosovo reveal a strong alignment with the research hypothesis that financial constraints, lack of public awareness, and inadequate policy implementation are the primary barriers to energy efficiency. These issues are compounded by technological and structural challenges, which were also highlighted by the survey and focus group participants. The data indicates that while there is significant knowledge and willingness to improve energy efficiency, the lack of financial resources and regulatory support hinders progress.

Overall, the findings suggest that a comprehensive strategy, involving regulatory reform, financial incentives, technological advancements, and public engagement, is necessary to overcome the barriers to energy efficiency in Albania's and Kosovo's building sector. The comparison between Kosovo and Albania underscores the need for tailored approaches that consider each country's legislative environment and social conditions. Both countries face similar challenges, but the solutions must be adapted to their specific contexts. By addressing these challenges, both countries can make significant strides toward sustainable development and improved energy efficiency in its buildings.

3.1.4. The results as a groundwork for developing a long-term renovation roadmap for Pristina and Tirana

The findings from the research provide a strong basis for crafting a long-term renovation roadmap. This roadmap should focus on addressing the primary barriers to energy efficiency in the building sector by first ensuring that financial mechanisms, such as subsidies, grants, and low-interest loans, are available to support energy-efficient renovations. These financial tools will be crucial in making energy-efficient upgrades more accessible to property owners and in encouraging widespread adoption.

A robust regulatory framework will be essential, with policies that include clear guidelines, incentives, and enforcement mechanisms to promote compliance with energy efficiency standards. Simplifying these regulations will help reduce bureaucratic obstacles, making it easier for stakeholders to implement energy-efficient measures. Additionally, the roadmap should prioritize technological upgrades by facilitating access to modern energy-efficient technologies and investing in capacity-building programs that equip professionals in the building sector with the necessary skills and knowledge.

Public awareness initiatives will also play a vital role in the roadmap, with targeted campaigns designed to educate the population about the environmental and economic benefits of energy efficiency. Moreover, fostering collaborations among government bodies, private sectors, and NGOs will be key to pooling resources and driving collective action. Finally, the roadmap should include infrastructure upgrades and promote retrofit-friendly building designs to support energy-efficient technologies, ensuring that Tirana's building sector aligns with both national and international energy efficiency goals. By addressing these areas, the roadmap can significantly advance Tirana's energy efficiency, contributing to the city's sustainable development and enhancing the quality of life for its residents. The insights gained from the project so far lay a solid foundation for developing a long-term renovation roadmap for Pristina. The roadmap should prioritize financial mechanisms to support energy-efficient renovations, including subsidies, grants, and low-interest loans. It should also emphasize the importance of a strong regulatory framework, with clear guidelines and enforcement mechanisms to ensure compliance with energy efficiency standards.

Public awareness campaigns should be a central component of the roadmap, aiming to educate citizens about the benefits of energy efficiency and the available financial support. Capacity-building programs for professionals in the construction and energy sectors will be essential to equip them with the latest knowledge and skills. The roadmap should also include strategies for improving organizational coordination and facilitating access to modern energy-efficient technologies.

Finally, the roadmap should incorporate a comprehensive renovation strategy that aligns with international standards and leverages the expertise and funding of international organizations. By addressing these key areas, the long-term renovation roadmap for Pristina can significantly enhance energy efficiency in the city's buildings, contributing to sustainable development and improved quality of life for its residents.

4. Recommendations

4.1 ALBANIA

To address the barriers to energy efficiency in Tirana's building sector, several short-term and long-term actions are recommended. In the short term, financial incentives such as subsidies and grants should be introduced to specifically target energy-efficient renovations, helping to reduce the initial cost burden on property owners and encouraging wider adoption of energy-efficient practices. Additionally, providing low-interest loans through government programs or partnerships with financial institutions can further facilitate investments in energy efficiency improvements, thereby increasing the uptake of such measures.

Public awareness efforts are also essential in the short term. Launching comprehensive public awareness campaigns can educate citizens about the environmental and economic benefits of energy efficiency, while community engagement programs such as workshops, seminars, and pilot projects can involve local communities in decision-making processes, increasing their commitment to energy-efficient practices and fostering a culture of energy efficiency.

For long-term actions, policy development is crucial. Strengthening the regulatory framework by developing and implementing robust policies that include clear guidelines, incentives, and enforcement mechanisms will support energy efficiency initiatives across all sectors. Simplifying regulations by streamlining processes and reducing bureaucratic hurdles will make it easier to implement energy-efficient measures. Technological upgrades should be facilitated through investments in modern technologies and capacity-building programs that focus on training professionals in the building sector on the latest technologies, best practices, and maintenance of energy-efficient systems.

Stakeholder collaboration is another key area for long-term action. Fostering partnerships between the government, private sector, and NGOs can drive collective action, pooling resources and sharing knowledge to develop innovative solutions to energy efficiency challenges. Public-private partnerships should also be encouraged to leverage the strengths of both sectors in implementing energy-efficient projects, bridging funding gaps, and enhancing technological capabilities. Structural improvements are necessary to support energy-efficient technologies. Promoting retrofit-friendly building designs, particularly in new constructions, can ease the retrofitting process, while investing in infrastructure upgrades such as power grids and heating systems will ensure they can handle the increased load and function efficiently.

Finally, social solutions like increasing public participation and implementing cultural change initiatives are vital. Public consultations and participatory decision-making processes can help align energy efficiency measures with community needs, while educational programs, success stories, and incentives can shift cultural perceptions towards adopting energy-efficient practices.

4.2 KOSOVO

To address the identified barriers, it is crucial to establish a national register and certification system. This register should cover all new and existing buildings, ensuring that they comply with the certification requirements. Awareness campaigns to educate the public on the importance and benefits of energy certification are therefore necessary. Educating the public will not only raise awareness, but also increase commitment and compliance.

Clearly, increasing the availability of financial incentives such as subsidies, grants and tax breaks is key to overcoming these barriers. In addition, the legal and regulatory framework will need to be refined and strictly implemented, including the establishment of robust compliance monitoring. In order to advance, the responsible institutions need to coordinate effectively with external actors to develop and implement a clear energy efficiency program in line with European standards. Without proper financial focus and inclusive strategies, valuable knowledge and community efforts will go unused, leaving Kosovo's energy efficiency goals unfulfilled.

Strategic planning for building renovation is another important step. The development of a comprehensive renovation strategy is key to achieving energy efficiency goals. This strategy should be developed in cooperation with international organisations such as LuxDev and the European Bank for Reconstruction and Development (EBRD), which can provide valuable expertise and resources. Such cooperation is essential to develop and implement effective strategies that are in line with global standards.

It is also necessary to establish a mechanism to enforce urban planning criteria such as energy certification. A comprehensive assessment of the costs of implementing new regulations and policies should be carried out to ensure financial feasibility. The long time to resolve property issues and legal disputes hinders progress in the building sector and needs to be resolved to facilitate smoother implementation of energy efficiency initiatives.

Private sector involvement is also essential to strengthen energy efficiency efforts. Creating appropriate contractual models and adjusting energy prices can attract private sector investment in energy efficiency projects. In addition, outsourcing certain aspects of project implementation can reduce the burden on public funds and ensure sustainability. Encouraging private sector participation can lead to innovative solutions and more efficient project implementation.

Another important recommendation is the legalisation and inclusion of unregistered buildings in energy efficiency initiatives. Campaigns should be conducted to legalise unregistered buildings and special subsidies and incentives should be provided to bring these buildings up to energy efficiency standards. Such an approach ensures that all buildings, regardless of their current status, contribute to overall energy efficiency goals.

5. Methodological Annex

5.1. THE INTERVIEW QUESTIONNAIRE

This survey is part of the project "Multi-level structural support for improving energy efficiency in buildings in Kosovo and Albania", that addresses the issue of inadequate progress in improving the energy efficiency of buildings in Kosovo & Albania by providing multi-level structural support. By participating in this survey, you agree to provide accurate information to the best of your knowledge and consent to the use of your responses for research purposes, ensuring that your data will be kept confidential and used only in aggregate form.

1. Demographic Data

AGE	GENDER	EDUCATION	OCCUPATION
☐ 18 - 25	☐ Male	☐ High school diploma or equivalent	☐ Construction Business
☐ 25 - 34	☐ Female	☐ Bachelor's degree	☐ Building Administrator
☐ 35 - 44	☐ Prefer not to say	☐ Master's degree	☐ Energy Efficient Expert
☐ 45 - 54		☐ Doctoral degree	☐ Non-government organization
☐ 55 - 64		☐ Professional degree	☐ Other (please specify)
☐ 65 and over			

2. General Information

2.1. How long have you been involved in the energy efficiency or building renovation sector?

☐ 0 – 3 years
☐ 3 – 5 years
☐ 5 – 10 years
☐ More than 10 years

2.2. What type of buildings do you primarily work with?

☐ Residential
☐ Non-residential
☐ Both residential and non-residential

3. Challenges and Barriers

3.1. What are the main challenges you face in implementing energy efficiency measures? (Select all that apply)

☐ Financial (e.g., lack of funding, high upfront costs)
☐ Structural (e.g., building design, infrastructure limitations)
☐ Regulatory (e.g., insufficient policies, complex regulations)
☐ Technological (e.g., lack of advanced technologies, outdated systems)
☐ Social/Cultural (e.g., openness or unwillingness to change, the role of habits, the level of environmental awareness)
☐ Organizational (e.g., lack of coordination, insufficient training or expertise)
☐ Market (e.g., lack of market incentives, low demand for energy-efficient solutions)
☐ Other (please specify) _____

3.2 How do you perceive the current policy framework in supporting energy efficiency improvements?

☐ Very negative	☐ Negative	☐ Neutral	☐ Positive	☐ Very positive

3.3. What are the key barriers to the widespread adoption of energy-efficient practices in your sector? (Select all that apply)

☐ Financial Constraints (e.g., high upfront costs, lack of funding or incentives)	☐ Lack of Awareness (e.g., insufficient knowledge about energy-efficient practices, benefits not well understood)	☐ Technological Limitations (e.g., lack of access to advanced technologies, outdated equipment)
☐ Regulatory Barriers (e.g., insufficient policies, complex compliance requirements)	☐ Market Barriers (e.g., low market demand, lack of competitive products)	☐ Other (please specify)

4. Stakeholder Roles and Engagement

4.1 How do you view the role of the government in facilitating energy-efficient renovations?

☐ Very negative	☐ Negative	☐ Neutral	☐ Positive	☐ Very positive

4.2 What is the level of engagement from the private sector and civil society in energy efficiency initiatives?

☐ Very Low	☐ Low	☐ Moderate	☐ High	☐ Very high

4.3 How do you perceive the capacities of firms and NGOs in supporting energy efficiency initiatives? Rate the following statements from 1 (Strongly Disagree) to 5 (Strongly Agree):

☐ Firms and NGOs possess sufficient expertise and knowledge.	☐ Firms and NGOs have adequate funding and resources.	☐ Firms and NGOs demonstrate effective collaboration and coordination
☐ Firms and NGOs have access to advanced technologies.	☐ Firms and NGOs exhibit a strong organizational structure and leadership.	☐ Firms and NGOs have a high level of environmental awareness.
Other (please specify):		

4.4 How effective are current communication strategies in raising public awareness about energy efficiency?

☐ Very effective	☐ Effective	☐ Neutral	☐ Ineffective	☐ Very ineffective

5. Potential Solutions

5.1 What measures do you think would be most effective in overcoming the barriers to energy efficiency?

5.2 How can financial incentives be better structured to support energy-efficient renovations? (Select all that apply)

☐ Increased Subsidies or Grants	☐ Low-Interest Loans	☐ Enhanced Awareness Campaigns
☐ Tax Incentives	☐ Public-Private Partnerships	☐ Long-Term Support Programs
Other (please specify):		

5.3. What role should local governments play in promoting and implementing energy efficiency policies? Rate the following statements from 1 (Strongly Disagree) to 5 (Strongly Agree):

☐ Local governments should develop and enact energy efficiency policies and regulations.	☐ Local governments should provide financial incentives such as grants, subsidies, and tax breaks to support energy-efficient renovations.	☐ Local governments should run public awareness campaigns to educate citizens about the benefits of energy efficiency.
☐ Local governments should provide technical support and resources to help implement energy-efficient practices.	☐ Local governments should monitor compliance with energy efficiency standards and enforce regulations.	☐ Local governments should support innovation and pilot projects to explore new energy efficiency technologies and practices
☐ Other (please specify):		

6. Impact and Priorities

6.1. What impact do you believe improved energy efficiency will have on energy poverty in Albania?

☐ No impact	☐ Minimal impact	☐ Moderate impact	☐ Significant impact	☐ Very significant impact

6.2. What should be the priority areas for investment to enhance energy efficiency in buildings? (Select up to 5 most important areas)

☐ Insulation Improvements	☐ Window and Door Upgrades	☐ Heating, Ventilation, and Air Conditioning (HVAC) Systems
☐ Renewable Energy Integration	☐ Energy-Efficient Lighting	☐ Smart Building Technologies
☐ Building Envelope Enhancements	☐ Energy Management Systems	☐ Appliance and Equipment Upgrades
☐ Public Awareness and Education Programs	☐ Training and Capacity Building	☐ Financial Incentives and Subsidies
☐ Research and Development	☐ Policy Development and Implementation	☐ Other (please specify)

6.3. Are there any additional comments or suggestions you would like to provide?

5.2. THE FOCUS GROUP SCRIPTS

Survey Form Table 2

SECTION	QUESTIONS
Demography	i.e Age, Gender, Education
General Information	1. What is your role in the building sector? (e.g., construction business, building administrator, expert, NGO) 2. How long have you been involved in the energy efficiency or building renovation sector? 3. What type of buildings do you primarily work with? (e.g., residential, non-residential)
Challenges and Barriers	4. What are the main challenges you face in implementing energy efficiency measures? (e.g., financial, structural, regulatory) 5. How do you perceive the current policy framework in supporting energy efficiency improvements? 6. What are the key barriers to the widespread adoption of energy-efficient practices in your sector?
Stakeholder Roles and Engagement	7. How do you view the role of the government in facilitating energy-efficient renovations? 8. What is the level of engagement from the private sector and civil society in energy efficiency initiatives? 9. How effective are current communication strategies in raising public awareness about energy efficiency?
Potential Solutions	10. What measures do you think would be most effective in overcoming the barriers to energy efficiency? 11. How can financial incentives be better structured to support energy-efficient renovations? 12. What role should local governments play in promoting and implementing energy efficiency policies?
Impact and Priorities	13. What impact do you believe improved energy efficiency will have on energy poverty in Albania? 14. What should be the priority areas for investment to enhance energy efficiency in buildings? 15. Are there any additional comments or suggestions you would like to provide?

ABOUT THE PROJECT

As buildings account for the largest share of energy consumption in Europe, improving their energy efficiency and reducing their energy consumption are key pillars in the pursuit of a decarbonised building stock by 2050, contributing to the implementation of the European Green Deal.

Kosovo and Albania, both officially considered as potential candidates for EU membership, have some of the most inefficient building stocks and the two highest energy poverty rates (40% and 37% respectively) in Europe. Despite their plans to reduce energy consumption, Kosovo and Albania lack adequate policy frameworks to scale up improvements – especially in the residential building sector – and support measures that could accelerate renovation.

Drawing on evidence-based analyses, the project provides the governments of Kosovo and Albania with policy recommendations on how to improve the energy efficiency of buildings. The Kosovan and Albanian partners provide expertise based on the two national contexts and engage with local target groups, while the Polish and Hungarian partners share their expertise in EU policy. Training measures, workshops and consultations are organised to provide central and local administrations with the know-how and tools needed to develop long-term renovation strategies in line with EU policies, including the Energy Performance Certificate Framework.

One focus of the project is on energy poverty, which is particularly prevalent in Kosovo and Albania. Policy recommendations are developed, and guidance is provided to local authorities and the national government on how to disseminate information to citizens and the private sector on energy efficiency measures in renovations. Local governments, the private sector, and civil society are trained to establish one-stop shops as a means to facilitate and accelerate the climate-friendly renovation of buildings.

Supporting the implementation of EU climate and energy legislation in Kosovo and Albania can also help to pave their way to EU membership.

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