

Facilitation process for pilot building renovation projects



FinEERGo-Dom
GREY PAST 2 GREEN FUTURE

Work Package: WP5

Work Package Leader: KAPE

Authors: Charlotte Eloise Stancioff (Ekubirojs) with input from all partners on specific context

Date of Delivery: 27/05/2022

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 847059.



The sole responsibility for the content of this document lies with the authors. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

ABBREVIATIONS

BEEF	Building Energy Efficiency Facility
DRS	Dispute Resolution System
EC	European Commission
ESR	Energy Service Requirements
EU	European Union
MSP	Multi Stakeholder Platform
SME	Small and medium-sized enterprises – on the EU level defined in the EU recommendation 2003/361, however there may be slight differences on the national level

Table of Contents

Introduction	1
How to implement BEEF Building pipeline in your region?	3
Facilitation: roles and technology	3
Methodology	5
Stage 1: Inspiration and Information	6
Define the business value:	7
General Value Propositions	8
Stakeholder Analysis	9
Current Local Policies:	10
Product Implementation	14
Go to Market Strategy	16
Stage 3 & 4. Implementation and Evaluation Phase	17
Monitoring and Adjustment	20
Learning from Current Use Cases	20
Conclusions	23
References and useful links	23
Appendix	24
Basic Market Questions	24

Table of Figures

Figure 1. Project implementation steps in the BEEF model digital use (with examples of institutions from Latvia).....	5
Figure 2. Overview of project facilitation methodology (with examples of institutions from Latvia)	6
Figure 3. Stage 1: Inspiration (with examples of institutions from Latvia).....	7
Figure 4. Stage 2.1 Ideation (with examples of institutions from Latvia).....	13
Figure 5. Stage 2.2 Ideation (with examples of institutions from Latvia).....	14
Figure 6. Stage 3 Implementation (with examples of institutions from Latvia)	18
Figure 7. Stage 4 Evaluation (with examples of institutions from Latvia).....	19

Introduction

The main goal of the FinEERGo-Dom project is the replication of the financial mechanism to support EPC contracts through purchase of receivables, originally set up in Latvia (“LABEEF”), across 5 pilot countries. This is aimed to be done through the setting up an actual facility and pipeline for building renovation.

This document facilitates project partners through a collaborative process of implementing a building pipeline through workshops in-country, digitalization with the SUNShINE platform, and mutual learning and understanding. It is worth mentioning that this process is different from what was initially foreseen. For a variety of reasons, in-person facilitation through co-design workshops was not possible because of the COVID-19 pandemic, which influenced in-person meetings. Additionally, the SUNShINE platform was continually delayed, making digitization of the process impossible.

Therefore, we have written this document to help organizations develop their own facilitation process for closing the pilots from the beginning of setting up a financial mechanism, in this case a Building Energy Efficiency Facility (BEEF), through project implementation.

In this document, we address the aspects that we believe are limiting the scaling of building renovation: private financing and stakeholder engagement, which are required for creating market demand. This document lays out a clear path that focuses on how to address these two aspects to help partners and other interested audiences implement a scalable building renovation pipeline in their own pilot country and local context. In each step of our methodology, we offer a series of useful questions and resources. Further, we give space for partners to share how that step of the methodology has been implemented or not. We aim to offer insight on where partners are now, what are the challenges and lessons learned from these past two years in the implementation of their building renovation pipeline.

We see this document as a living document, which can be updated by FinEERGo-Dom project partners and other replicators as they move forward through the methodology and set up a pipeline for building renovation and facilitate pilot projects. We have identified the main steps, resources and aspects that need to be considered by not only partners of the FinEERGo-Dom project, but any future collaborator interested in facilitating a pilot for building renovation. We wrote it with a language that is approachable and easy to understand, offering future readers the ability to reuse, take it apart and adapt to their

context. The structure of this document is one of steps that can be followed and checked off as a reader goes through the document. We aim for readers to use the steps, offering an architecture to follow. We offer this framework, but it is up to readers to catalyse the resources and lessons learned to crystalize implementation.

As a public deliverable that is approachable and useful. We hope that FinEERGO-Dom project partners and, even more so, future audiences will use it as a guide to move ahead with their pilot – especially defining the necessary financing costs, ensuring measures/services offered are clear, and meeting the owner’s demands. Our goal, therefore, is a public document that enables our methodology to scale

How to implement BEEF Building pipeline in your region?

From our experience in Latvia and the FinEERGo-Dom project, we have worked now with 6 different EU countries, which all have different local contexts (including legal and policy), to begin to implement the BEEF mechanism and a pipeline for building renovation. These experiences have led to the creation of this document to share our methodology, important considerations, input from partners on their experiences and templates for others to implement their own building renovation pipeline as well. In the FinEERGo-Dom project, we recognize the cultural differences and context that exist in our partner countries. For this reason, we emphasize three aspects in our methodology that we believe are key to successful deep building renovation: the delivery in one clear package of a set of benefits thanks to Standardization, Transparency and Engagement. These three values are paramount for attracting buildings, setting up a building pipeline and facilitating the delivery of the projects.

Facilitation: roles and technology

Before beginning any scalable building renovation process, it is best to define roles of stakeholders and involved organizations. As a lengthy and bureaucratic process, building renovation requires alignment of diverse stakeholders. We believe that the process can be made simpler through definition of roles and use of technology.

First, roles of organizations should be made clear from the beginning. Implementing a pipeline for building renovation requires a dedicated organization, and even, dedicated project manager, to ensure that the process, documentation, and deadlines are all respected. Furthermore, there needs to be a dedicated organization or project manager to continuously engage, assess and build new relationships with stakeholders. It is our belief that there needs to be some focus on digital and traditional marketing when engaging with stakeholders. For a building pipeline to scale, there needs to be market demand, this can only happen with dedicated marketing.

Beyond the need for a dedicated team to take on the establishment of a building pipeline in any country, the renovation process can be time-consuming, and complicated because of the documentation and contractual procedures that are required.

The [SUNSHINE](#) platform is envisioned to be an integral part of the renovation process. It takes the renovation process and breaks it down into steps that mimic the user journey of stakeholders normally involved in a renovation process. It is designed to lead the user through the different project phases of building renovation and to serve as a database, which can be effectively used by all stakeholders from inception to monitoring. We built the as a digital project management tool geared specifically for building renovation. The SUNSHINE is intended to be a tool that enables organizations developing a pipeline for building renovation to easily manage projects, access energy information and view contacts.

The platform enables users to follow the entire process and effectively communicate with the parties involved. Through the platform, we aim to establish a high level of trust by fostering continuous mutual learning, knowledge and experience sharing between the stakeholders. The platform enables the renovation process to be transparent, efficient, and standardized which we believe is key to scale deep renovation, whilst reducing transaction costs.

By digitalizing the financing, standardization, and engagement, we ensure consistent scale for such ecosystems so that each local BEEF can generate sufficient volumes of energy savings receivables that each fund can invest in as its core financial asset, thus further attracting Private Sector funding. Currently the platform is being used by partners to register buildings and track meetings. As no partner has developed a pipeline for building renovation, the actual project management modules of the SUNSHINE platform have not been used.

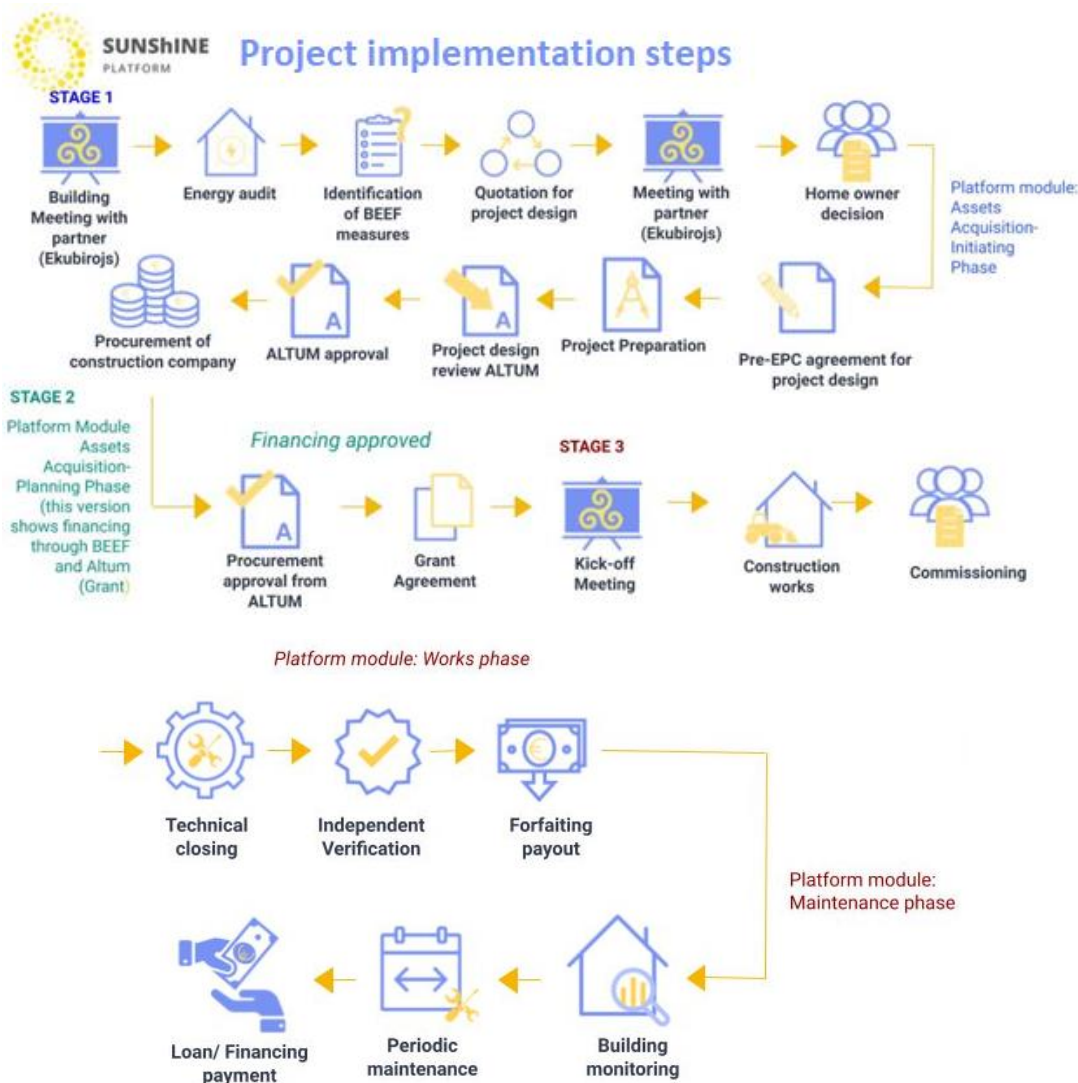


Figure 1. Project implementation steps in the BEEF model digital use (with examples of institutions from Latvia)

Methodology

Building a methodology to implement building renovation powered the BEEF mechanism requires a business development approach. While the benefits of building renovation may be clear to many stakeholders, as organizations that work in the sector, we often forget that



we are still talking about people’s homes. No stakeholder will be interested in renovating his or her home if there is not a real focus on his or her needs. We have seen from our own experience that even if funding does exist for building renovation, stakeholders are not interested because there no connection with the market. Market demand, therefore, is key, and should be the final outcome of any pipeline development—encouraging stakeholders to asking for building renovation.

Therefore, the methodology that we propose to facilitate this process is adaptive and iterative but focused on building market demand. In Figure 2, we give an overview of our 4 steps that we consider to lead all the way to the renovation works. This figure is in line with Figure 1.

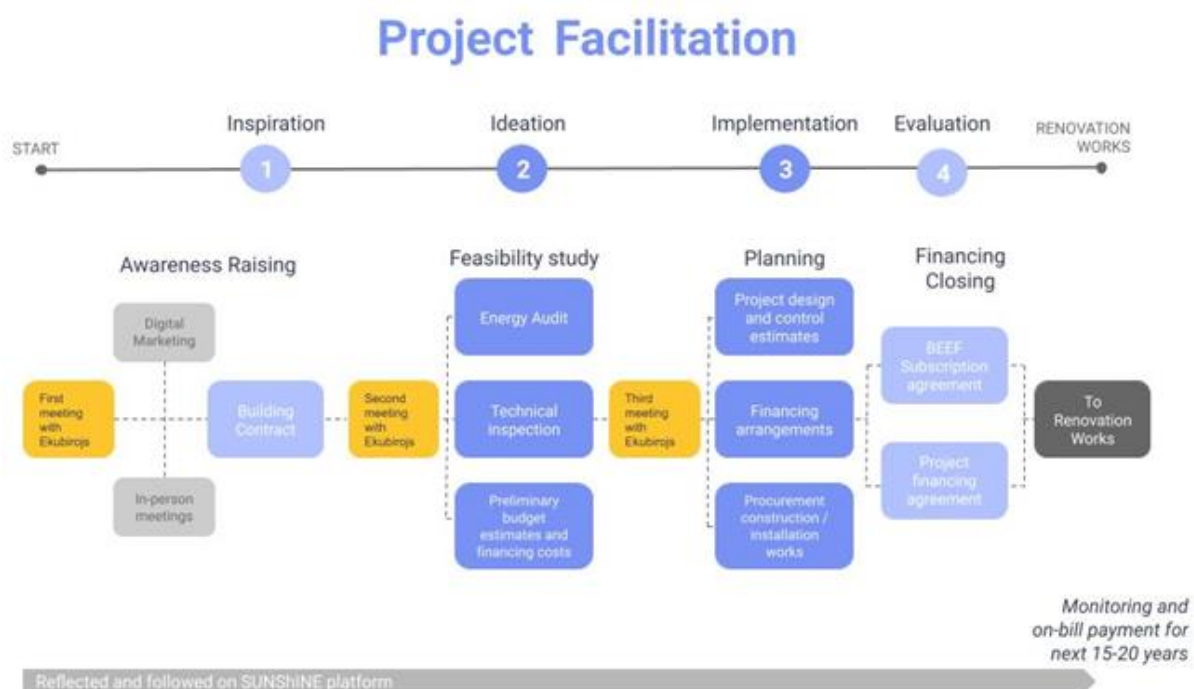


Figure 2. Overview of project facilitation methodology (with examples of institutions from Latvia)

Stage 1: Inspiration and Information

In this first phase, we recommend that readers take a step back to understand the building renovation market in their country or pilot region. In this phase, we aim to learn directly from involved stakeholders about their needs and explaining the project goals and results and guarantees. In Figure 3, we see the steps more concretely.

1. Inspiration

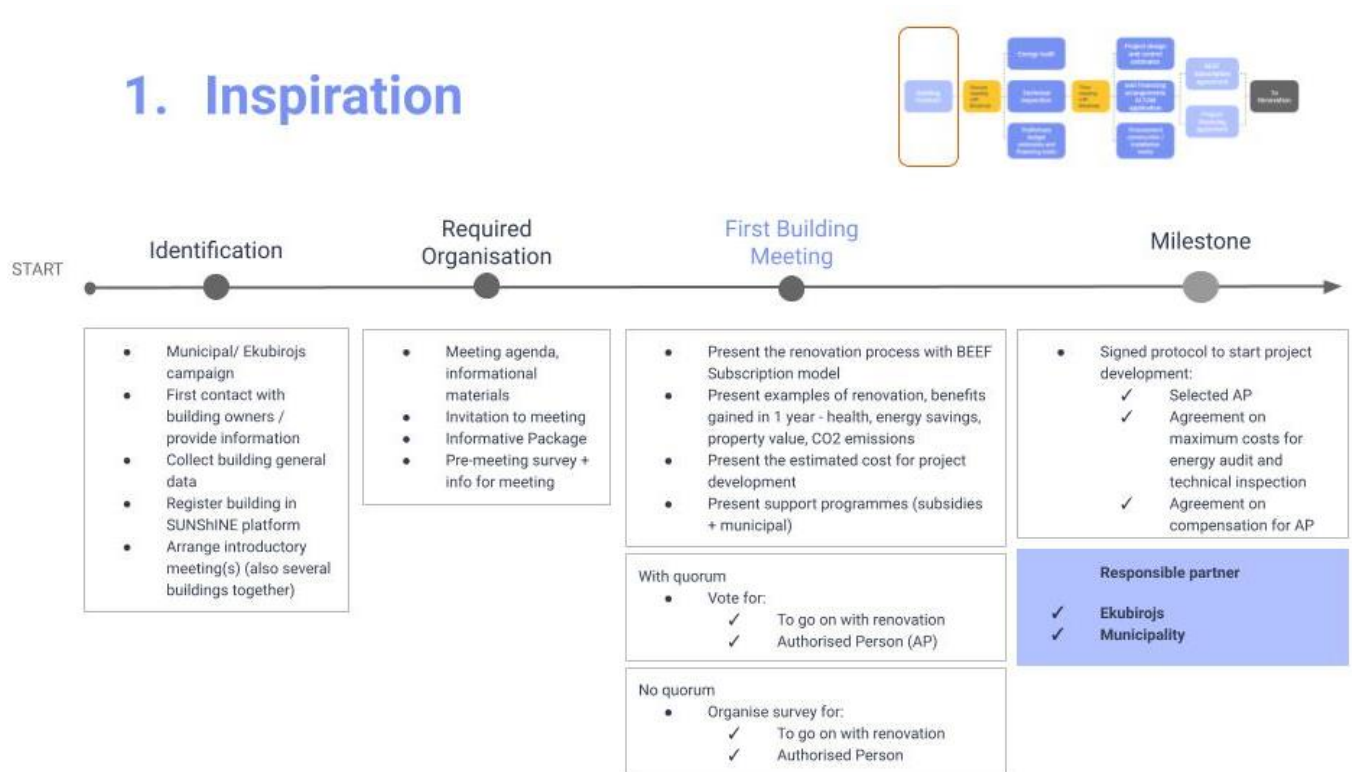


Figure 3. Stage 1: Inspiration (with examples of institutions from Latvia)

Define the business value:

Key Questions to ask:

What is the Business model that you aim to implement?

Is there an actual demand for BEEF? And how to make sure it is sustainable?

Only through financial mechanisms and by attracting private investment capital can countries achieve results close to energy efficiency targets defined by the EU Energy Directive. By crowding in private investment, we promote the energy services market, and increase access for investment to SMEs in this space. This is done through setting clear guidelines and standards alongside building renovation for not only energy efficiency but also health, safety, and comfort. In doing so, residents have a value add, market operators have access to increased financing, and investors have clear energy saving targets and a stable return.

Each specific business case varies from country to country. It is up to the reader to identify how their business case may differ. There are a variety of tools that can be used to understand the business case of each pilot. The Business Model Canvas¹ is one such tool and a good place to start as it considers all aspects of business development. Another such tool is a SWOT analysis.² To help replicators begin to think about how their business case may be impacted by local policy or context, we have created a series of helpful questions to catalyse strategic thinking (See Appendix 1).

We have also identified two value propositions that often work in the general context. Once identified, the specific value propositions of the pilot country should remain as the focal point in all research, communication, and project implementation. The goal is to create a clear message for all stakeholders involved in the process.

General Value Propositions

Residents: For residents, we offer an affordable renovation process that is easy and efficient while guaranteeing healthy, safety and comfort. For residents, the incentive corresponds to an affordable renovation process that is easy and efficient while guaranteeing healthy, safety and comfort.

Market Operators:

The incentives for market operators come primarily in two forms: standards, which reduce bureaucracy or transaction costs (financial, time and risk), and purchased commitments.

Most market operators have limited balance sheet capacity and are not able to support long-term debt to scale building renovation. A financial mechanism such as BEEF offers the possibility to scale building renovation selling future cash flows (receivables) through a forfaiting transaction. After this transaction, the market operator continues to guarantee energy savings for the entire BEEF contract (15-20 years).

From our experience, the BEEF financial mechanism must be implemented before the start of any renovation pipeline. This is why we propose that replicators define their business model clearly before moving on to the next steps. This ensures that the financing mechanism

¹ https://en.wikipedia.org/wiki/Business_Model_Canvas

² https://en.wikipedia.org/wiki/SWOT_analysis

is already in place when replicators go to stakeholders and propose any sort of collaboration, investment or renovation project. This builds trust and transparency allows being completely upfront with stakeholders about its purpose increasing owners' trust.

Stakeholder Analysis

Key Questions to ask:

Who are your stakeholders?

How do you bring stakeholders together?

How do you ensure that key messages are understood by stakeholders?

How do you make sure you have the people who need investment, those who do the investing and those who do the works in the same place at the same time?

How do you create matchmaking between stakeholders?

We work together with stakeholders: municipalities, market operators, financial institutions, and most importantly, residents. Residents are the most important member of our ecosystem, as we are talking about renovating their homes. We do our best to create a process that is honest, transparent, and builds knowledge and trust between stakeholders. We see this as key to the success of the renovation process.

Stakeholder engagement is key to the success of a building renovation pipeline. We encourage a flexible and holistic approach to involving stakeholders. This would entail stakeholder engagement being interactive, encouraging, inclusive, and prepared to change rather than being proactive, anticipative, regular, or defensive³. Defining a strategy for stakeholder engagement from the beginning will fosters a much quicker market uptake, as stakeholders will understand the multiple incentives for building renovation. Stakeholder engagement is a long and continuous process that requires dedicated staff. It involves different levels of engagement at different times depending on the influence and importance of the stakeholder. In the FinEERGo-Dom project, stakeholder engagement began with stakeholder mapping and the development of a stakeholder action plan.

The SUNSHINE platform also offers users a stakeholder management tool as it records and keeps track of stakeholder meetings. We aim to facilitate the creation of an active

³ <https://www.fundacionseres.org/lists/informes/attachments/1118/stakeholder%20engagement.pdf>

stakeholder ecosystem with less bureaucracy as users of the platform can easily stay in touch and track their project. We include the stakeholder matrix and action plan that was used in preparation for the FinEERGo-Dom project that partners used to identify important stakeholders. Our stakeholder survey was intended to help partners identify the needs of their stakeholders. Finally, the explanatory video is an example of messaging that can be used with stakeholders.

1. **Stakeholder Matrix and Action Plan**
2. [Stakeholder Survey](#)
3. [Explanatory Video](#)

Current Local Policies:

Key Questions:

What is the most successful finance ecosystem/landscape to enter?

What is the current political sphere in each region and how does it shape renovation policies?

Establishment of a financial mechanism, such as BEEF, and simultaneous stakeholder engagement cannot occur in a vacuum without regard to local context. As the BEEF mechanism relies on an expanded version of an EPC contract with specific guidelines and specifications to guarantee health, comfort and safety, understanding the related legal, technical, and project finance regulations is a key ingredient to country market entry, and market success. Therefore, analysis of regional policy is key to create a sustainable pipeline of building renovation. This step has been completed by FinEERGo-Dom partners in their legal analysis of the BEEF Guidelines and its application to their local context. Ekubirojs and Funding for Future have completed their own EU-level analysis of the EU Directive on Energy Efficiency and National Recovery and Resiliency Plans for Bulgaria and Latvia. In general, overall attention should be paid to the following:

- Focus on residential buildings

We recommend that partners focus their market entry on residential buildings because of the potential for impact. Recent Renovation Wave communication even highlights that if we

are to tackle “energy poverty and worst-performing buildings,” this refers to “public buildings and social infrastructure.”⁴

- Holistic benefits of building renovation

For successful market entry, building renovation must prioritize key messages that go beyond energy savings and energy efficiency. Stakeholders will invest and demand renovation only when they see actual benefits to their lives. This is why regulatory framework of any country needs to address the broader economic, social, and environmental benefits of building renovation, especially in the residential sector.

- Investment market gap and lack of public/private partnerships

To reach overall EU goals, beyond national goals of any partner country, it is paramount for private sector initiatives to also be prioritized to deliver on the EU’s long-term objective of a climate-neutral economy by 2050. Policy should favour standardised and transparent financial mechanisms necessary to attract private investment capital can countries deliver on their energy efficiency targets.

- Role of digital technology

Digital technology is key for priming investment, and ultimately, leading to a scalable project pipeline. This is because regulations that promote the use of technology in the sector will also lead to less bureaucracy and more standardized. The SUNSHINE platform acts as an aggregator of stakeholders and ensures that the entire process from engagement through to financing and renovation and then measurement & verification is cost-effective.

These overall considerations should be analysed in the specific context of each country. In the FinEERGo-Dom project, analysis by partners shows that there are very few differences in applicability of the BEEF contract across several EU states. This supports the idea that standardization of the BEEF business model is possible. Using this business model with the public and regulatory support and stakeholder engagement will enable upscale investments in the residential sector.

⁴ European Commission. (2020). A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives. p.20

https://ec.europa.eu/energy/sites/ener/files/eu_renovation_wave_strategy.pdf

For further information, all the public reports related to establishment of the financing mechanism of the FinEERGo-Dom project are useful to understanding the legal, policy and financial framework to be analysed. Furthermore, useful information can be found on the Renovate Europe website, of which Ekubirojs is a national partner.

WP4 deliverables

[Renovate Europe](#)

Stage 2. Ideation and Design Phase

From this phase, we aim to work together with FinEERGo-Dom project partners to make sense of the needs of stakeholders and identify design opportunities for collaborative solutions in establishing a pipeline for building renovation. At this point, replicators should have a good idea about how building renovation is received in their context. Replicators should understand what their unique selling point is and what the key messages to reach stakeholders are. Furthermore, policy and legal analysis should result in an overall understanding of any roadblocks that may be beyond the scope of the business model, needing more political push to alleviate. From this external analysis, replicators can now define how they will implement their product, or BEEF mechanism, based on the defined business canvas developed. In this phase, the replicators should aim to develop finalized project costs, meeting requirements, and continue engagement with stakeholders. In Figure 4, we see the first step of the ideation phase. This includes the energy audit/inspection as well as the project assessment. In Figure 5, the next steps of the Ideation phase are presented. These steps include meeting again with the building to discuss the project next steps and agree if the project is suitable to the residents' needs.

2.1. Ideation

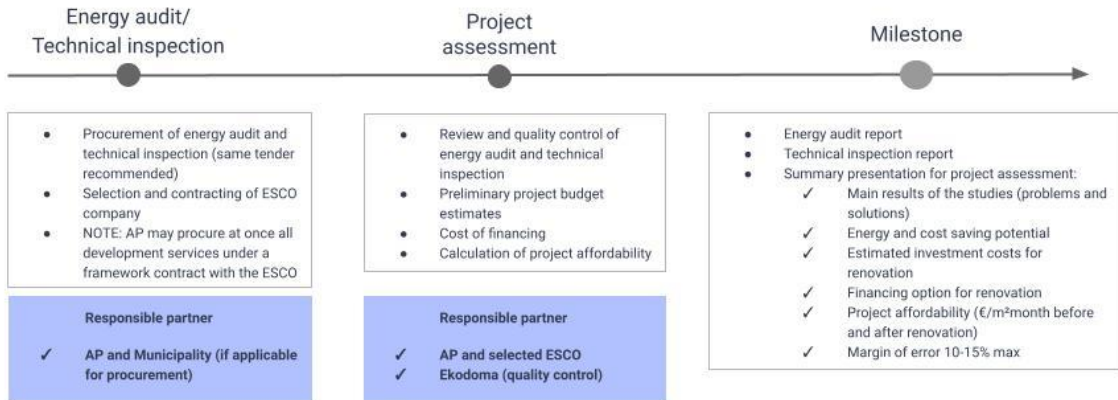


Figure 4. Stage 2.1 Ideation (with examples of institutions from Latvia)

2.2. Ideation

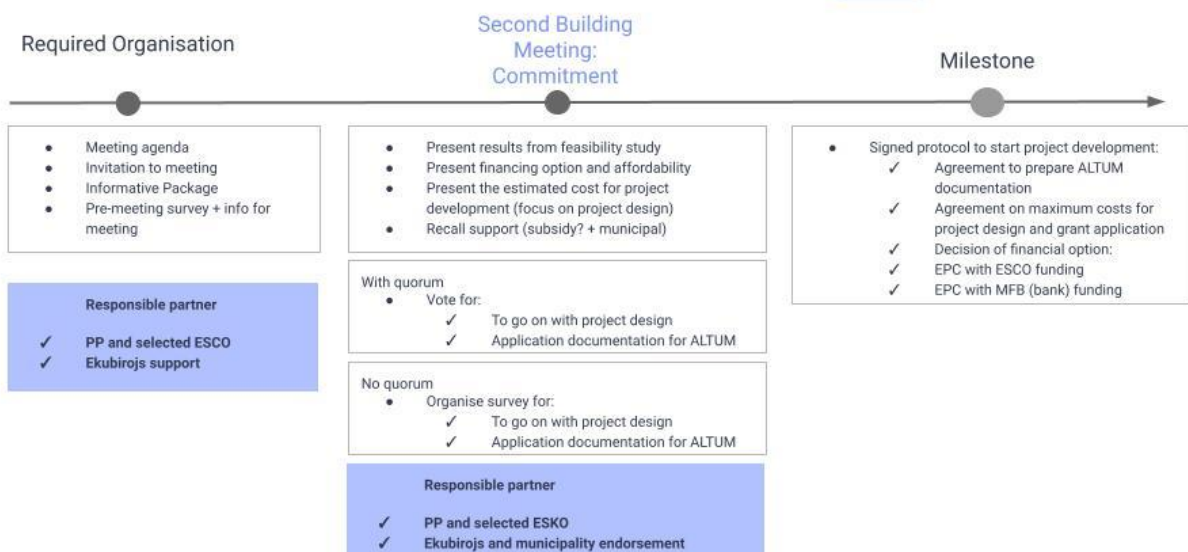


Figure 5. Stage 2.2 Ideation (with examples of institutions from Latvia)

Product Implementation

Key questions:

How to make sure the BEEF contract fits your local context?

What is the tentative timing of implementing BEEF and how is it aligned with the engagement of stakeholders?

How can you assure a product of renovation to the final beneficiary?

What guarantees do you have for a stable return to investors?

The BEEF Performance Standards are a set of rigorous, industry-level requirements that defines the excellence of a building renovation project. They are based on an Energy Performance Contract (EPC), with additional guarantees for energy efficiency measures, health, safety, and comfort. This ensures a value add for all stakeholders.

There are a variety of aspects that need to be considered to ensure that the BEEF contract fits the local renovation context- providing both return on investment and providing value to the final beneficiary. Most importantly, this includes ensuring that that the legal, technical, project finance standards of the BEEF contract fit the local context, guarantying energy savings of the project selected for building pipeline. Such work builds upon the policy and legal analysis conducted in Stage 1. What we advise replicators to do is to take the BEEF contract as it is defined and create criteria that define the technical standards and certification frameworks in their own country.

First, this ensures that the application of the BEEF contract meets the highest energy saving standards possible in the partner's country. The BEEF contract is underpinned by an Energy Performance Contract as well as the BEEF standards. We extended the notion of Energy Performance Contracting and created new holistic standards that incorporate structural measures for deep renovation of buildings to generate 60% energy savings.

Second, this ensures that the application of the BEEF contract also meets safety, comfort, and health standard for the final beneficiary. This creates a value add for residents and delivers a safe and wellbeing for the environment.

The BEEF contract aims on an entire deep building renovation, not just 'cherry picking' renovation measures. This will ultimately not lead to impactful energy consumption

reductions or stakeholder health, security, and comfort. This difference with the BEEF contract versus other similar types of EPC contracts defines our competitive advantages as it will provide significantly higher value for owners and investors

The BEEF standards that make up the contract are described below:

1. **Technical Renovation Project Templates.** These can be applied readily to each building type. Technical project templates stimulate the development of the multi-stakeholder platform ecosystem in the following way:
 - a. MARKET OPERATORS and BUILDING CONTRACTORS can streamline the terms and oversight of their contract arrangements.
 - b. BUILDING CONTRACTORS can specialize their resources and scale their presence in the ecosystem.
2. **Technical Certificates.** Technical certificates cover both renovation project implementation capacity as well as materials used in those projects.
 - a. MATERIALS SUPPLIERS can benefit from an enhanced market opportunity for certified materials;
 - b. BUILDING CONTRACTORS can benefit from an enhanced market opportunity as certified suppliers and from a reliable network of certified materials suppliers;
 - c. MARKET OPERATORS benefit from a reliable network of building contractors for project implementation.
 - d. Building Owner/Tenant benefit from a certified transparent market, including a Dispute Resolution System (DRS)
3. **Legal Contract Templates.** Funding for Future with local partners develop legal project templates for all contract types in the MSP ecosystem, including those where the fund is not a party to. This will stimulate stakeholder participation by reducing risk and legal costs. The key contract templates are:
 - a. Building Renovation and Energy Performance Contract both for private and public sectors between Market Operators and Buildings/owners;
 - b. The receivables purchase agreements between BEEF and Market Operators;
 - c. Project implementation agreements between Market Operators and Building owners.
4. **Project Finance Templates.** Funding for Future with a local partner provides financial templates for each project type. Together with technical project templates, these include the following benefits:

- a. Funding for Future and other investors benefit from visibility into the likely future Energy Service Requirements (ESR-s) resulting from the project.
- b. MARKET OPERATORS benefit from visibility into the likely selling price of the ESR-s.
- c. BANKS will benefit from the opportunity to expand their short-term lending portfolios with large volumes of standard, low-risk, ES project loans.

One way we aim to alleviate this process of BEEF contract creation is the digital efficiency created by the SUNSHINE platform. The platform ensures transparency and forfaiting, de-risking the investment with digital follow up to lower the transaction costs. Within the SUNSHINE platform, a stakeholder can use the BEEF template and adapt it to their own context. The SUNSHINE platform ensures that individuals can securely sign the contract and share it to the appropriate audiences.

Go to Market Strategy

Key Questions

What is the go-to-market strategy?

What is the marketing plan?

How can you use digital resources to ensure an easier job?

Along with product development, a marketing strategy needs to be developed to be launched when the BEEF mechanism has financing to start created demand. Awareness should be built early on to inform of key messages. One important lesson learned from our side is the importance of innovative stakeholder engagement that includes both digital means as well as on-the-ground interaction with residents. To create the scaling of building renovation, we recommend an on-the-ground team with inbound and outbound marketing skills.

Inbound marketing includes:

- Social media
- Thought leadership
- Search engine optimization (SEO)

- Content marketing
- Social monitoring
- Brand creation

Outbound marketing includes:

- Events
- Campaigns
- Press releases
- Advertising
- Sponsorships

These aspects of marketing come together in a launch plan that should identify how to generate leads to ultimately convert them into stakeholders that advocate for BEEF renovation. This can take the form of an investor who ends up in investing, a market operator who decides to use the BEEF contract to begin their renovation projects, or a resident who ultimately decides they can afford renovation because of the guaranteed energy savings and value add. These 3 types of generated leads are fundamental for a working BEEF mechanism. Therefore, before reaching this step, Stage 1 which includes identifying the specific value propositions and emphasizes stakeholder engagement, must be completed.

This step is replicator dependent. While we can offer ideas and resources, it is up to the partner to create a marketing strategy that works for their country.

Stage 3 & 4. Implementation and Evaluation Phase

Working together with partners, this phase should aim to provide solutions for building renovation. The ideal situation would enable mutual learning between stakeholders of all levels.

It is estimated that there is a 12-month period to establish a pipeline of building/s for renovation. In this time, the finance would need to come on stream. Therefore, a whole year usually passes before renovation works would even begin. Then, one heating season must

4. Evaluation



Figure 7. Stage 4 Evaluation (with examples of institutions from Latvia)

Key Questions:

How can you build initial country project pipeline development?

What is the assessment and pre-selection of projects?

Who is responsible for pitching projects for residents/beneficiaries?

How can you certify the market operators, building contractors and materials suppliers?

How do you create a market operator-bank interaction/?

Customer Experience (Months 6-12):

To set up a country pipeline, a market operator needs to establish ESR agreements with market operators. This step will then lead to agreements with contractors and eventually move to bank and funding arrangements.

Establish contacts with Key Players (Months 1-2/ continuous) to introduce BEEF

Test Country prioritization/scoring matrix (Month 3) for favourable market entry conditions based on activities from Part A.

Monitoring and Adjustment

Key questions:

What Key performance indicators do you need to meet to offer return on investment?

How do you assess risks and opportunity for continued project success?

How can you adjust midway through project development in case of an emergency?

At the end of this phase, replicators should reflect on the methodology that they followed to see if any adaptation is needed to ensure a greater success in the pipeline renovation. In this last phase, the building has now been renovated, and the goal is to continue renovation to future buildings. This is made possible because the market operator has freed up surplus of cash as they have made a contract with BEEF, which has forfeited their loan. This allows the market operator to continue to new projects and new buildings, ultimately scaling building renovation to a much wider audience. For this to happen, one heating season needs to pass to ensure that the energy savings of the building meet the requirements of the BEEF contract. Again, the SUNSHINE platform ensures that this monitoring is easily accessible and recorded. All energy consumption is monitored and recorded in the platform.

Learning from Current Use Cases

With the aim to replicate and implement the Building Energy Efficiency Facility in Poland, Bulgaria, Austria, Romania and Slovakia, the FinEERGo-Dom project is now entering its third year. Development of pipeline of buildings in the residential sector to be financed with the foreseen financial mechanism is ongoing. Therefore, we have taken the methodology and addressed partners specifically to understand better the lessons learned and where they are in the process of replication.

The National Fund for Environmental Protection and Water Management (NFOŚiGW) in Poland is responsible for setting up BEEF in Poland and has engaged with PFR (Polish Development Fund S.A.) to provide long-term funding. The complementary funding instrument is being established by NFOŚiGW through a national wide Priority Programme to support the EPC market. A privately managed BEEF will most likely not be set up in Poland. The programme ended its preapplication phase with 9 stakeholders applying for support for 38 buildings. From the Polish experience it is worth noting that most applicants did not know the EPC model, therefore having a two-step application is favourable for building owners especially with the support of advisors. The pre application helps better understand the benefits of the EPC and learn about that contract without additional risk for the beneficiaries. The role of the advisor is very important early on as it not only guides the building owners through the financing application but also introduces the EPC concept to those not familiar with it.

Econoler (Bulgaria) has identified that there are some challenges with Bulgarian ecosystem (100% grant funding for renovation of multifamily buildings), creating a roadblock for getting a building pipeline implemented. In the interim, Funding for Future has set up a BEEF in Bulgaria (BULBEEF). Econoler clearly identified its key messages to stakeholders which it uses to create engagement. Currently, Econoler is intensively collaborating with the Municipality of Gabrovo, as well as with the H2020 project SHEERenov (<https://sheerenov.eu/>) which has the objective of establishing a “one stop shop” assistance to homeowners.

The renovation market in Austria concentrates mainly on one measure rather than on deep renovation. However, the Austrian Energy Agency (Austria) has identified that this could be compensated by exceptionally long contract-durations reflecting similar conclusions to those which brought about the BEEF model and methodology. However, as contract terms of less than 10 years are common in Austria, terms of 20 or more years represent an additional hurdle. One of the issues is that consumer rights in Austria are very protected (much more than in Latvia). This can be compensated by creating contracts that can be used in the private sector. Funding for Future is looking to implement ÖBEEF. AEA already prepared estimates for calculating the Austrian market size for deep renovation for cooperatives to Funding for Future.

Because of the ownership structure of privately owned buildings, any kind of change in the structure or renovation measures must be accepted by all the owners. Therefore, in the multifamily houses, the implementation of energy saving measures is strictly done if the requirements of safety or replacement of technical building systems due to the old age must be carried out.

Regarding the non-profit housing associations, the buildings are mostly renovated because of the Limited Profit Housing Act or Wohnungsgemeinnützigkeitsgesetz⁵: *If the building association does not use the maintenance and improvement contributions paid by the tenants or T authorized users within a period of twenty calendar years to finance a maintenance or improvement work, the building association shall immediately refund the maintenance and improvement contributions paid by the tenants or other authorized users plus the statutory interest (§ 1000 ABGB). The tenant or other authorized user who is the tenant or authorised user of the flat or other rented property at the time when this claim becomes due shall be entitled to reclaim the unused maintenance and improvement contribution (including interest).*

The Energy Saving Contracts have been more successful in non-residential buildings and mostly relate to the replacement or tuning the settings of the heating system because the contracts should not expand over the period of 10 years. Especially in the public sector.

Partners have rightly acknowledged and identified the difficulty of engaging with stakeholders, as convincing stakeholders in the residential sector is difficult because this sort of contract and business model has never been used. Furthermore, in Austria, all owners need to agree. If one owner does not agree to renovate, the entire process stops. One recommendation is to focus on the digitalization aspect by having a functioning platform that is ready to use and easy to use for stakeholders. Convincing the stakeholders to use mechanism such as BEEF has never been attempted in the residential sector. To ensure that it works, there will need to be a functioning SUNSHINE platform and usable BEEF contracts. In Austria, the pipeline has not been implemented because there is still no ÖBEEF, making convincing stakeholders even more difficult.

In Romania, Mattig Management Partners RO SRL (MMP.RO) have identified a pilot and prepared the Romanian EPC. MMP.RO has discussed with stakeholders the key message that the business model offered for building renovation by BEEF is a great opportunity for energy efficiency measures especially for owners of buildings who do not have a sufficient budget for (deep) renovation. MMP.RO describes their communication as successful with stakeholders as there is interest in the project, like other partners, a pipeline is needed to move this forward. According to MMP.RO, a BEEF will be set up in Romania and the contract is finished. However, there is no discussion of financial commitment at this stage.

⁵ ⁵ Wohnungsgemeinnützigkeitsgesetz: Source: Bundesgesetz vom 8. März 1979 über die Gemeinnützigkeit im Wohnungswesen

According to Mattig Management Partners SRO (MMP.SK), a pipeline of buildings for renovation has already been identified, albeit in the public sector. Currently, partners are assessing the business use case possibilities as SK BEEF is already established by Cime Energy Efficiency Finance as MMP.SK reports that they communicate with all important stakeholders using key messages to ensure closing of pilots. The MMP.SK is following the steps identified by FinEERGo-Dom regarding setting up of SK BEEF, putting into place the legal framework, and completing a stakeholder analysis. However, it is clear that despite these steps, a pipeline of buildings in the residential sector is still difficult to put into place, as MMP.SK explains that the process is taking longer than initially anticipated.

Conclusions

As discussed in our Executive Summary, this document provides a methodology for partners to follow when implementing a pilot for building renovation financed through a mechanism, such as a BEEF. Despite a BEEF being implemented (including the financial and legal requirements) by itself does not guarantee the development of a building pipeline if there are not supportive regulatory frameworks both at EU level and national level regulations, increased stakeholder engagement, standardization of measures, and an added value to build market demand.

References and useful links

www.fineergodom.eu

[SUNShINE_platform](#)

[Stakeholder Survey](#)

[Explanatory Video](#)

[EU renovation wave](#)

[Energy efficiency first principle](#)

Appendix

Basic Market Questions

Basic market questions to understand building renovation and regional policies in your country/region better

Here are a list of basic building renovation questions to help you figure out if BEEF financing is a good option for you~

Building Research

Who owns buildings, apartments, etc?

Are there many ownership issues in multifamily buildings?

How many square meterage of multi-family building housing stock is currently not renovated in your country/region?

Have you identified a pipeline of buildings for renovation (3 or more?)

How many floors are on average?

How much do residents spend on heating in December?

How much do residents spend on heating in June?

How much do residents spend on heating in September?

How much do residents spend on heating in April?

Can you identify 5-6 key target building types and prepare indicative fin/project/tech plans accordingly) for demonstration?

Stakeholders

Who are the key players in business, government and academia?

What is the current country Energy Service market landscape (e.g.: ESCO-s, existing and potential projects, supplier availability, banking sector involvement)?

Are there NGOS or other organizations working in the national space for advocating for building renovation for residents?



Financing and Implementation

What constraints exist in country legal/regulatory frameworks (e.g.: government ES mandate implementation frameworks, housing ownership / management laws)?

What are the budgeting/public sector procurement rules?

Does debt management in public projects include model contracts or not? How are they financed and how could they be financed by financial market constraint?

Do public procurement procedures facilitate sustainable energy investments adequately?

Is it easy and efficient to gain a construction/renovation permit?

Is it easy to get a bank loan for an ESCO (e.g. equal or below 4-5%)? Are credit guarantees available for ESCOs and can they cover loans necessary for renovation?

Are there any other legal constraints/issues hindering the implementation of sustainable energy related projects (e.g. lack of national regulatory framework for utilization of third party financing)?

Does the public stance support SECAP related investments?

Is there cooperation and communication within the replicating body or other investment actors (e.g. banks, utilities) sufficient in order to implement the scheme?

Is there cooperation and communication with non-traditional investment actors (e.g. ESCOs) sufficient to implement the respective scheme?

Are there any other refinancing schemes available for building renovation? Are they available only for the public or private sector?

Is there a Non-governmental organization whose main field is to promote building renovation or energy efficiency? If yes, is there cooperation or communication with that organization?

Is there identified personnel for administration, coordination and monitoring adequate to support the implementation of the BEEF scheme?

EU Policy and national Policy goals:

What is your country's renovation rate?

Most European countries are below the recommended rate to meet the EU's updated 2030 climate goals of 3%, with current average renovation rate of 1%, and deep energy renovations accounting for only 0.2-0.3% of the renovated floor area.

What is the percentage of multifamily buildings that have an energy efficiency rating of Low Efficiency (D,E)?

What is the percentage of multifamily buildings that have an energy efficiency rating of Energy Deficient (F,G)?

How much money was put aside by your national recovery plan for building renovation?

- Total
- Multi family
- Residential
- Public
- Single family housing

Are you familiar with the EE First Principle ([link here](#))?

If yes, how are the EE first principle being applied?

Are you familiar with deep renovation approach (deep Energy Efficiency priority renovation) under the BEEF methodology? Are you aware of policies that may be discouraging either municipalities or residents from investing in EE related projects?

Are you aware that the residential sector would need to achieve the highest reduction in energy demand in heating and cooling, according to the impact assessment for the Climate Target Plan 2030?

Stakeholders:

Do you think that the building sector sees a useful role under current EE policies? Have current policies considered the impact on District Heating and Electricity Providers?

Finance:

Do you have an idea about the annual amount of investment in renovating the EU building stock necessary to reach the EU 2030 energy efficiency target? (€282 billion investment per year)

What is your estimate of the investment needed for decarbonisation in your country? Would you agree that building renovation is one of the sectors facing the largest investment gap in the EU?

Do you think that the commercial banking sector sees a useful role under current EE policies? Can this be measured? What conditions would be required so that pension funds might invest in deep renovations?

Transition to Carbon Neutral

Does the transition to clean energy include increased use of natural gas? Are there mitigation plans for the increased impact of Methane leaks (since methane is about 28 times more powerful than carbon dioxide at warming the Earth, on a 100-year timescale, and more than 80 times more powerful over the next most critical 20 years)?

EU and State AID

What percentage of EE support is designed to attract private-sector investors?

Do support plans target residential sectors in a manner to ensure concrete monitoring of results?

Policy Support

One of our goals is to provide evidence based proposals, in this respect:

Would it be useful to provide specific briefings to policymakers to detail the benefits and challenges of deep renovations? Would it be interesting to share with regional colleagues these same challenges in an informal cadre?

PROJECT PARTNERS



STAGE



AUSTRIAN ENERGY AGENCY

Mattig Management Partners