

How to improve Integrated Home Renovation Services?

Case studies and comparison of four initiatives

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Abstract

This study aims at identifying the best practices of four Integrated Home Renovation Services to present recommendations and expand those best practices to other IHRS initiatives. To do so, we conduct a literature review and semi-structured interviews to analyze the cases of Serafin (France), Open Gela (Spain), Reimarkt (The Netherlands), and the Energy Efficiency Mortgages Initiative (The European Mortgage Federation), to gain insights on the concrete existing propositions. Our analysis highlights that there is not one-size-fit-all, and that different IHRS can be equally successful. We however find that a successful IHRS should focus on trust-building, affordability, diversification, and empowerment. To make it as attractive and successful as possible, we recommend future IHRS to build on a public-private partnership, while following the framework of a Support Model, as defined by Milin and Bullier (2021). The emphasis should be put on transparent advice, a fair selection of contractors, and financial support.

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1. Introduction

To achieve the ambitious goals set forth by the European Union for 2030, a substantial investment in energy efficiency is imperative. With an estimated €300 billion required annually to meet the objectives outlined in the Fit for 55 initiative, aimed at reducing greenhouse gas (GHG) emissions by 55% compared to 1990 levels¹. With buildings accounting for 40% of EU's energy consumption and 36% of its GHG emissions, improving their energy performance is an unavoidable step².

Yet, renovation rate has been historically low and is still lagging due to various obstacles of different nature³. For example, although home renovation is a coherent project for homeowners, it often results in a set of uncoordinated steps involving different actors. Milin & Bullier (2021) define the customer journey as “the sequence of interactions between a homeowner and all the stakeholders involved in the renovation”. The lack of coordination along the customer journey and the diverging interests of the different actors prevent a holistic answer to the needs of the homeowner. This, in turn, explains their low motivation to engage in home renovation. To solve this issue, initiatives (mainly driven by public entities, but not only) have started to emerge across Europe to link these fragmented market offers, known as Integrated Home Renovation Services (IHRS) providers. These initiatives aim to offer a continuous administrative, technical, and (sometimes) financial support to homeowners along their renovation project.

While IHRS providers vary in nature, structure, ambitions, deployment methods, and target groups, they encounter similar challenges. These differences arise from their development through a “bottom-up” process rather than following a “top-down” regulation. In this sense, the EU Peers project intends to connect these different initiatives and foster collaboration to promote their development and

¹ European Investment Bank. (2023). *Energy Overview 2023 : Clean and Secure Energy*. <https://www.eib.org/en/publications/20220286-energy-overview-2023>

² *In focus : Energy efficiency in buildings*. (2020, 17 février). European Commission. https://commission.europa.eu/news/focus-energy-efficiency-buildings-2020-02-17_en

³ Ringel, M., & De Los Casares, V. (2024). *Course : The future of European energy efficiency policies – options and updates : Second lecture - The Energy Efficiency Directive*. Sciences Po, Paris, France.

replication, paving the road toward more efficient home renovation services. As part of EU Peers, this report is three-fold; by looking at four mature cases of IHRS initiatives in Europe, it aims to :

- Identify their strength and weaknesses,
- Compare their different approaches,
- Propose recommendations promoting the implementation and development of other IHRS initiatives.

2. Methodology

To identify good practises and potential obstacles, we selected four mature initiatives fostering IHRS: Hauts-de-France Pass Rénovation/Copropriété (or Pass Rénovation), OpenGela, Reimarkt; and Energy Efficiency Mortgage Initiative (EEMI). The three first ones concern the development of regional or local IHRS providers. However, the EEMI is an initiative promoting the development of a financial ecosystem adapted to home renovation. Concerning the selection process, they were chosen out of a proposed set of successful initiatives funded by the EU's Horizon 2020 program. We considered differences in approaches and locations to favor the richness of our findings as this report is assessing only four case studies. Evidently, as tens of IHRS providers have emerged in Europe in the past decade, focusing on such a few numbers of projects cannot provide a full assessment of what are the best practices, approaches, and business models. However, by focusing on the most mature and successful initiatives, this report can give some insights on the drivers that led these projects to where they now stand, with the aim of inspiring other less developed initiatives.

The article "Towards large-scale roll out of "integrated home renovation services" in Europe" by Milin & Bullier (2021) provided us with significant insights on the characteristics of an IHRS provider and how it can approach each step of the customer journey. We conducted extensive online research on each initiative, analyzing their websites, internal reports, and external sources. Interviews were carried out whenever possible and proved to be essential as some initiatives lacked comprehensive information on their websites. Nonetheless, due to time constraints, interviews were not arranged for all case studies. Two interviews were undergone on the EEMI: with Mr. Adrien Bullier, Senior Project Advisor at the European Commission, and Ms. Jennifer Johnson, Deputy Secretary General of the

European Covered Bonds Council. An interview with Ms. Daniela Antonina from Banco BPM was canceled due to scheduling. For OpenGela, one interview was carried out with Andoni Hidalgo, in charge of International Communication. For practical reasons, we did not receive a response from Pass Rénovation and Reimarkt.

3. Case Studies

A. Sérafin / Haut-de-France Pass rénovation, France

The first case study presented in this paper concerns the French initiative Pass Rénovation⁴. This project was launched under the name “Réhabilitation Thermique des Logements Individuels” in 2013 as a public initiative by the former regional agency of Picardie. After some years of testing and overall positive results, it was renamed “Hauts-de-France Pass Rénovation/Copropriété” and widened to the new regional territory (Hauts-de-France) in 2020.

The project aims at fostering the rate of renovation of existing building stock in the Hauts-de-France region (with at least 35% of energy savings per project) and protecting households from energy poverty by offering technical, administrative and financial support for a wide range of customers. This objective comes with the idea to standardize and simplify energy renovation services. As it proposes its own financial solutions, Pass Rénovation can be considered as a third-party financing company.

The program is organized as a public agency operating industrially and commercially (EPIC⁵), the executive board being composed of elected officials⁶. It is directed to all owners and co-owners, lessors or occupiers, of individual houses (Pass Rénovation) or dwellings in multi-unit buildings (Pass Copropriété) without income or age requirements. It charges approximately half of its actual costs to customers, the rest being compensated by public subsidies.

The project has now gained some visibility through an intensive marketing campaign directed towards homeowners, but also craftsmen, local authorities, and property management companies. The team has

⁴ Unless indicated otherwise, all information was retrieved between March 7 and April 23 2024 from the official website of Pass Rénovation: <https://www.pass-renovation.hautsdefrance.fr/>.

⁵ [fr: EPIC: Etablissement Public à Caractère Industriel et Commercial]

⁶ Logement : « Nous proposons une offre intégrée de rénovation » (Alice Morcrette, SPEE Hauts-de-France). (2021, 18 janvier). News Tank Cities. <https://www.pass-renovation.hautsdefrance.fr/media/files/a.pdf>

organized several housing shows, accommodation fairs, trainings, information meetings for service providers and elected representatives. In practice, the program translates into the deployment of 31 OSS⁷ and 57 information spaces⁸ across the regional territory where committee rooms are ensured. Moreover, several municipalities signed some partnerships with Pass Rénovation (11 at the end of 2022⁹). They can be of different nature: partnerships on animation, with local authorities communicating on the project; and partnerships with financial support from the local government covering part or all of the service cost. In terms of cooperation with other stakeholders, Pass Rénovation is part of the SERAFIN (Services territoriaux de la Rénovation : Accompagnement et Financement) network¹⁰.

Pass Rénovation is present at every step of the customer journey. It offers a complete energy audit¹¹, financed by the region. It optimizes the overall project by identifying the most relevant retrofits and the financial support available (including public subsidies). It is only then that the service is charged, the customer has the possibility to contract for either technical support only or both technical and financial support. In the first case, it is the customer who chooses the companies and craftsmen that will take part in the project, yet Pass Rénovation can help the customer in the research process for instance by analyzing the quotations or providing the official list of RGE certified companies¹². This help comes along with a limited financial support (simple support in accessing public grants).

On the other hand, the technical and financial subscription takes a different approach in selecting companies: Pass Rénovation realizes a call for tender, for which companies can answer. It then analyzes the proposed quotations and selects the companies with the agreement of the customer. This approach resembles a delegation model as it is Pass Rénovation that contracts and remunerates the

⁷ One-Stop-Shops

⁸ Régie Régionale du Service Public de l'Efficacité Energétique (SPEE), Hauts-de-France Pass Rénovation, & France Rénov'. (2023). *RAPPORT ANNUEL 2022*. <https://www.pass-renovation.hautsdefrance.fr/media/files/spee-rapport-activite-2022.pdf>

⁹ *ibid.*

¹⁰ The Serafin network gathers all public third-party financing companies active in the energy renovation sector in France. Created in 2022, its primary objective is to share experiences and feedback to foster the development of such initiatives.

¹¹ Also known as Passeport Energétique du Logement (PEL).

¹² Reconnue Garant de l'Environnement. This label attests to expertise in energy renovation and professionalism in the execution of their work. The acquisition of the RGE label is based on an examination of the company's compliance with a set of requirements for means and skills. This examination and the subsequent issuance of the quality mark are carried out by qualification bodies (Qualibat, Qualit'EnR, and Qualifelec) or certification bodies (Certibat and Cerqual) that have entered into an agreement with the state.

craftsmen in the name of the customer. In addition to the support in accessing public grants, it also offers three personalized and combinable financial solutions:

- An advance of the total cost of the renovation works, including public grants (usually given at the completion of the renovation) and the remaining balance (usually ensured through a bank loan). This advance is available to all subscribers, without any income conditions, and is offered with a 0% interest rate.
- The Prêt Pass Rénovation, a long term loan proposed by Pass Rénovation, for all subscribers, with a 3.5% interest rate and a repayment period of up to 25 years.
- The Eco-Prêt à Taux Zéro, a 0% interest loan, borne by the state (i.e. not exclusive to Pass Rénovation, for owners living in their principal residence. The loan amount is capped at a maximum of 50,000€, and the repayment period can extend up to 20 years.

In the three cases, their reimbursement occurs once the project is completed, on a monthly basis.

Independently from the two types of contracted support, Pass Rénovation ensures worksite supervision, controlling for the quality and the scheduling of the work. In terms of quality assurances and guarantees, the project design and the worksite supervision should allow for energy savings of at least 35% once the retrofits are completed. Yet there are no guaranteed energy savings as they depend on the behavior of customers which cannot be controlled or anticipated. However, it offers follow-up support to customers for 3 years once the project is completed to ensure the intended energy savings. It can be carried out by giving information on equipment use and maintenance, by monitoring the household energy consumption, and by promoting responsible behaviors. An interesting aspect is that the continuous support offered to homeowners in coordinating and supervising their project is ensured through one individual only (called an operator) along all the steps of the project. This encourages customers to reach out when necessary and create a closer contact with Pass Rénovation.

The Pass Rénovation initiative is one of the most mature third-party financing initiatives in the renovation sector across Europe. In terms of outcomes, the SPEE announced in its annual report of 2022¹³ that 180 projects were contracted during the year and 1023 projects were completed or undergoing renovation. On average, the cost of projects amounted to approximately 46,000€ with

¹³ Régie Régionale du Service Public de l'Effacité Energétique (SPEE), Hauts-de-France Pass Rénovation, & France Rénov'. (2023). *RAPPORT ANNUEL* 2022. <https://www.pass-renovation.hautsdefrance.fr/media/files/spee-rapport-activite-2022.pdf>

energy savings accounting for 54%. Interestingly, 87% of projects supported by Pass Rénovation were undergoing global renovation. In comparison, only 7% of all energy efficiency renovations carried out in France were undergoing global renovation. Similarly, the investment of homeowners incurred is also much more important. However, these correlations do not imply a causal effect of third-party financing on the scale of the project as some biases persist. For instance, homeowners wanting to perform global renovations could be more incentivized to reach out to such services.

The implementation of this IHRS initiative has also had some spill overs in the building sector. In fact, 1106 tradesmen were mobilized in 2022 according to their annual report, and 92% were local companies. Actually, the projects supported by Pass Rénovation are very attractive for craftsmen. On one hand, it allows access to a solvable demand (as the payment is guaranteed). On the other hand, the project usually implies more ambitious renovation projects than on average.

However, even though the initiative is one of the most mature IHRS providers, it is still facing some barriers¹⁴. First of all, the operators of Pass Rénovation are still unfamiliar with the whole initiative and its mechanisms. Secondly, there is still a lack of coordination with local authorities in terms of administrative procedures. Therefore, more communication is needed, with a better formation of civil servants on the functioning of the initiative. Thirdly, the energy audit (PEL) is somehow not incentivizing enough homeowners to renovate their dwellings. In fact, 403 energy audits were carried out in 2022, while only 180 projects were contracted. Lastly, there have been reports of insufficient coordination between auditors and operators. This poses a problem, as auditors are responsible for verifying that the work carried out conforms to their recommendations, yet they do not supervise the worksite.

B. Open Gela, Spain

The OpenGela project is a model of IHRS that was first implemented in 2019 as part of the HIROSS4all project. It is a program that aims at creating one-stop-shops in targeted neighborhoods to accompany the population during the process of their home renovation. It was a public project driven by the Basque Government acting as a coordinator working closely with the municipalities in which the services were being offered.

¹⁴ *ibid.*

Like many IHRS, the project was first launched in response to the disconnection of the renovation works that were happening in the Basque region that made the process of home renovation too complex for customers. However, the OpenGela model carries an added element to traditional IHRS that focus predominantly on home renovation works, as it aims at filling the lack of social dimension in the approach of these services. In that sense, the OpenGela model is an innovative project of comprehensive urban regeneration, not so much a project of building renovation.

Indeed, following the requirements set by the EU's directive on energy efficiency¹⁵ mandating each Member State to establish a long-term renovation strategy for the renovation of buildings by 2050, Spain complied by issuing its first LTRS in 2014. The latter includes an assessment of the residential building stock in Spain using different parameters¹⁶: it showed that more than 30% of the Basque population were living in vulnerable or very vulnerable neighborhoods¹⁷. The decision was thus made to intervene at the neighborhood scale to improve the life conditions of the population. The project therefore enjoys a strong social dimension at its very roots, as its maiden motive is to improve the life of the population – not only to achieve climate targets.

To do that, the OpenGela model launched 2 pilot projects in the neighborhoods of Otxarkoaga (Bilbao) and Txonta (Eibar) that were selected based on (1) their state of vulnerability, (2) the proportion of households in social rental housing and (3) the needs of the landlords¹⁸. Offices -acting as one-stop shops- were opened directly within these neighborhoods for a more efficient¹⁹ impact on the population. In these offices, employees work to support the neighbors in their renovation process by advising them “on technical, financial, legal and social aspects, minimizing logistical, administrative and legal burdens.” In that sense, the project could be considered to resemble the support model as defined by Milin and Bullier (2021). The OSS thus do not propose financial aids or loans²⁰, or do the actual renovation works themselves; they rather accompany the residents throughout their customer journeys. In an interview with Andoni Hidalgo²¹, he explained how “every step of the customer

¹⁵ 2012/27/EU

¹⁶ Gómez-Gil, M., et. al. (2024). Indicators and Data in Spain for an Overview of the General Characteristics of the National Building Stock. *Digital Innovations in Architecture, Engineering and Construction*, 57–105. https://doi.org/10.1007/978-3-031-51829-4_3

¹⁷ Interview with Hidalgo.

¹⁸ OpenGela. (2023). Final Report. p.5.

¹⁹ OpenGela. (2023). Final Report. p.4.

²⁰ See MAS OpenGela for more information.

²¹ Andoni Hidalgo is a member of the OpenGela team, in charge of International Communication.

journey is being covered from initial contact to discussion on the works”, without leaving “the people at the mercy of the contracting company.”

To do so, the model is based on three pillars at the source of its success:

The first pillar is probably the most innovative one compared to other IHRS: integrality. This means considering more than energy efficiency in the renovations of the buildings and targeting other social benefits in the interventions like accessibility, health or security, with an active participation of the neighbors and an engaged listening to their needs. This is what adds the social dimension to the model that proposes benefits for the customers that go further than a reduction in the energy bills. This fosters compliance of the population and “has been shown to be an essential factor in increasing social acceptance of urban regeneration processes.”²² Integrality thus implies going further than home renovation and considering the interventions as part of the greater urban regeneration process.

The second pillar is proximity, as the OSS are directly situated in the neighborhoods. This is probably the most important pillar, enabling the creation of links between the employees and the population and fostering trust in the OpenGela model and propositions. The neighborhood scale of the projects is interesting to consider here, as it makes it possible for distinct physical offices to be opened and tailor-made to the needs of the targeted population and their specific situation. The name of the model is also a good indicator of this objective, as “gela” means room in Basque; the name of the model is literally “open rooms”. In our interview, Hidalgo mentioned that they often hold community meetings in these “open rooms”, as participation from the neighbors is higher than when they are organized in the Town Hall, which they trust less. Another interesting thing is that Hidalgo always spoke of the “neighbors”, never the “customers” or any related term. This truly shows the human proximity of the OSS employees with the people they help. All of this contributes to building trust with the targeted population, here again helping break down the barrier of non-acceptance of the works.

The third pillar is equity. This value is at the core of the project, as the latter targets vulnerable populations and neighborhoods, promoting social justice and inclusion on top of home renovations. Moreover, the financing mechanism aims at giving personalized advice to all customers on the financial aid they are eligible to, to ensure that everyone is able to afford the renovations.

²² OpenGela. (2023). Final Report. p.3.

If these are three strong pillars that contributed to the success of the OpenGela model, the latter still encountered some obstacles that need to be mentioned, as some have still not been overcome. Part of these obstacles are quite common to other projects of IHRS, such as important delays sometimes encountered in the works due to external factors -such as the pandemic- that change the length and nature of the support to the customers needed. Others are quite specific to the OpenGela model. For example, the final report mentions the “lack of agreement among several communities to address common issues” limiting economies of scale, or a “lack of consensus between the communities to achieve a compositional unity of façades.” These show the limits of the community scale and the weaknesses of an extensively collaborative model. Another obstacle worth mentioning is the difficulties encountered with the financial aid mechanism; these could probably be avoided if the model proposed its own financial solutions.

However, despite these obstacles, the OpenGela model and its pilot projects were a clear success. In quantitative terms, the model reached its renovation and energy consumption reduction targets^{23,24}. But what further shows the success of this initiative is its expansion to already 8 other cities of the Basque Country²⁵, with 14 additional neighborhoods in the early stages of the implementation of an OSS. This was the OpenGela project’s goal all along: to propose a replicable model for urban regeneration. Its success in doing so is also shown by the number of visits of the pilots' sites by other countries and projects such as Ireland with SuperHomes, or Italy with Sharing Cities, that come to learn from OpenGela’s strengths.

Finally, the users have also expressed their satisfaction with the service. In our interview, Andoni Hidalgo confirmed this idea by telling us that the best ambassadors to show the success of the model to others looking to implement it were the neighbors, as they were fully satisfied with their user experience.

Unlike traditional IHRS, the OpenGela model therefore truly incorporates a critical social dimension into the building's renovation process, transforming it into an intersectional urban regeneration one. It is a true success model that managed to build trust with the citizens, and is already getting replicated.

²³ OpenGela. (2023). Final Report. P.7-8. The pilot projects have supported more than 800 people in their home renovation and have intervened in 425 homes.

²⁴ <https://fedarene.org/project/opengela/>. It is worth noting that the average energy saving per apartment exceeds 60%.

²⁵ In Durango, Lasarte, Pasaia, Abanto-Zierbena, Santurtzi, Valle de Trápaga, Orduña and Amurrio.

C. Reimarkt, the Netherlands

The Netherlands have established high targets to meet the ambitions of the European legislation and hence aim to renovate 300 000 homes every year²⁶. Nonetheless, it's often the IHRS that are the most efficient to incentive home renovation and assist consumers. We will analyze the efficiency of Reimarkt, a private company launched in 2014 by the architects' agency KAW and that nowadays counts 6 offices across the Netherlands (physical offices in Enschede and Groningen, and virtual offices in Zoetermeer, Delf, Den Bosch, and Hoozeveen).

To begin this analysis, we first need to understand who the homeowners are and what the housing system is like in the Netherlands. The Netherlands counts many social housing, which are managed by private, non-profit organizations, subsidized by the State. The housing market is also remarkably homogeneous since almost 50% of the houses were constructed between 1946 and 1990 based on a few model-types such as 2-houses-under-1-roof or corner house²⁷. The particular homogeneity of the houses in the Netherlands is an integral part of the Reimarkt's strategy as we will see later. Many of the homeowners, as we said, are in fact social housing companies that operate in every part of the Netherlands. The private homeowners on their side are facing the same incentives for renovation, such as to increase life quality or to reduce the energy bill. They are also facing the same barriers: the cost of the process, the complexity and duration of the home renovation process and the struggle of finding renovation workers²⁸. Most private homeowners hence pursue partial renovation, concentrating on the implementation of double glazing or of a more sustainable heating system for instance. It is important to note that there are still 37% of households in the Netherlands that had not effectuated any energy saving renovation in 2021²⁹.

Understanding the needs of the Dutch housing system will help us analyze what are the advantages of Reimarkt, and what problems it tries to solve. The information and data on Reimarkt have been

²⁶ Ebrahim Gharebaghi, S., Qian, Q.K., Meijer, F.M., Visscher, H. (2019, June). Unraveling Dutch Homeowners' Behaviour Towards Energy Efficiency Renovations: What Drives And Hinders Their Decision-making? *Energy Policy*, 129, 546-561. <https://doi.org/10.1016/j.enpol.2019.02.046>

²⁷ ibid

²⁸ ibid

²⁹ Ebrahim Gharebaghi, S., Qian, Q.K., De Vries, G., Visscher, H. (2021). Identification Of The Behavioural Factors In The Decision-making Processes Of The Energy Efficiency Renovations: Dutch Homeowners. *Building Research And Information*, 50(4), 369-393. <https://doi.org/10.1080/09613218.2021.1929808>

researched on the official website of Reimarkt³⁰, an official report of different OSS in Europe, that has been published by the JRC of the European Commission³¹, and a guide to open OSS, funded by Horizon 2020, and that features insights from Reimarkt funders³². Reimarkt is an IHRS operating in several localisations in the Netherlands, it has a full implementation model since it provides help all along the customer journey. It has consulting and advice offers, a solution-design approach, it acts as a subsidiary for finding local renovating companies, and provides an after-sale service. It can also help homeowners find the appropriate subsidies to fund the renovation. The IHRS is specialized in working with social housing companies, but has also developed offers for private homeowners. Since 2014, Reimarkt has helped renovate 8000 houses (with an average of 1000 houses a year nowadays, among which 900 are owned by social housing companies). Reimarkt is not an ESCO in the sense that it is an industry driven and fee-based company, looking to extend its offers in other areas³³.

Reimarkt prospects interest groups itself (through online communication, pop-up stores and partnerships with social housing companies) and has a conversion rate that varies from 0,5% to 10%. The average time spent on the customer journey is 11 months³⁴. The conservation rate is average but nonetheless has a great standard deviation that could be explained by the difference among people (both in terms of characteristics and needs) from different areas. The business is largely supported by the local government and subsidies for development since it was not profitable in the first years of its running³⁵. Indeed, the average social housing company spends around 80 000 euros (for the renovation of several households) and the private owners spend an average of 5000 euros³⁶, on which Reimarkt receives 10% of the total renovation. To be profitable, the business needed to renovate 600 houses per

³⁰ Reimarkt. (2023, December 15). Reimarkt - Wij Maken Energiebesparing Voor Iedereen Makkelijk En Mogelijk. <https://reimarkt.nl/>

³¹ Boza-Kiss, B., Bertoldi, P. (2018). One-stop-shops for energy renovations of buildings. European Commission, Ispra. JRC113301

³² Cicmanova, J., Eisermann, M., Maraquin, T. (2020). How to Set up a One-Stop-Shop for Integrated Home Energy Renovation: A step-by-step guide for local authorities and other actors. *Innovate*. Funded by Horizon 2020. https://energy-cities.eu/wp-content/uploads/2020/07/INNOVATE_guide_web.pdf

³³ Bertoldi, P., Boza-Kiss B, Della Valle, N. Economidou, M. (2021). The Role Of One-stop Shops In Energy Renovation - A Comparative Analysis Of OSSs Cases In Europe. *Energy And Buildings*, 250, 111273. <https://doi.org/10.1016/j.enbuild.2021.111273>

³⁴ Cicmanova, J., Eisermann, M., Maraquin, T. (2020). How to Set up a One-Stop-Shop for Integrated Home Energy Renovation: A step-by-step guide for local authorities and other actors. *Innovate*. Funded by Horizon 2020. https://energy-cities.eu/wp-content/uploads/2020/07/INNOVATE_guide_web.pdf

³⁵ *ibid*

³⁶ Vallinga, M. (2022, October 24). Reimarkt: A One-Stop-Shop For The Netherlands. *ProRetro*. <https://proretro.eu/reimarkt-a-one-stop-shop-for-the-netherlands>

year³⁷, a threshold that has been reached according to the analysis of Vallinga and that would make the business sustainable and profitable. We however lack recent data to analyze the profitability of each office.

According to their website, Reimarkt has worked with four social housing companies (ProWonen, Domijn twice, Volkshuisvesting, and Woningstichting Tubergen). While Reimarkt works directly with the social housing companies it is often the tenants that can decide whether they want to renovate their households, through an online form on Reimarkt's website. The company also provides online and by phone switchboards to answer any question that the tenants might have on the process.

What makes Reimarkt so efficient is its standardized home renovation implementation. The company has hence 6 offices and 9 consultants and uses physical as well as virtual interfaces. Since the houses in the Netherlands were in majority built in the same period and they follow the same models, Reimarkt has developed a ready-to-use renovation model according to the characteristics of the households. Hence, the homeowners or tenants are only required to complete an online form (and visit the office if needed), then Reimarkt provides a feasible and adequate proposal of home renovation's implementations without having to visit the households (see appendix A). It is an efficient and fast technique that allows them to renovate many houses each year and reduce the duration of the process for the consumers. Reimarkt also uses pop-up stores to increase the visibility of the company and come in smaller villages or poorer parts of the city. The efficiency of pop-up stores as a marketing tool to convince more homeowners to pursue renovation has been proved in the Netherlands³⁸. We hence see that Reimarkt, with its 10 years of experience, is a well-functioning company that probably greatly improves the decision-making of homeowners in their renovation journey. It has a large presence, both online and in-person; provides a simplified diagnostic for the consumers; offers financial planning; and supervises the renovation. Each homeowner can receive a standardized ready-to-use renovation strategy or a personalized one according to need (a flexibility made possible thanks to the website). The company assures quality of the final renovation, supervision and follow up. It has many

³⁷ Cicmanova, J., Eisermann, M., Maraquin, T. (2020). How to Set up a One-Stop-Shop for Integrated Home Energy Renovation: A step-by-step guide for local authorities and other actors. *Innovate*. Funded by Horizon 2020. https://energy-cities.eu/wp-content/uploads/2020/07/INNOVATE_guide_web.pdf

³⁸ Meijer, F.M., Ad Straub, & E. Mlecnik. (2018). Consultancy Centres And Pop-Ups As Local Authority Policy Instruments To Stimulate Adoption Of Energy Efficiency By Homeowners. *Sustainability*, 10(8), 2734. <https://doi.org/10.3390/su10082734>

partnerships with contractors in the different areas of home renovation, that should assure results without setbacks.

On the other hand, Reimarkt is facing some difficulties that need to be studied. Reimarkt does not provide other financial solutions than the subsidies from the State and the proposal of an integrated means of payment could increase their conversion rate. Reimarkt also lacks a stronger social media presence. Indeed, although present on every social media, the information is scarce and is not up to date. We had trouble finding all the information we needed, especially on the result of the renovation and satisfaction of the homeowners. A monitoring tool might exist within the company, but it is not easily accessible. The shareholders recognise that one mistake that has been made was to upscale Reimarkt to 5 new shops at once, making the business extremely unsustainable for a few years. The deployment nonetheless enabled Reimarkt to become well-known all around the Netherlands very fast³⁹, but the lack of physical offices in the neighborhood might reduce the trust people give to the company. As we will see in the next session, trust is very important in our analysis and we would have liked to have more time to conduct interviews and question the trust factor a bit further.

D. The European Mortgage Federation, Energy Efficiency Mortgage Initiative

To better understand the incentives, it's fundamental to understand the nature of an EEM⁴⁰ and the financial institutions that trade them. When consumers take out a mortgage on a property, they are liable to repay a monthly payment. Consumers have three main financing options for energy efficiency renovations. First, they can self-fund the project using savings, allowing for flexibility in project scope but potentially high costs and limited expert guidance. Second, some providers offer invoice discounts, which are cost-effective but come with restrictions on eligible work and buyer identification challenges. Lastly, Energy Efficient Mortgages (EEMs) provide lower interest rates for efficiency upgrades. While flexible in coverage, these loans require credit evaluation and may limit future borrowing and incur additional costs.

Current state of renovations and customer blocks

³⁹ Cicmanova, J., Eisermann, M., Maraquin, T. (2020). How to Set up a One-Stop-Shop for Integrated Home Energy Renovation: A step-by-step guide for local authorities and other actors. *Innovate*. Funded by Horizon 2020. https://energy-cities.eu/wp-content/uploads/2020/07/INNOVATE_guide_web.pdf

⁴⁰ For an example of a green EEM covered bond, please refer to appendix B.

Mr. Bullier highlights that over 50% of renovations target bathrooms and kitchens, driven mainly by home value appreciation rather than energy efficiency. This suggests energy savings might be a secondary benefit of promoting Energy Efficient Mortgages (EEMs). Energy service companies (ESCOs), designed to be paid based on energy savings, have limited implementation involvement and unclear definitions, representing only 2% of companies. Energy communities currently lack significant influence.

Assigning liability during work also poses challenges, hindering fair compensation due to information asymmetry between consumers and providers. Mr. Bullier notes the OSS prioritizes administrative simplification, while the IHRS, a subset, focuses on the residential sector, aiming to integrate services beyond mere information provision.

Understanding the product framework requires defining an EEM and establishing guidelines for property valuation and energy performance measurement. An energy efficient mortgage (EEM) is a financial instrument intended to finance residential or commercial building purchase, construction, or renovation with an emphasis on energy performance.⁴¹

EEMI: What is it?

In the heart of the EEMI is the market for mortgage securities and principally covered bonds. EEMI is linked to EU directives such as the taxonomy for environmental goals and complements the Energy Efficiency Directive (EED), a legislative energy consumption reduction target. The EEMI also aligns with the Mortgage Credit Directive (MCD). The framework involves 70 lending institutions, 20+ organizations, and 50+ supporting entities.

Three Pillars

Under the EEMI umbrella, efforts have been made to create harmonized disclosure templates (HDT) aimed at supervisors, investors, and rating agencies. These templates are modeled after the covered pool disclosure benchmark and offer several advantages, including providing a product grid for consumers and potentially leading to a national "shopping" mall for green mortgages.

⁴¹EEM label. (n.d.). <https://www.energy-efficient-mortgage-label.org/>

Additionally, the initiative is built upon three pillars:

1. Simulators (e.g. Green Bees by CRIF): A unique tool that is part of the EEM is the Green Bees tool by CRIF. It leverages their successful experience in providing comprehensive retrieval and management of property information to provide an new interface for customers to simulate the amount of cost energy retrofit will require and with a budget, what retrofit options make financial sense for the household. (figure 1)
2. EEML;
3. ESG & financial ratings.

Initiative, structure, and partnership

[Ms. Johnson] introduced the pivotal role CINEA provided in funding to ECBC-EEM for the development of the "green mortgage." The ECBC serves as a network hub with 50-60 interested banks, encouraging middle-sized banks to step up their efforts, especially in countries like Italy where larger banks are already engaged. Additionally, unsecured lending is being explored as an additional avenue.

Collaboration has been key to advancing these initiatives. The ECBC has worked closely with a dedicated data team and established a network of Small and Medium-sized Enterprises (SMEs) across member states to prioritize the renovation wave. Furthermore, there has been surprising demand from mortgage lenders, driven mostly by pressure from investors looking for a "greener" portfolio. This has led to a focus on eligible assets and the development of green covered bonds, which currently represent a small segment of the overall bond market.

The EEMI took two years to integrate energy performance standards into the mortgage framework. Interestingly, market research has shown that the abundance of capital is not sufficient facing concerns about user experience, emphasizing the importance of a coherent and smooth end-to-end customer journey. The availability and accessibility of subsidies and tax credits also play a crucial role in determining the financing landscape.

Throughout the interview, [Ms. Johnson] repeatedly emphasized the outsized importance of a consumer-centric approach, which requires extensive consumer research to understand behavior and preferences. Strategies are being developed to influence consumer behavior and create nudge levers

for banks to engage more effectively with consumers. The ultimate goal is to create a one-stop-shop where banks can collaborate with an advisory council in close consultation with public authorities to facilitate private finance.

What is the Energy Efficient Mortgage Label?

Finally, the EEML is intended as a global benchmark for EEM from the perspective of lending institutions and institutional investors (following the lead of the [Covered Bond Label](#)). The EEML provides information on the portfolios of energy efficient loans as assets to be included in green covered bonds and green securitisation, allows for enhanced evaluation and tracking of their financial performance relative to alternatives and provides greater transparency regarding climate risks and resilience.

Mortgage underwriters often package pools of mortgages into a covered bond which allows issuing credit institutions to obtain a lower cost of funding. Covered bonds are built with an array of attractive safety mechanisms including bankruptcy remoteness and asset coverage features as well as a double recourse mechanism that grants full recourse on the credit institution as well as senior lien on a pool of assets, ahead of unsecured creditors in the event of default. The added assurances gave rise to its popularity. By the end of 2020, there were more than EUR 2.9 trillion outstanding. And after the end of the COVID-19 pandemic and the subsequent end of the quantitative easing regime, niche markets like covered bonds regained favor among institutional investors.⁴² (Figure 2)

According to the ECBC overview, 93% of the sustainable covered bonds are backed by mortgages. Green mortgage covered bonds finances energy efficient commercial or residential buildings, accounting for 66% of all use proceeds. Sustainability-linked or green residential real estate loans account for 50% of use of proceeds, and this steady rise in proportion demonstrates the traction and the integration of ESG criteria in issuer and rating methodologies.⁴³

Incentives and motivation

⁴²*Covered Bonds Special Report 2023*. (2023). GlobalCapital.
<https://www.globalcapital.com/covered-bonds-special-report-2023>

⁴³*Ibid.*

Lending institutions team up with partners to boost marketing and provide subsidy details to potential EEM consumers. Incentives for consumers include better mortgage rates, lower energy bills, training, and possibly higher property values.

Lower energy bills increase consumer disposable income, making mortgage payments more manageable and reducing default risks for banks. EEMI's analyses confirm this risk reduction, cutting required capital reserves and freeing up bank funds. Investors gain from high-quality EEM-covered bonds. Together, these benefits promote employment, cut consumption, and decrease carbon emissions.

Yet, lower consumer interest rates lead to a "greenium," raising investor hurdle rates. Jennifer highlights a 10-30 basis point greenium, more pronounced in primary than secondary markets. Stakeholders like lending institutions and EEM partners encourage energy performance. EEM partnerships enhance marketing and subsidy access, while self-certifying EEM compliance with the EEM Label. Strong data tools aid in analyzing energy-efficient mortgage assets, emphasizing credit risk and energy efficiency savings correlations. (figure 3)

Future Directions: 5 Main Focus Areas

[Ms. Johnson] outlines five key focus areas for the project's post-2023 phase. First, deep correlation and scenario analysis will inform product development to reduce energy investment risks. Second, the ECBC plans to incorporate ESG factors into property valuation. Third, ESG factors will be integrated into the bank's operational models, including decarbonization paths and innovative parametric microinsurance to enhance consumer confidence. Fourth, ECBC aims to enhance and standardize EEM labels. Lastly, the ECBC will support SMEs through capacity building, green initiatives, and "Project Transparency" for improved credit access.

4. Discussion

A. Comparison of the study cases

To present a framework of good practices of the IHRS, we will compare the different initiatives we analyzed. Although our analysis is limited to four initiatives, we have nonetheless

noticed interesting axes of comparisons that could be used to identify successful initiatives. In the following argument we will only be comparing Reimarkt, Open Gela, and Serafin because they are self identified as IHRS; whereas the EEMI is a completely different initiative that isn't (the particularity of the EEMI will be analyze in the next section). We will highlight four axes of comparison that were mentioned during the interviews, and in the literature : the model of the IHRS, the values forming their identity, their communication and deployment strategy, and finally their financing model (see appendix C).

First of all, a descriptive comparison of the model of the IHRS is needed because it induces different strategies. Hence, Open Gela and Serafin are public initiatives, while Reimarkt is a private company. The public-private dichotomy can have an influence on the trust accorded to the IHRS, the choice will depend on the relation the population has with its public sector and the challenges the IHRS wants to target. Reimarkt also stands out through an implementation model, while Open Gela and Serafin preferred a support model. This difference is explained by the strategies adopted. Reimarkt is trying to reduce the duration and the difficulty of the customer journey thanks to its standardized renovation model, which is also coherent with its focus on social housing companies that don't have time to renovate each household individually. Open Gela and Serafin are focusing on a personalized service to create a stronger customer experience. We would need to survey the European population to define if time-gain or personalisation is more important for the customer, but that might differ for each of them. Moreover, a focus on a defined population (social housing for Reimarkt and vulnerable neighborhoods for Open Gela) is the best practice. Indeed, vulnerable populations are at risk of energy poverty (as emphasized by the EED) and beginning with a vulnerable population could make the reproduction of the initiative to a larger public more efficient.

In terms of values embodied by the services, trust was the most predominant one. Indeed, it was mentioned during all our interviews, on the websites, and in the literature. The OECD defines trust as “a person's belief that another person or institution will act consistently with their expectation of positive behaviour”⁴⁴ . We hence decided to add the concepts of transparency and fairness, as elements of trust-building. Open Gela seems to be the project more favorable for trust-building since it is a small-scale project with offices directly in the neighborhoods. Serafin bases its trust building on a system “1 consultant-1 customer”, but being a much larger scale project it cannot get as close to the public as Open Gela. Reimarkt on its side has been implemented all around the Netherlands, allowing

⁴⁴ <https://www.oecd.org/governance/trust-in-government/oecd-trust-survey-main-findings-en.pdf>

a national recognition that favors trust-building, but has a remoteness that limits contacts with the targeted public. On transparency, Open Gela demonstrates best practices by asking the former customers to become ambassadors of the service. For the other initiatives, despite annual reports, it was difficult to have a comprehensive view of their concrete results and efficiency; it is hence lacking data and testimonies from customers for monitoring. Finally, fairness appeared to us as a challenge for public companies. While private companies can hire contractors without having to justify their choice, public companies have the obligation to be fair and transparent. Consequently, Serafin has implemented call for bids in order to hire the contractors adapted to each renovation project, and proposes a list of certified contractors, for the homeowners who prefer choosing the contractors themselves.

We also analyze the communication strategy of each initiative, an important tool to build trust and acquire new customers. Information about the company should be accessible, understandable, and complete. Each initiative tries to get as close to the public as possible and for instance each initiative has at least one physical office. Serafin is the most deployed initiative since it has several offices, and organizes webinars or fairs. On its side, Reimarkt decided to deploy virtual offices to develop its business faster and tried to develop pop-up stores to solve the remoteness issue. On a side note, we thought that social media presence and communication was lacking in each initiative. They have efficient websites (although sometimes only in one language), but don't have social media (Open Gela), or have social media in which information is outdated and not attractive.

Finally, on the financial model adopted by the company we are going to present their business plan and the support they provide to the customers. This section is justified first because an initiative, to be sustainable, should be profitable; second because the financial barrier is preventing homeowners from pursuing renovations. Reimarkt, as the only private company, takes 10% from the total renovation's cost of the homeowners; Serafin has a more socially-oriented strategy since the cost of the service is different according to the service provided and according to the salary of the household; while Open Gela is providing free advices to the homeowners. These IHRS depend on public subsidiaries, highlighting the importance of the public sector in creating efficient IHRS. Finally, only Serafin provided financial support to customers, expected to be safe since it comes from the French government.

B. Financing as a barrier

Across all barriers, financing often emerges at the top of the consumer's mind. The key is often to de-risk the consumer just to a point that allows them to take on the project. So the strive for equilibrium entails the possibility of granting an excessive level of subsidies, as we have seen in Italy. In the case of the EcoBonus tsunami, consumers were inundated with information without the commensurate advice and the private sector was energized by a profit opportunity which led to poor quality of works and exacerbated misalignment of incentives.

There are obviously advantages and drawbacks to each mode of financing. Across all projects, the subsidy could either be direct: through a disbursement with or without condition or indirect. The indirect method can either be through tax credits, subsidized or zero interest renovation loans in Serafin, invoice discounts, or in the case of home buyers - a green mortgage. Direct disbursement solves the difficult issue of consumers unable to access the financing but trades the convenience for the complicated dilemma of ensuring that the funds are directed towards an intended destination. Even with conditionality, direct disbursement could be politically thorny. Many projects often opt for indirect financing through the waiver of a counterfactual burden (tax / interest). This is more politically palatable and has a stronger conditionality and traceability of funds.

Of course, the choice of how to subsidize is highly dependent on the local demographic's relationship with the financial institutions, the liquidity of the market, dynamics of the local housing stock, cultural/social-factors and relationship with the "green identity" etc. In areas in which trust in financial institutions is low, any bank-led marketing will run into credibility issues. Contrarily, in a market where the value of a "green" identity can create a bubble of demand for renovation in superficial elements like windows that doesn't generate significant savings. The balance is also crucial between being too specific in the defining energy saving renovation types and too broad or overarching.

*Country-Specific Consumer Insights*⁴⁵

⁴⁵ Eon & BASIS. (2018, February). *Creating an Energy Efficient Mortgage for Europe: Consumer Research Insights*. Energy Efficient Mortgage Action Plan. Retrieved April 18, 2024 <https://energyefficientmortgages.eu/wp-content/uploads/2021/07/Consumer-Research-DE-IT-SE-UK-2018.pdf#page=2.60>

Consumer preferences and trust in banks vary significantly across countries like the UK, Italy, Germany, Hungary, and the Netherlands. In the Netherlands, homes are highly valued investments due to their competitive market, but environmental concerns are paramount, and energy-efficient homes are a source of pride. Conversely, Romania has a strong tradition of homeownership, viewing housing as a rite of passage, but there's hesitancy towards additional mortgages due to a dislike for debt and a focus on cost savings over environmental impact. Hungary stands out with proactive banks and a supportive Central Bank, investing in green mortgages, while the European Covered Bond Council (ECBC) plans to deepen its research in Denmark, Italy, and Hungary.

The lack of universal applicability of any one model should not be taken to discourage innovation. Ultimately, as we have seen in certain cases like Serafin, public financings can have enormous leverage (1:20) that mobilizes the bulk of and often necessary private capital. Therefore, the prospect of blended finance seems rather sanguine.

C. Recommendations

After having compared the four different projects and highlighted their strengths and weaknesses, we here propose our recommendations to foster IHRS and make them both more attractive and efficient.

What key elements are pillars for an efficient IHRS?

From our analysis, we identified four major elements as essential to the successful performance of the OSS, yet often lacking or not maximized.

a) Trust

Trust is often considered to serve essential functions in the policymaking process by facilitating cooperation and shaping interactions between policymakers, stakeholders, and the public⁴⁶. This entails that the trust we place in an organization – or the lack thereof – will affect our perception of the services they propose and our willingness to cooperate. Beyond the pure policymaking dimension, trust is also considered as an essential organizing principle that shapes the structure and performance

⁴⁶ Cairney, P., & Wellstead, A. (2019). ICPP Montreal Session 1. Integrating Behavioral and Structural Explanations for Policy Choices The Role of Trust in Policymaking.

of organization, notably allowing a freer flow of information in environments with higher levels of trust⁴⁷.

We found that building trust with the customers is a crucial prerequisite if we want to render the OSS attractive and successful in its renovation objectives, which was sometimes lacking in the projects we examined. For example, we found that the lack of trust was one of the – if not the biggest – obstacles to the implementation of the EEMI; on the contrary, it was one of the biggest strengths of OpenGela. Building trust with the population that you target is thus essential to having an impact and positively influencing their attitude towards the renovation process, especially in more vulnerable areas where trust tends to be systematically lower⁴⁸.

According to our analysis, two of the main tools to foster trust are increased proximity and transparency.

b) Diversification

Another key element we found is the need for an increased diversification of the performance targets defined by the service. This means that there is a need to deepen the social dimension of the targets of the renovation works by going beyond energy efficiency and savings, and focusing on more social benefits for the people.

The residents affected by the renovations are more likely to accept the projects if the benefits they gain from them go beyond the common environmental benefits. In the OpenGela model, the service proposes a renovation plan that also targets an improvement in the accessibility of buildings, or the safety of inhabitants: this makes the renovation work more attractive for the customers, who are more willing to engage in it.

With a diversification of the renovation targets, the residents derive more benefit from the renovation work, which makes it easier to accept the burden since it is spread out.

c) Empowerment

The third key element we found is the empowerment of the citizens by the service and the renovations. This again makes engaging in the renovation process more attractive to the residents, breaking down the barrier of participation. This means that there is a need to assess individualized situations to make everyone involved in the process, and every case heard.

⁴⁷ McEvily, B. et. al.. (2003). Trust as an organizing principle. *Organization science*, 14(1), pp.91-103.

⁴⁸ OECD. (2022). Background: About the OECD Trust Survey. p.11.

By doing that, the service also fights the risk of free riding. Indeed building renovations, when looked at through the lens of energy transition policies, present benefits for the community while incurring costs to the individuals. In game theory, this could lead us to think that many would try to “benefit from the outcome of collective action without making a direct contribution”⁴⁹. However, involving the citizens directly in the process of the renovation of their homes by building proximity and trust, and by presenting them personalized social benefits that they could not gain by being a passive free rider could make them feel empowered by the process and willing to take part in it.

d) Affordability

Finally, the fourth and last element we identified is affordability. The IHRS needs to be able to provide an adequate financial solution for the residents, while considering the intersectionality of the struggles linked to home renovation. In the cases we looked at, we noticed that the lack of funding was often one of the main obstacles to the existing IHRS.

Many scholars have already argued that for the energy transition to be successful, its response must be intersectional⁵⁰ to guarantee that all citizens can afford it; this also applies to IHRS which is one of the instruments for the implementation of energy transitions policies. There therefore exists a need for social justice in the implementation of IHRS.

To make an IHRS efficient and attractive, there thus needs to be a smart funding mechanism that allows all residents to engage in a renovation process regardless of their personal means.

What concrete model to implement?

Expanding on this, we propose a concrete model of Integrated Home Renovation Service that, according to our research -and considering its gaps and limits- we believe would be the most efficient model.

Coming back to Millin and Bullier’s paper, we recommend **using the Support Model as a basis**. If we recommend developing the most complete and integrated model possible, we believe that the Implementation Model, arguably going further in its service integration than the Support one, will lead

⁴⁹ Cairney, P., & Wellstead, A. (2019). ICPP Montreal Session 1. Integrating Behavioral and Structural Explanations for Policy Choices The Role of Trust in Policymaking. p.8

⁵⁰ Johnson, O.W., Han, J.Y.-C., Knight, A.-L., Mortensen, S., Aung, M.T., Boyland, M., et al. (2020). Intersectionality and energy transitions: a review of gender, social equity and low-carbon energy, Energy Res. Soc. Sci. 70.

to conflicts of interests if it proposes to conduct the renovation works. Using the Support Model framework thus seems like a safer option.

We recommend to articulate the model around the following elements:

- **A public-private partnership.** We recommend keeping the leadership of the public sector for the projects to ensure their legitimacy. We urge for a close collaboration with as many private stakeholders as possible to facilitate the process and allow for more innovation. Both sectors should be represented in a common managing entity.
- **An enhanced advice dimension.** The Support Model, as presented by Milin and Bullier, seems to consider the advice part of the journey as only marginal to the services proposed. We argue they should be part of the core activity of the IHRS. The customers need to be accompanied and supported throughout the entire customer journey.
- **A support in the selection of contractors.** If we do not encourage an Implementation Model framework, we encourage the IHRS to accompany customers in the renovation work stage. To maintain competition in the market and avoid conflicts of interest in the public sector, we propose two mechanisms:
 - An impartial and official labeling for trusted home renovation companies. The IHRS should promote a list of certified contractors to residents that will only include companies whose qualifications have earned them the publicly-assured label. Thanks to this, customers will know which company to trust, without the public sector having to make an unfair selection.
 - A call for tenders for each project. The employees could propose to launch and supervise a call for tender when a renovation project comes through: the certified companies can respond. Here again, the goal is to avoid any conflict of interests and foster competition amongst the contractors, while ensuring that the customers are accompanied.

Finally, we recommend proposing a **more advanced financial mechanism** based on a partnership between the private and public sectors.

- On the **public part.** There is a clear and strong need for public funding for home renovation to ensure affordability for all citizens. We recommend two forms of public-sector involvement:
 - Smart funding: grants and subsidies allocated to citizens and grants progressively indexed to the income of the households.

- Public loans with zero interests: when possible, we recommend implementing a zero-interest loan service publicly funded. This could prove very attractive and useful to foster citizens' participation.
- On the **private part**. We urge for private investment to act as a complement to the undeniably insufficient public funds. We recommend **fully integrating the EEMI to every IHRS** as a mechanism to enable and facilitate private investment – and not considering it as a distinctive service as such. To do so, we recommend:
 - To designate an EEMI interlocutor for each IHRS to create a link between the different actors.
 - To promote the training of the IHRS employees on the EEMI solutions and labels to make sure they are able to advise the residents on the different options available. In that sense, we recommend **presenting all private loans options under the EEMI label** and letting the consumer choose; here again maintaining competition and fairness.

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6. Appendix

Appendix A : standardized renovation strategy proposed by Reimarkt during its contract with Domjin (2023) <https://reimarkt.nl/complexendomijn2023/>

Woningverbetering

In deze folder leest u meer over het pakket energiebesparende maatregelen dat wij samen met Domjin speciaal voor uw woning hebben samengesteld. Door deze maatregelen wordt uw woning verbeterd op de punten comfort, luchtkwaliteit en duurzaamheid.

Wanneer 70% van de bewoners akkoord gaat met dit voorstel wordt het pakket bij alle woningen uitgevoerd.

Kosten

Woningcorporatie Domjin neemt de kosten voor de verduurzaming volledig voor haar rekening. Er wordt geen huurverhoging in rekening gebracht.

Voor de elektriciteit die opgewekt wordt met de zonnepanelen wordt maandelijks een bedrag in rekening gebracht via servicekosten. Voor 6 zonnepanelen is dat €23 en voor 8 zonnepanelen is dat €31.

Energierkening omlaag

Isolatie, tochtwering en ventilatie zorgen ervoor dat uw woning beter verwarmd kan worden en minder warmte verliest. Daarnaast wordt er met de zonnepanelen duurzame energie opgewekt. Totaal kunt u met dit pakket gemiddeld tot wel 40 euro besparen op uw energierekening.

Deelname

In de envelop met deze folder vindt u ook een deelnameformulier. Controleer de vooraf ingevulde persoonlijke gegevens en vul het formulier verder in.

Maak een duidelijke foto of scan van het formulier en mail het naar klantenservice@reimarkt.nl. Heeft u geen e-mailadres? Gebruik dan de meegeleverde antwoordvelop.

Wij ontvangen uw reactie graag binnen twee weken.

Energiebesparende maatregelen

Rossinistraat-Wagnerstraat

- ✓ Zonnepanelen (6 of 8 stuks)
- ✓ Dakisolatie
- ✓ Dakraam vervangen
- ✓ Gevelisolatie (na isoleren spouw)
- ✓ Mechanisch ventilatiesysteem
- ✓ Geïsoleerde achterdeur
- ✓ HR++ glas met ventilatievoetjes
- ✓ Geïsoleerde gevelpanelen
- ✓ Bodemisolatie

Veelgestelde vragen

Is deelname verplicht?
Wanneer 70% van de bewoners akkoord gaat met het voorstel dan worden alle woningen verduurzaamd. Ook van de bewoners die geen deelnameformulier hebben ingestuurd. Als u hier vragen over heeft dan kunt u contact met ons opnemen.

Kan ik maatregelen laten vervallen?
Het is belangrijk alle woningen op hetzelfde niveau te krijgen wat betreft energiebesparing en goede luchtkwaliteit. Een maatregel komt alleen te vervallen wanneer het technisch niet mogelijk is in uw woning of al uitgevoerd is.

Worden kozijnen en deuren vervangen?
HR++ glas wordt geplaatst in de bestaande kozijnen. Waar nodig worden de kozijnen gerepareerd en de draaiende raamdelen vervangen. Tijdens de opname beoordeelt de aannemer de staat van de kozijnen, de ramen en de deuren. Deuren en ramen die al voldoen aan de eisen worden niet vervangen.

Wat verwachten jullie van mij als bewoner?
Voor de verduurzaming is het in sommige gevallen nodig om de spullen die in de weg staan even aan de kant te zetten. Vaak zijn dit spullen die in de vensterbank staan of tegen de buitenmuren zijn geplaatst. Voor het aanbrengen van vloer of bodemisolatie is het niet nodig de vloer eruit te halen. Uw spullen hoeven niet naar een opslag. Maar maakt u geen zorgen, de aannemer legt dit van te voren aan u uit!

Kan ik nog meer informatie krijgen?
Ja, dat kan! Als u na het lezen van de informatie nog vragen heeft dan kunt u contact met ons opnemen. U kunt ons bellen op 085-0185233 of uw vraag mailen naar klantenservice@reimarkt.nl.

Op onze website kunt u terecht voor algemene informatie en diverse folders over bijvoorbeeld het belang van ventilatie. Kijk voor meer informatie op : www.reimarkt.nl/complexendomijn2023

Onderhoudswerkzaamheden

Naast de energiebesparende maatregelen voeren we regelmatig onderhoud uit aan uw woning. Het gaat om de volgende onderhoudswerkzaamheden:

- Herstellen en schilderen houten delen buiten.
- Vervangen lijk kruipruimte
- Aanpassen meterkast

Appendix B: An example of an Italian EEM by BancoBPM

Introduced in January 2021, BancoBPM's Mutuo Green with Green Factor uses the HDT to present its EEM offering. This loan, available in fixed or variable terms, finances residential purchases, construction, or renovations for 10 to 30 years. It offers flexible disbursements aligned with construction progress. Consumers can get a 0.10% greenium rate reduction by showing an EPC (APE) with a 2-energy class improvement or 30% lower EPgl, nren post-renovation. (figure 4a)

As of April 14th, 2024, BancoBPM has issued 28,350 loans totaling €3,925 million, with 98.5% in the Residential sector. Half of this is in covered bonds, amounting to €1,988.4 million. Most borrowers are property owners (95.2%), mainly for apartments (85%). Loans vary from €0 to over €300k, with a median of €100k, and are mostly first lien. The loan-to-value (LTV) ratio median is around 60-70%. The EPC shows predominantly Green Certified Buildings from post-2016 and class A-C buildings, with renovations making up a small part of total financing outflows. (figure 4b)

Figure 1: An example simulation of energy savings retrofit options constrained with a simulated budget

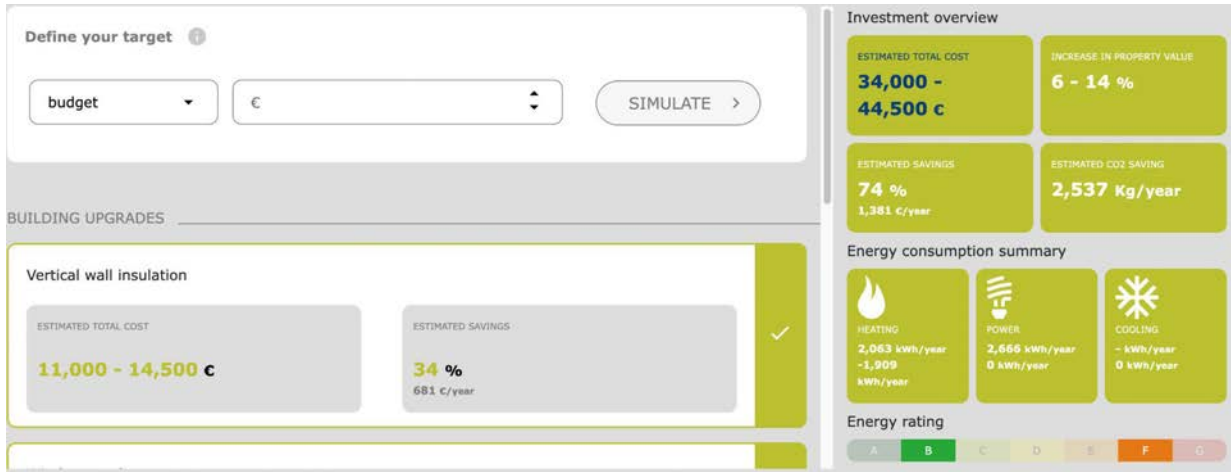
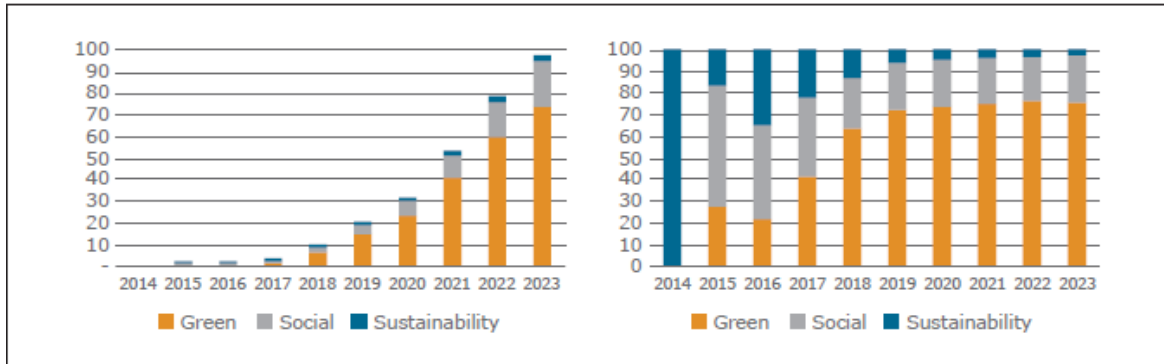


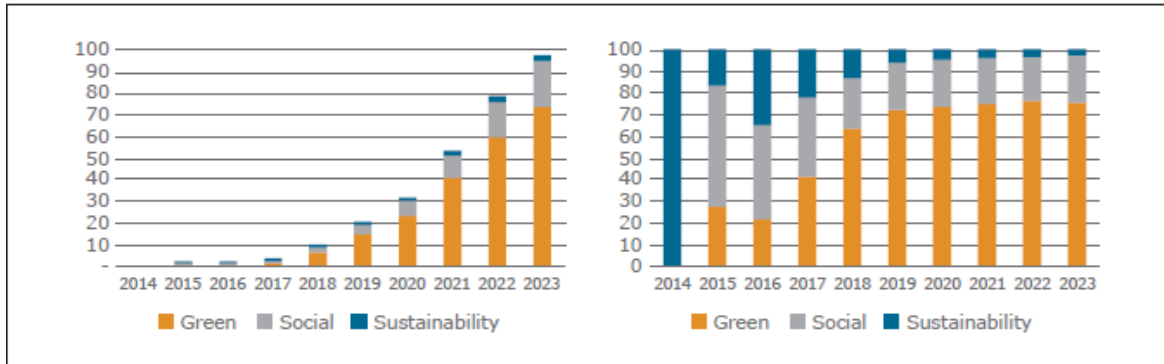
Figure 2: Outstanding amount of sustainable covered bonds & share of ESG covered bonds in total, %.⁵¹

⁵¹*Sustainable covered Bonds: Market Overview - ECBC.* (2023, November 23). ECBC. <https://hypo.org/ecbc/publication-news/sustainable-covered-bonds-market-overview/>

> FIGURE 1: OUTSTANDING AMOUNT OF SUSTAINABLE COVERED BONDS, EUR BN



> FIGURE 2: SHARE OF GREEN, SOCIAL AND SUSTAINABLE COVERED BONDS IN TOTAL, %



Source: ECBC, ABN AMRO, Bloomberg, 2023 data covers H1

Figure 3: An example of a covered bond with EEM label (green leaf).

ISIN	Pool Identifier	↑ Initial Date of Issuance	Maturity Date	Face value ¹	Coupon	Syn.	Listed	Tapped	Mat. ²	E
FR00140000K0	CAISSE FRANÇAISE DE FINANCEMENT LOCAL	19/03/2024	19/03/2036	EUR 500,000,000	Fixed	Yes	Yes	No	HB	Y

Figure 4a: Breakdown by regions of an example EEM - Banco BPM Mutuo Green with Green Factor

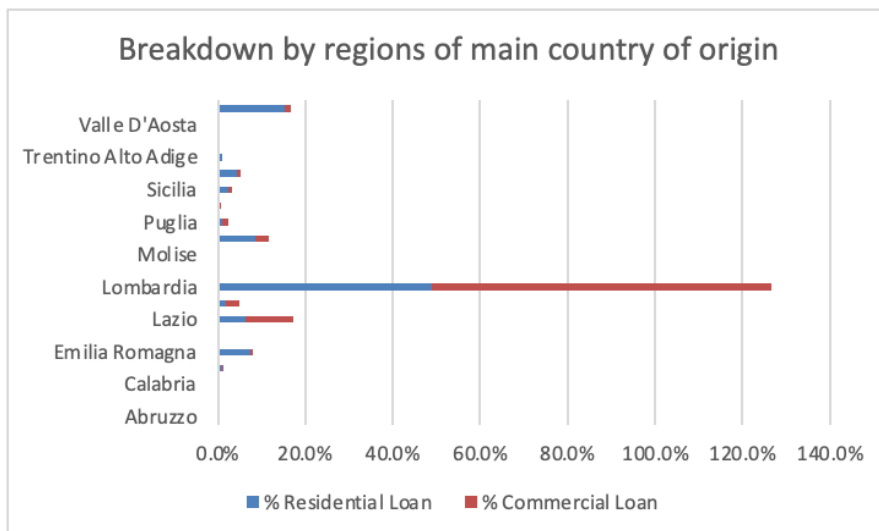
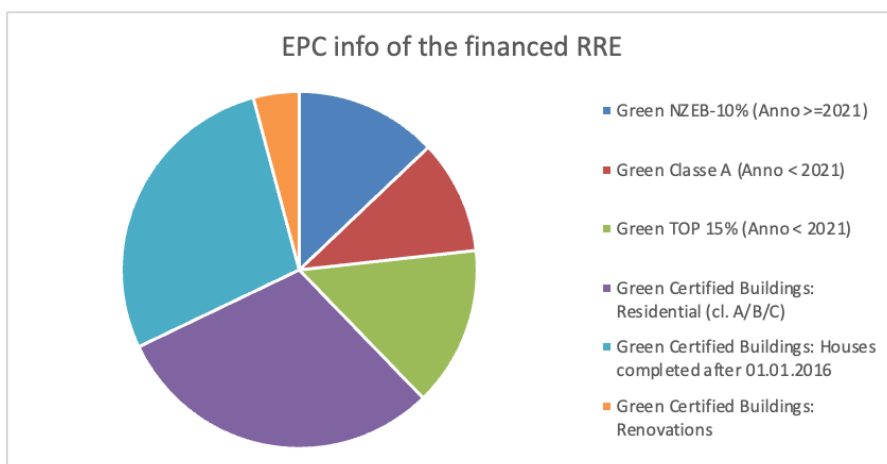


Figure 4b: breakdown of Mutuo Green with Green factor financing flow



Appendix C: table of comparison between Reimarkt, Open Gela, and Serafin

		SERAFIN	OPEN GELA	REIMARKT
INTERNAL MODEL	MODEL OF IHRS	support model: personalised approach with advices, financial support, and follow-up	support model: personalised approach based on advice giving	implementation model: standardised renovation model, hiring of the contractors, and follow-up
	PUBLIC	all homeowners within the region Haut-de-France	vulnerable neighbourhood	social housing companies and homeowners
	LEGAL ENTITY	public company managed by the Region	public initiative managed by the Basque Government	private company
VALUES	TRUST	1 consultant 1 client model	close to the homeowners, acts as a private advisor	standard by telephone but often no physical contact
	FAIRNESS	call for bids and certified craftsmen (RGE)	not applicable	no information
	TRANSPARENCY	annual reports but difficulty to find the concrete results	annual reports and clients as ambassadors	contact with tenants of the social housing companies but difficult to find the concrete results
COMMUNICATION	DEPLOYMENT	regional deployment, numerous offices, webinars, fairs...	offices directly in each neighbourhood	physical/virtual offices and pop-up stores
	PUBLIC PROXIMITY	visit the targeted public and their house	proximity as a pillar value	fast development across the NL but only virtual offices in some neighbourhoods
	SOCIAL MEDIA	efficient website (only French)but weak social media	efficient website but no social media	website and social media outdated and only in Deutch
FINANCING MODEL	MODEL	fees depends on the model chosen and by the income of the households	free service	take 10% of each renovation's cost
	SUBSIDIES	regional/ national	Horizon 2020	government and fund for development
	CUSTOMERS SERVICE	offers a financial aid	no financial aid	no financial aid