

# Acceleration Workshop Report: Integral Renovations for More Condominiums

The Hague, November 22, 2023

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Work Package: WP2, D2.2

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Created: 23/11/2023

Updated: 11/12/2023





*This project has received funding from the European Union's Programme for Environment and Climate Action (LIFE) MGA — Multi & Mono, under grant agreement No. 101076316. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.*

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## Workshop Aim

Various municipalities and private organizations already offer energy advice for home renovations to individual owners and predominantly small homeowner associations (HOAs) (Bertoldi et al., 2021; Bagaini et al., 2022; Elgendy et al., 2023). However, the development of more comprehensive home renovation services for CAs is still in its early stages. HOAs are often challenging to reach and convince to renovate their buildings with a focus on quality towards higher energy performance. They are also insufficiently guided in setting up financially optimal constructions for renovation costs. New collaboration models provide a potential solution (Milin & Bullier, 2021; Mlecnik, 2022).

Therefore, the Municipality of The Hague and TU Delft invited stakeholders involved in the development of comprehensive home renovation services for HOAs to familiarize themselves with new insights regarding guiding the customer journey of HOAs and to share experiences. The workshop discussed the need of new policy developments in the Netherlands, potential business models for public or private operation, and explored new collaboration possibilities.

## Workshop Summary

The workshop commenced with an introduction of the CondoReno Project and the agenda of the day by Erwin Mlecnik (TU Delft), followed by a lecture by Jop Beumers from BZK on the “VVE versnellingsagenda” (Homeowner Association Acceleration Agenda). Sytse de Maat and Wies Ettema from the Municipality of The Hague then shared the approaches and experiences of the municipality in accelerating energy renovations for homeowners in the Hague. A panel discussion, moderated by Henk Visscher from TU Delft, included perspectives from Jop, Natasja Schouten-Lening from the Province of South Holland, and Gert-Jan van der Panne (Program Manager of The Hague's isolation project for the Hauge apartments).

Ragy Elgendy from TU Delft emphasized the significance of stakeholder collaboration in crafting viable business models. The concept was illustrated using WNR's business model presented by Walter Van Steenis. Clarence Rose from Kennisinstituut KERN presented a roadmap for homeowners to renovate their buildings with six main phases, leading to an interactive activity session. Participants engaged in a Power Interest Matrix (Figure 1) activity, discerning stakeholder roles, identifying missing elements, and discussing tasks that required attention. Erwin moderated the live session with the participants in Dutch and Ragy moderated the online session in English.

Post-lunch, a meeting with the National Advisory Board (NAB) showcased the Condoreno project, detailing experiences and challenges in WP1, WP2, and WP3. The NAB meeting concluded with a round table discussion, reflecting on the day's activities, identifying gaps, and discussing stakeholder roles. The report provides a comprehensive overview of the workshop's key insights, next steps, and recommendations for future endeavours.

## Participants List

Appartement en Eigenaar (branche vereniging)  
Atlas Research  
Bouwnext  
Centraal Beheer  
DVvE  
eBounce Advies  
Embuild Vlaanderen  
EnergieAdvies Zutphen  
European Builders Confederation (EBC)  
Gemeente Den Haag  
HBO Bouw en Energie  
Jongzeeuw Architecten  
Kennisinstituut KERN  
Provincie Zuid-Holland  
Rijksoverheid BZK  
Stichting WoonlastenNeutraal Renoveren (WNR)  
TU Delft  
VvE balie gemeente Den Haag  
VvE Bond  
YES!Delft

## Introduction and key notes

Erwin Mlecnik from TU Delft introduced the goal of the workshop. The recent HOA acceleration agenda (“VvE-Versnellingsagenda”) emphasizes the need for speeding up the renovation of buildings owned by HOA’s. Amongst other, decision-making can be improved, as well as financial support, information provision and unburdening of HOA’s. THE EU LIFE-project CondoReno also pays specific attention to stimulating deep renovations with better energy performance (minimum energy label A) as well as living-cost optimized propositions for HOA’s. Collaboration of public actors and supply side actors (advisors and executors) is key for eliminating hindrances experienced by HOA’s and for developing IHRS for HOA’s. CondoReno develops such services in the Netherlands and Belgium by testing and developing IHRS using interventions in the decision-making processes of HOA’s. Planned deliverables will stimulate supply and demand for IHRS for HOA’s. The workshop aimed to formulate policy viewpoints for guiding HOA’s to achieve label A renovations. Collaboration opportunities for speeding up IHRS were explored.

The first part of the workshop covered policy challenges such as those related to the old HOA-owned building stock, inactive HOA’s, slow decision-making processes, insufficient maintenance and reserve funds, needed communication about value propositions and existing IHRS and stimulation of efficient collaboration. The second part of the workshop focused on the IHRS provider’ challenges such as unburdening the decision-making, support the whole renovation journey with a process that integrates multiple stakeholders.

Jop Beumers from the Ministry of Internal Affairs and Kingdom Relations presented the HOA acceleration [agenda](#). The agenda resulted from round table discussions with multiple stakeholders and

was sent to the Second Chamber on September 5. A set of actions for the coming period until 2026 was identified (see slides). Amongst other, ideas are to develop a national HOA sustainability desk for smaller municipalities, to train proces guides and to develop a toolkit for market actors on Volkshuisvestingnederland.nl. The decision-making quorum for sustainability measures could be reduced to 50 percent +1: an internet consultation will take place next year.



Figure 1: Jop Beumers Presents the HOA acceleration agenda

Wies Ettema from the Municipality of The Hague presented the local strategy to support HOA's during their renovation journey. About 90 percent of the HOA's in The Hague are small and the buildings often have a label G. Municipal subsidies, a sustainability fund for interest reduction for loans from the Heat Fund ("Warmtefonds") and a local HOA desk support actions. Sytse de Maat from the Municipality of The Hague experiences the need to emphasize home improvements next to energy savings. The HOA campaign box ("[VvE-campagnebox](#)") proves to be a valuable tool. Building up support of homeowners is crucial.

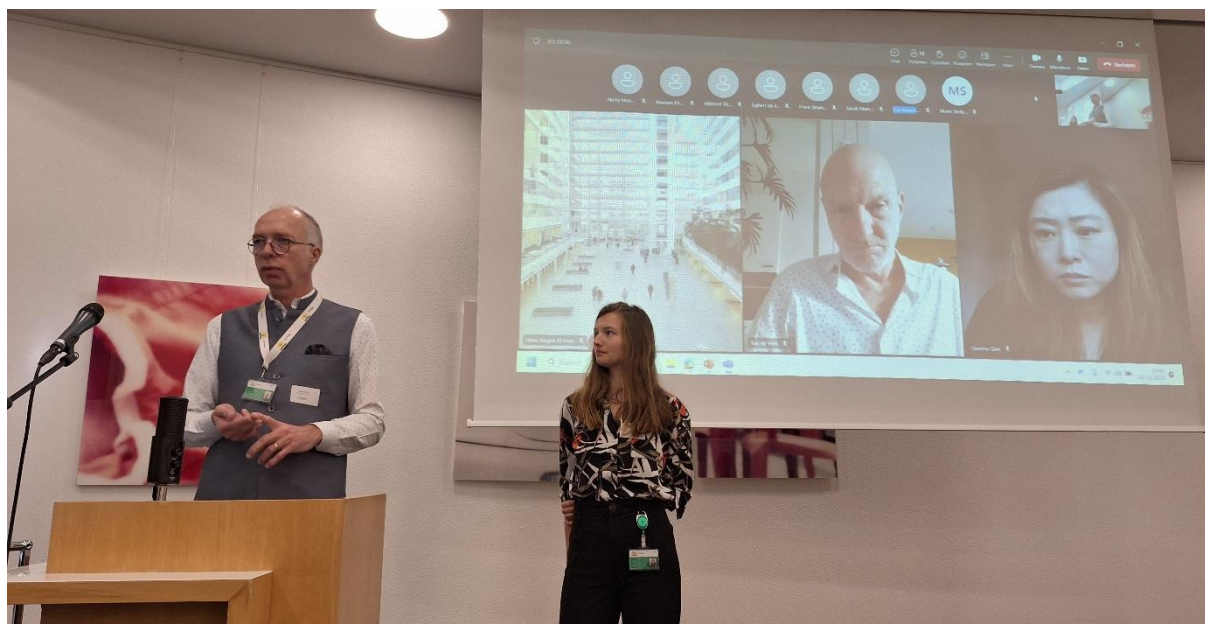


Figure 2: Sytse de Maat and Wies Ettema presents the strategy of the Hague to support HOA's

## Panel discussions

Henk Visscher from TU Delft moderated questions from and to a panel consisting of Jop Beumers (Ministry of Internal Relations and Kingdom Affairs), Gert-Jan van der Panne (Municipality of The Hague), and Natasja Schouten-Lening (Province of South-Holland).



Figure 3: Panel discussion moderated by Henk Visscher

The role of the Province for supporting IHRS for HOA's still must be explored. The experience in Brabant is that municipalities can collaborate with the support of the Province.

The Municipality of The Hague tries to eliminate barriers step-by-step. It is experienced that the legal barriers related to changing the deed of division are particularly important. The Ministry is communicating about this with the supply chain.

It is also experienced that multi-annual maintenance plans (“MJOP”) are often insufficient. The law regarding the MJOP will be evaluated and a change of the law is proposed to take place in 2026. It is suggested to look for couplings with norms such as NEN-standards.

Whether or not a lot of energy can be saved has to do a lot with the competencies and interaction of the advisor. A certification and training of advisors might be needed as quality assurance and independence of the advisor are important. The energy performance calculation software is currently also not suitable for evaluating apartment buildings. Energy behaviour of users also can play a role for assessing the energy performance.

Whether or not obligations can be introduced will depend on the ambitions of the next government.

Annet Terpstra from VVE Bond Amsterdam provided further suggestions to relieve barriers. For asking subsidies an electronic recognition of HOA’s is needed which also costs money, which creates an additional burden. Social security can be an important value proposition as many people are not thinking about making their buildings sustainable as a priority issue. A way needs to be found to accept loans without increasing service costs. A lot of apartments still have block heating. A fully completed sustainable renovation is not yet visible. There are opportunities to work together with housing associations. Each unit needs a separate calculation. Many HOA’s drop out during the decision-making process and even small steps are difficult to achieve. There is not enough workforce and money to achieve the goals by 2030. Currently only prioritized areas can benefit from subsidies. The future value is often not considered in the decision-making. A report is available (<https://www.vvebond.nl/wp-content/uploads/2023/10/Rapport-Van-Fossiel-naar-Fossiel-VvE-Bond-analyse-warmtetransitie-020-2023.pdf>).

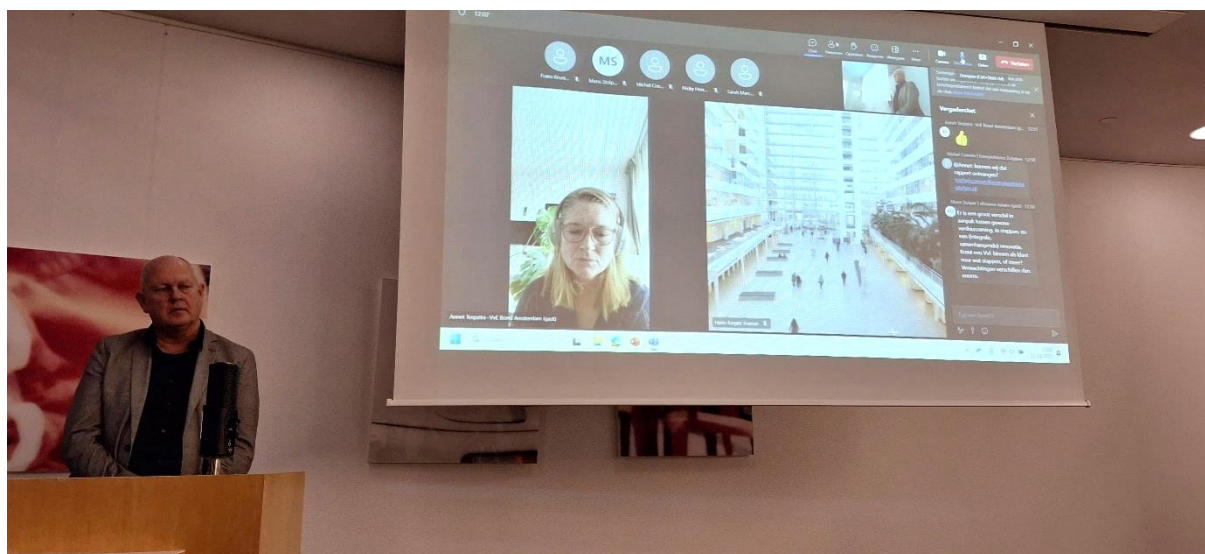


Figure 4: Annet Terpstra discusses the possibilities to relieve barriers for HOA's

Henk Visscher concluded the workshop. Overall, the IHRS processes for HOA’s need to speed up and improve.

## Workshop

### Stakeholder's collaborations for viable business models

Home renovation projects frequently involve multiple tasks that necessitate coordination among various trades and stakeholders (Milin & Bullier, 2021)

During the workshop, Ragy underscored the crucial significance of collaborative efforts among stakeholders for the successful execution of renovation works for HOAs. He emphasized the necessity for clearly identifying and defining the roles of each stakeholder involved in the renovation process. Ragy referred to literature, notably illustrated in Figures 2 and 3, which accentuate the pivotal role of understanding the distinct responsibilities of each stakeholder in achieving effective collaboration. Furthermore, in the context of establishing viable business models for IHRS providers, it was highlighted that the imperative to identify key partners with whom collaboration is essential. This identification process is crucial for executing the necessary tasks and activities seamlessly throughout the renovation process. This emphasized the interconnectedness of roles and partnerships in creating a successful framework for energy-efficient renovations within HOAs.



Figure 5: Stakeholders engagement in various renovation tasks for homeowners and the possibility of providing all tasks by a one-stop-shop solution (Source: Refabert 2019)

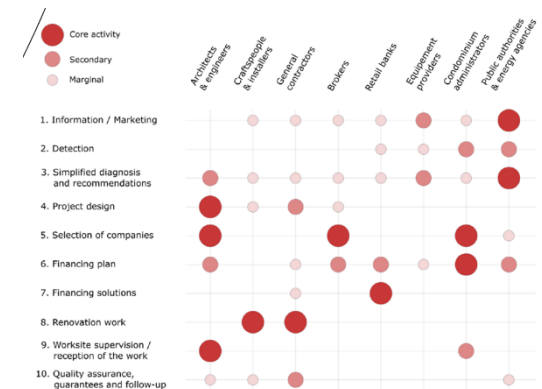


Figure 6: Current market offerings along the customer journey for energy renovation of homes, Towards large-scale roll out of “integrated home renovation services” in Europe, Milin C., Bullier A., 2020

## WNR Model

Walter van Steenis exemplified the collaborative dynamics among diverse stakeholders in the business model of an IHRS provider, explaining the WNR business model. WNR was founded in 2020 based on the needs of the supply side, the DNA in Construction association, and the decision-making surrounding a major integral renovation for homeowners' associations which is very complex. WNR created a model and an associated entity based on the customer's needs and an inventory of all parties in the playing field that are necessary to realize a renovation. WNR is a spider in the web that assists the HOA board from initial advice to the realization of the renovation and far beyond if the aftercare and building performance guarantee is included.



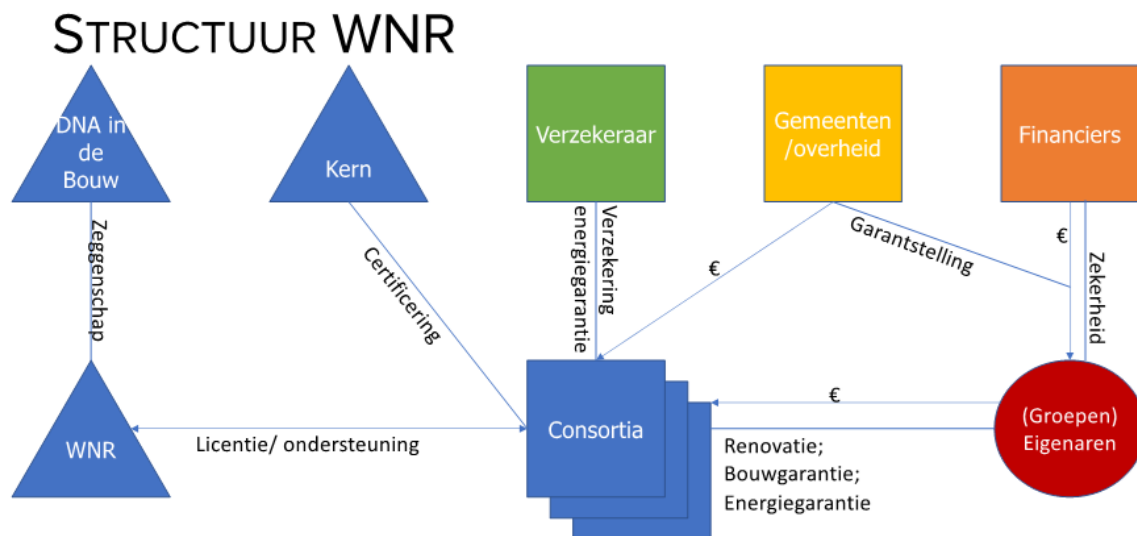


Figure 7: WNR Structure Model

### Condominium associations Renovations Roadmap

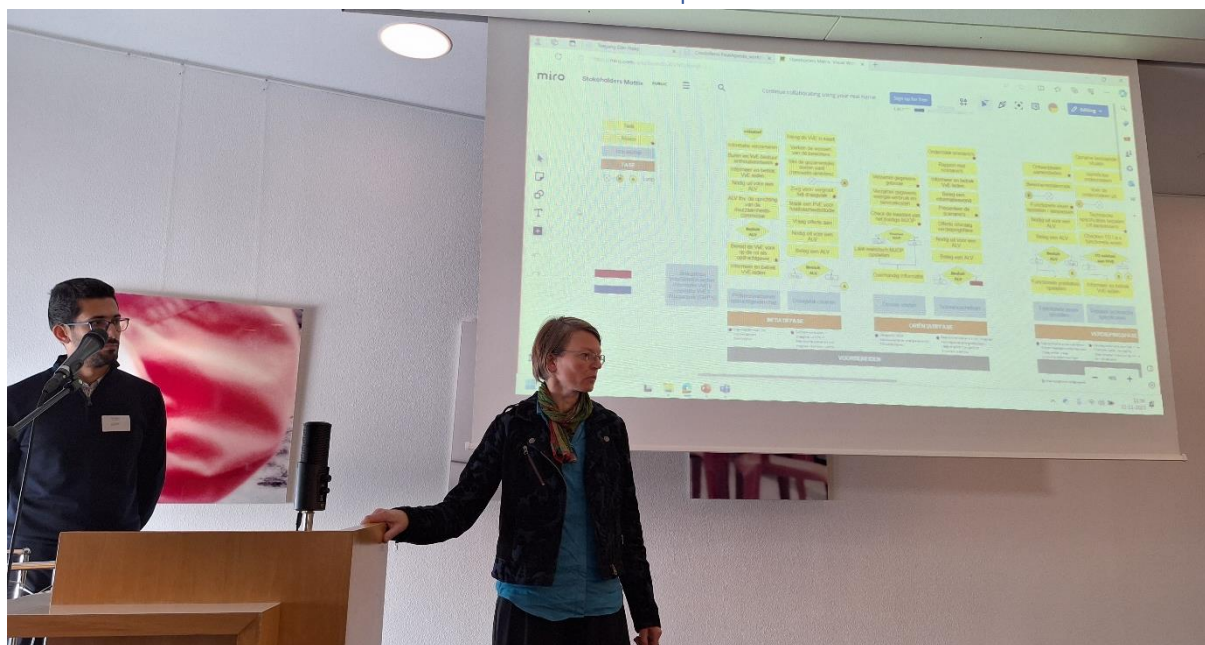


Figure 8: Clarence Rose presents the Roadmap for HOA's undertaking energy renovations

Clarence Rose from KERN Institute presented a comprehensive roadmap for homeowners undertaking renovations (See figure 9), featuring four distinct parts: 1.Preparation, 2.Design, 3.Implementation, and 4.Post-renovation. The Preparation part includes an initiation phase and an orientation phase, setting the foundation for the renovation process. Moving to the Design part, it encompasses an in-depth phase and a transaction phase, emphasizing the importance of detailed planning and decision-making. The Implementation part follows with a construction phase, ensuring the actualization of the planned designs. Finally, the post-renovation part involves an aftercare phase to address any post-construction needs. Each phase involves specific tasks and sub-tasks, underscoring the necessity for collaboration among various stakeholders. This highlights the crucial role of an IHRS provider's business model, incorporating all partners to ensure a seamless and efficient process throughout every stage of the HOAs renovation journey.

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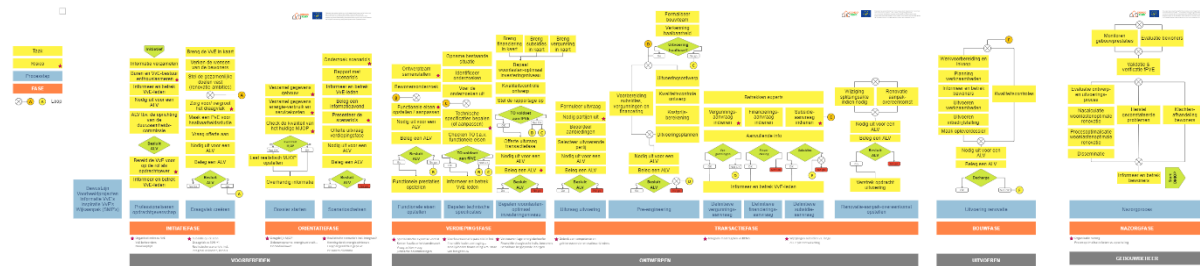


Figure 9: Renovation Journey Roadmap for Homeowners association

## Activity session

The participants were asked to identify themselves with a colour as stakeholder for the development of IHRs for HOAs. This was done according to their main activity being in the demand side, the construction supply side, the public sector, the service/advice supply side, the communication and IT intermediaries, the financial intermediaries or the other intermediaries. Then the stakeholders were invited to look in detail at each step of the renovation journey. They were asked to position themselves on a power-interest matrix per step. This was followed by a discussion for each step.

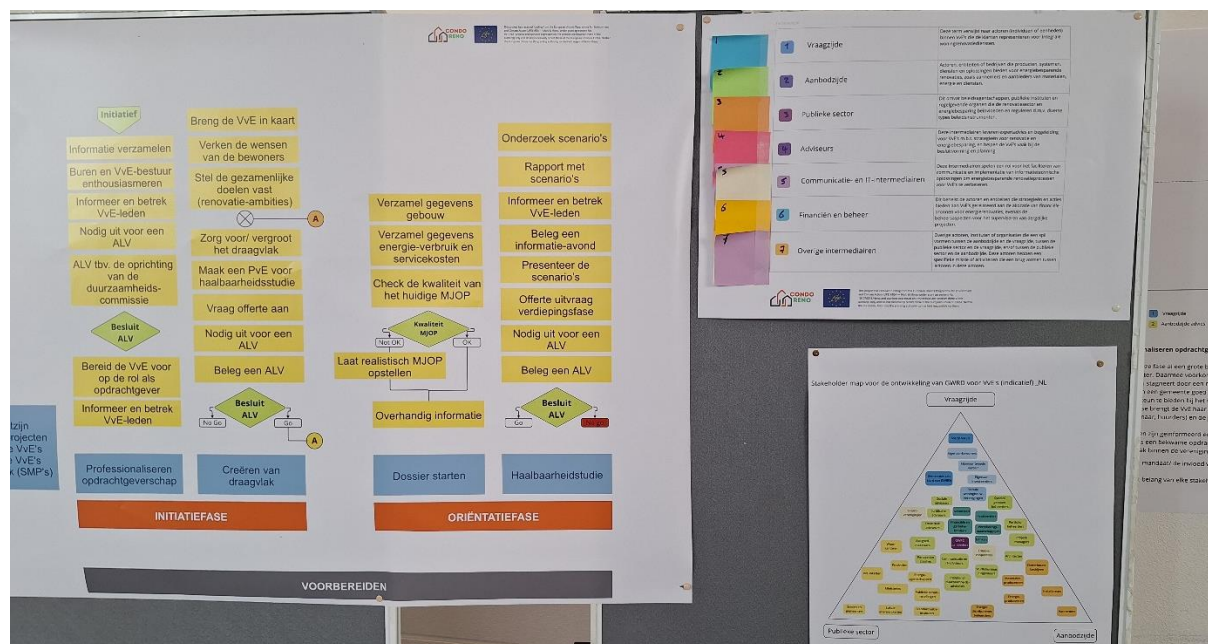


Figure 10: Stakeholders Categories and Roadmap

For the preparation part:

Phase 1 Professionalising commissioning and creating support for IHRs for HOAs the active contribution of the national government and municipalities (like The Hague) was deemed important. Also, insurance companies, knowledge institutes and specialized consultants (like engineering offices, incubators and sustainability brokers) might play a role. The existing IHRs have a high interest but low power to act in this phase.

Phase 2 Starting a file and sketching scenarios, the municipalities, consultants, brokers and IHRs play a more active role. Also, specific homeowner activators and insurance companies that engage homeowners might be relevant. Engineering offices might have interest in this phase. Contractors and



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the homeowners themselves could potentially have a high influence in this phase but the risk is they have limited interest.

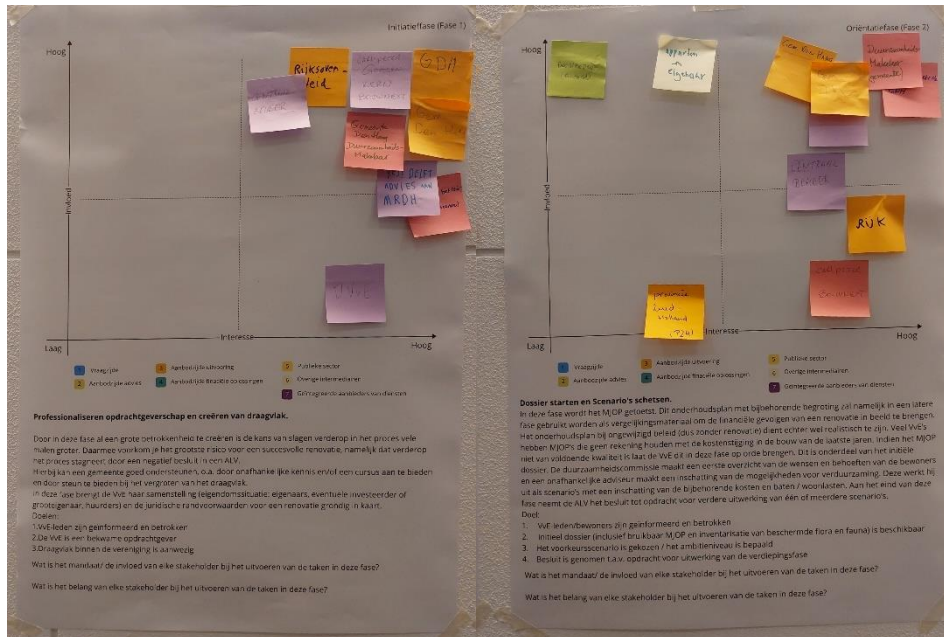


Figure 11: Results of the working group for Phase 1 and 2

## For the Design Part:

Phase 3 Identifying the functional requirements and technical specifications and for determining the living-cost optima investment level the IHRs, consultants, brokers and process guides play an important role. Also, insurance companies, provinces and homeowner support organisations might play a role. The influence and interest of the national government in this stage was considered lower.

Phase 4 The same actors could contribute also for developing an offer, pre-engineering, financing and contracting. In this stage they are confronted with high power of the local, regional and national government, who might have lower interest to directly support this phase. The influence of process guides might be more limited in this phase.

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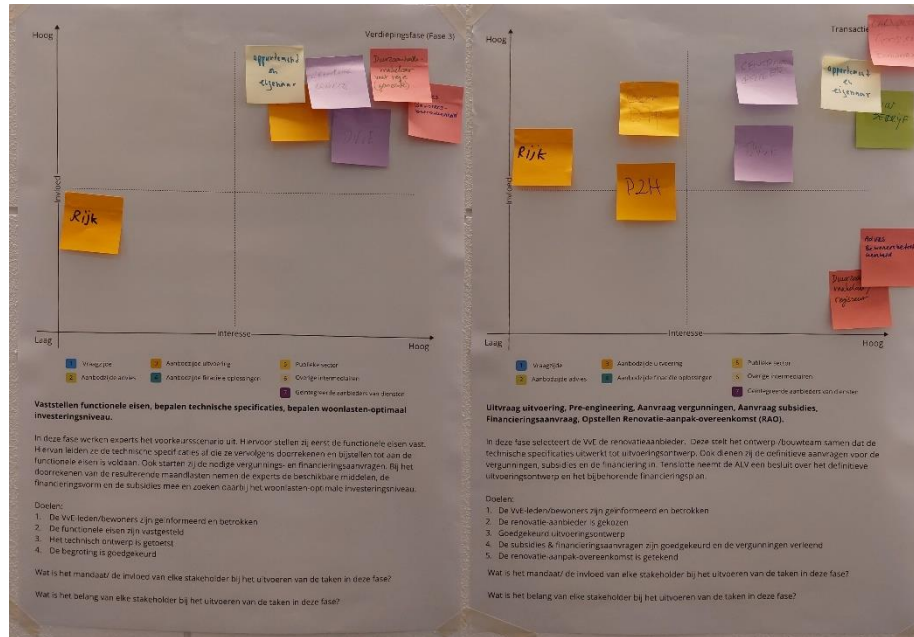


Figure 12: Results of the working group for Phase 3 and 4

### For the Implementation part:

Phase 5 Executing the renovation, next to contractors, specialized consultants might be relevant, also for social guidance of homeowners. The Province is still searching for its role in this phase. The power and influence of the brokers is very low in this phase.

### For the Post-renovation

Phase 6: The after-care phase sustainability brokers and IHRS come in the picture again as there is a need to assure quality. Contractors and social guides remain involved.

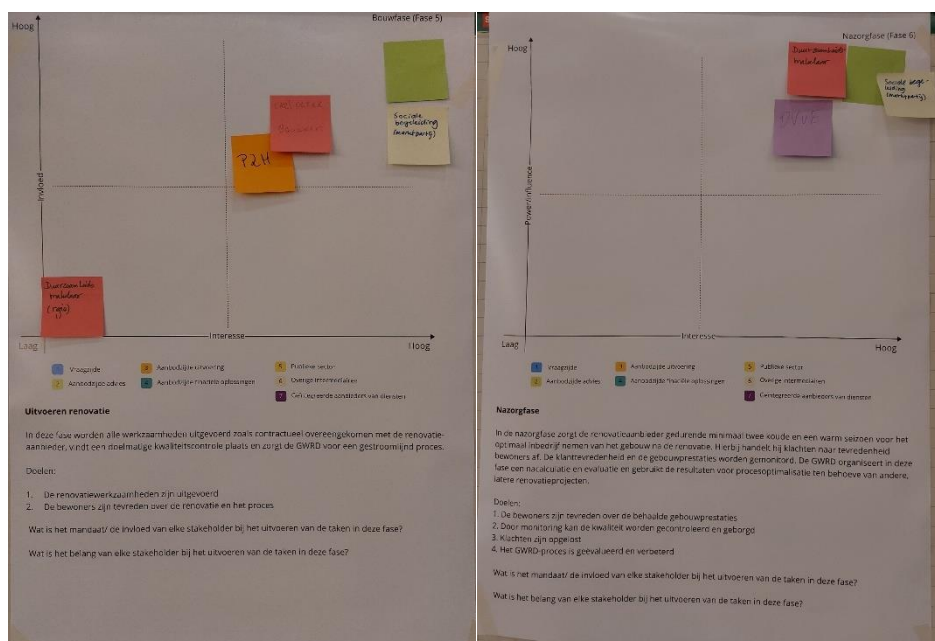


Figure 13: Results of the working group for Phase 5 and 6

### Online session discussion:

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Municipalities and energy advisers recognize a challenge in mobilizing condominium associations (CAs) for energy renovations, acknowledging that the initiative should ideally come from the HOAs themselves. Proposed solutions include targeting early adopters and providing increased subsidies for the initial phases. While condominium managers may lack real motivation for energy renovations, they possess significant influence in disseminating knowledge to the HOAs. A proposed policy change involves requiring condominium managers to inform HOAs about energy renovations, subsidies, and benefits. May help in increasing the number of HOAs to take the decision to invest in an energy renovation plan.

Municipalities are hesitant to impose obligations on HOAs or homeowners, preferring not to compel their attendance at events. This perception contributes to the belief that municipalities have limited influence in bringing HOAs on board during the initial phases. Energy advisers advocate for heightened governmental involvement in the early stages, emphasizing the necessity for additional subsidies during this crucial period.

Recognizing the pivotal role of the first phase in securing HOAs decisions to invest in renovations, stakeholders emphasize the importance of success in these initial stages. Subsequent phases rely more on the collaboration of various stakeholders, underscoring the critical nature of CAs and homeowners' decisions in the initial phase.

### Outcomes and findings

The exercises led to an interesting overall perspective how stakeholders are or can be involved throughout the renovation journey and how they could support the development of IHRS. The challenge is now to better streamline the actions from one phase to the next to reduce the burden for HOAs. The participants were urged to think about their possibilities to collaborate more intensively to develop a one-stop-shop model for HOAs. Participants that want to collaborate to develop a joint business model can contact TU Delft, who can support them in this trajectory in the framework of the CondoReno project.



The event was followed by a vegetarian lunch.

### References

Bagaini, A., Croci, E., & Molteni, T. (2022). Boosting energy home renovation through innovative business models: ONE-STOP-SHOP solutions assessment. *Journal of Cleaner Production*, 331, 129990. <https://doi.org/10.1016/j.jclepro.2021.129990>

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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>

CondoReno. (2023, November 30). Resources - CondoReno. <https://condoreno.org/resources/>

Elgendy, R., Mlecnik, E., Visscher, H., & Qian, Q. (2023). Typologies of Business Models of Integrated Home Renovation Services: Accelerating Energy Efficient Renovations for Homeowners Associations in The Low Countries and France. *Proceedings of the International Conference "Sustainable Built Environment and Urban Transition"*. Sustainable Built Environment and Urban Transition, Växjö, Sweden.

<https://open.lnu.se/index.php/sbut/article/view/3812/3516>

Milin, C., & Bullier, A. (2021). *Towards large-scale roll out of "integrated home renovation services" in Europe*. Retrieved [November 09, 2023] from "[https://www.turnkey-retrofit.eu/wp-content/uploads/Integrated-home-renovation-services\\_MILIN-BULLIER\\_ECEEE-2021.pdf](https://www.turnkey-retrofit.eu/wp-content/uploads/Integrated-home-renovation-services_MILIN-BULLIER_ECEEE-2021.pdf)"

Mlecnik, E. (2022). Chances for the upscaling of living-cost neutral renovations in the Netherlands. *IOP Conference Series: Earth and Environmental Science*, 1085(1), 012040.

<https://doi.org/10.1088/1755-1315/1085/1/012040>

Mlecnik, E., & Elgendy, R. (2023). *Geïntegreerde woningrenovatiendiensten voor VvE's*.

[https://condoreno.org/wp-content/uploads/2023/11/CondoReno\\_D2.1\\_V1.0\\_NL.pdf](https://condoreno.org/wp-content/uploads/2023/11/CondoReno_D2.1_V1.0_NL.pdf)

TU Delft (2023). *Replication and Exploitation Plan*, LIFE project CondoReno Deliverable 7.1 (draft), Delft: TU Delft, internal document, 30 June 2023.

TU Delft (2023). *Dissemination and communication strategy*, LIFE project CondoReno Deliverable 8.1 (draft), Delft: TU Delft, internal document, 31 January 2023.

TU Delft (2022). *Grant agreement*, LIFE project CondoReno, Delft: TU Delft, internal document, 22 September 2022.