

Burgerparticipatie in de Energietransitie

14 november 2024



Welkom door Urban Energy Institute & Gemeente Delft



Henk Visscher

TU Delft

Agenda

15:00 – 15:05: Welkom door Urban Energy Institute & Gemeente Delft door Henk Visscher (TU Delft)

15:05 – 15:25: Introductie van lessen, uitdagingen en dilemma's door Suzan Mannens (Gemeente Delft)

15:25 – 16:15: Pitches & beleidsaanbevelingen door UEI onderzoekers: Stefanie Horian, Ladislav Krutisch, Ragy Elgendy en Diletta Ricci

16:15 – 16:45: Paneldiscussie met Art den Boer (Gemeente Delft), Ingrid Lips (Bewonersvereniging Heel Tanthof Delft) & Wim Schut (VvE bewoner)

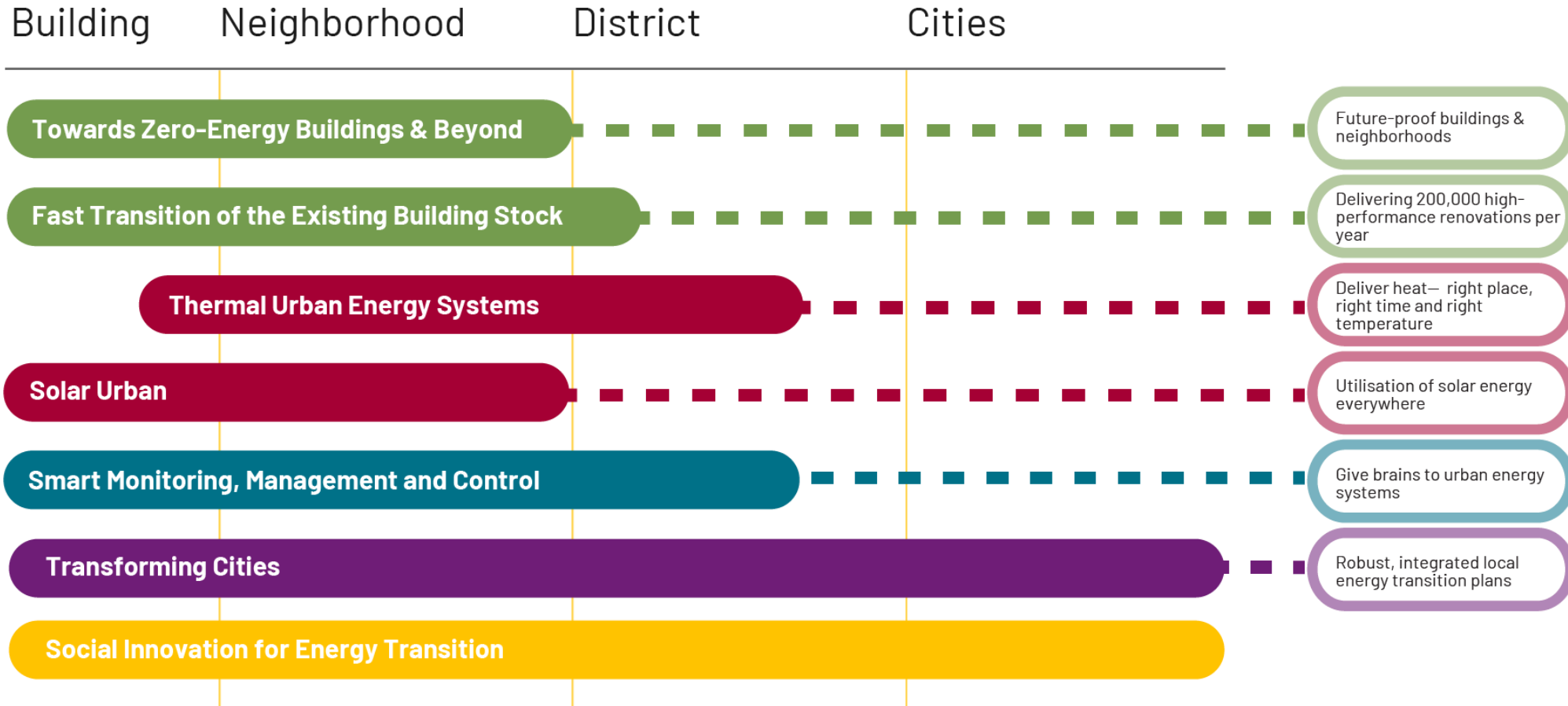
16:45 – 17:00: Reflecties en vervolgactiviteiten

17:00 – 18:00: Afsluiting & borrel

An aerial photograph of a large, multi-story building complex, likely a university or government building. The building has a prominent glass facade and a flat roof covered in solar panels. The surrounding area includes trees, walkways, and a street with a few cars. The lighting is bright, suggesting a sunny day.

**“UEI supports a rapid
and equitable transition
to a carbon-free built
environment.”**

Our Scope



Join at menti.com | use code **7670 831**

Hoe zou je jouw rol vandaag het beste omschrijven?



0

Academisch / Onderzoeker

0

Ambtenaar

0

Werkzaam in het
bedrijfsleven

0

(Actieve) Burger

0

Anders



Welk woord schiet je te binnen als je denkt aan deelname aan de energietransitie?

focus leader
creative
inspiration fast bold
transpiration



Participatie in de Delftse energietransitie

Suzan Mannens
14 november 2024



Gemeente Delft



Welkom in Delft!





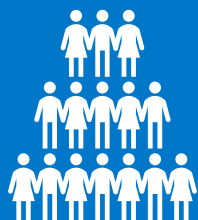
55.000
Woningen



Inwoners: 109.577
Studenten: 30.375



21,5%
energiearmoede
(Buitenhof)



1.600 VvE's,
ca. 17.000
woningen



De opgave voor 2030

- Isoleren: 10.000 woningen
 - Aardgasvrij: 9500 woningen
- ➔ Dit kan de gemeente niet alleen, samenwerking met partners en inwoners is noodzakelijk.
- ➔ We zijn allemaal participanten in de energietransitie.





**Bestaande
participatie ziet er
vaak zo uit**

Bron: Populytics

Van informeren

- Delftse Klimaatweek
- Raadpleging
- Delft Doet Duurzaam / Energieloket
- Energiecoaches
- Collectieve acties
- Doe-het-zelf isolatieactie
- Subsidie voor isoleren van woningen
- WUP Multatulibuurt
- BBN / BHTD



Isolatieplan Delft

Het versnellen van de isolatie van de Delftse woningvoorraad

...naar zelf organiseren

Belangenvereniging Binnenstad Noord

Home Wie zijn wij? Historie Buurinfo Dossiers Water Agenda Links

Tweets

Posts van @BinnenstadNoord

Hier is nu nog niets te zien

Wanneer hij of zij een post plaatst, zie je die hier.

[Bekijk op X](#)

Recente artikelen

Dienstverlening in ons gebied komt in gevaar
Lampionnooptocht 2024
De Kroonlezing
In de binnenstad neemt de tevredenheid over de woning af
BBN doneert aan Voedselbank Delft
Door de borden het parkeerverbod niet meer zien
[Meer artikelen ...](#)

Recente reacties

Boetes zonder bon
baggertegels
Parkeerautomaat met alleen dagkaart
Bezoekers alleen Dagvergunning

Geluidsoverlast door warmtepompen en airco's blijft een probleem

RAPPORT
Warmtepompen en airco's in de historische binnenstad van Delft

Gemeentelijke sturingsmogelijkheden m.b.t. installaties voor warmte- of koudeopwekking

Klant: Gemeente Delft

Referentie: BU1275

Status: Definitief

Datum: 10 oktober 2023

Royal HaskoningDHV
Enhancing Society Together

Nederland gaat van het aardgas af, wij dus ook. De regering heeft bepaald dat vanaf 2026 hybride warmtepompen de standaard worden voor het verwarmen van woningen. Dat betekent dat bij vervanging van de cv-ketel mensen moeten overstappen op een duurzamer alternatief. In veel gevallen is dit een hybride warmtepomp, maar ook alternatieven zoals de volledig elektrische warmtepomp of een aansluiting op een warmtenet zijn mogelijk. De gemeente acht een warmtenet echter niet mogelijk in ons gebied, dus dan wordt het een (hybride)warmtepomp. De verplichting voor een warmtepomp geldt (nog) niet voor bovenwoningen, appartementen en monumenten. Warmtepompen besparen op gas. Dat is goed voor de portemonnee en voor het milieu. Daarom kiezen sommige mensen er nu al voor om een warmtepomp te plaatsen. De afgelopen tijd zijn er diverse geplaatst in ons gebied. Warmtepompen hebben ook een nadeel: ze maken geluid. Het geluid wordt gemaakt door de buitenunit.

Ook airco's hebben een buitenunit die geluid maakt. De verkoop van airco's is de afgelopen jaren spectaculair gegroeid. Inmiddels prijst ook Natuur & Milieu airco's aan, echter zonder de geluidsconsequenties te noemen, zie [hier](#). Ook de Vereniging Eigen Huis besteedt aandacht aan de airco voor verwarming van het huis. Gelukkig worden hierbij wel de nadelen genoemd waaronder het geluid: "De buitenunit maakt ongeveer evenveel geluid als een koffiemachine voor bonen.", zie [hier](#).

Ons gebied is beschermd stadgezicht. Dit betekent dat de buitenunit van een

Zoeken

Zoeken

Populaire onderwerpen

openbare ruimte (131)
buurtactiviteiten (72) groen (62)
vereniging (58) verkeersveiligheid (56)
afval (43) geluidsoverlast (42)
horeca (39) parkeren (36)
fietsparkeerders (33)

[Meer](#)

Agenda

woensdag 13 november 2024
De Kroonlezing
woensdag 20 november 2024
BBN Bijeenkomst

Belangenverenigingen

Belangenvereniging de Oude en de Nieuwe Delft
Belangenvereniging Olofsbuurt-Westerkwartier
Belangenvereniging Onze Indische buurt
Belangenvereniging TU Noord
Belangenvereniging Voorhof II West
Belangenvereniging Zuidpoort
Bewonersvereniging Heel Tanthof Delft
Buurtvereniging Delftzicht

Archief per maand

oktober 2024 (5)
september 2024 (1)
augustus 2024 (1)
juli 2024 (7)
juni 2024 (3)
mei 2024 (6)

[Naar archief ...](#)

[Inschrijven nieuwsbrief](#)

BHTD

Bewonersvereniging Heel Tanthof Delft

U bent hier: [» Actueel »](#)
Grote belangstelling tijdens bewonerscafé Energie

DOE MET ONS MEE!

VRUWILLIGERS GEZOCHT

VOLGT U ONS AL?

[f](#) [t](#) [i](#) [l](#) [v](#)

WORD LID, MELD JE NU AAN!

NIEUWSBRIEVEN

GROTE BELANGSTELLING TIJDENS BEWONERSCAFÉ ENERGIE

27 Augustus 2024 Ingrid Lips 0 Reacties

Op 8 juli was er een bewonerscafé georganiseerd door de BHTD over energie. Een technisch adviseur van het Regionaal Energieloket heeft een generiek advies gepresenteerd. Tijdens de presentatie stond de volgende vraag centraal: Wat kun je het beste doen als je CV-ketel aan vervanging toe is? De gemeente Delft heeft op verzoek van de BHTD het generieke advies op laten stellen door het Regionale Energieloket. Er was veel belangstelling. Tijdens het bewonerscafé was de grote zaal in de Hofstee goed gevuld. Er waren 60 aanwezigen. Zij luisterden aandachtig naar de presentatie van het Regionale Energieloket die door alle bewoners goed te volgen was. Daarna deden bewoners actief mee aan het energiespel van 015duurzaam. Het was een geslaagde avond met dank aan Wij West, de gemeente Delft, het Regionaal Energieloket, 015duurzaam, de werkgroep energie en duurzaamheid van de BHTD en alle belangstellende bewoners!

ISOLEER UW WONING!

Wat u het beste kunt doen als de CV-ketel aan vervanging toe is dat hangt af van het type woning. Voor alle type woningen is het advies om de woning te isoleren. Dit is nodig

Van informeren naar zelf organiseren

Delftse Klimaatweek – Raadpleging - Delft Doet Duurzaam / Energieloket –
Energiecoaches - Collectieve acties - Doe-het-zelf isolatieactie - Subsidie voor
isoleren van woningen - WUP Multatulibuurt - BBN / BHTD



➔ hoe kunnen we het aantal mensen dat mee kan doen
aan de energietransitie vergroten?

Raadpleging

Online raadpleging naar wensen rondom een warmtenet.

Onder 4.000 woningeigenaren

Respons van 15%



WUP Multatulibuurt

WUP = concreet plan van gemeente, bewoners en belanghebbenden waarin staat beschreven hoe de buurt over kan stappen op schone warmte.

Wijkgerichte participatieaanpak

- Toon oprechte interesse in de ander
- Waak voor participatiemoeheid
- Wees bereikbaar
- Neem de tijd

➔ hoe maken we de slag naar de rest van de stad?



Join at menti.com | use code 7670 831

Mentimeter

Hoe kunnen we het aantal mensen dat mee kan doen aan de energietransitie vergroten?

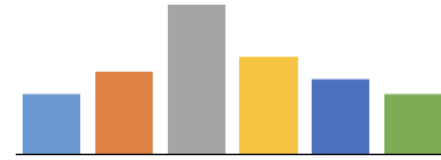
There's no correct answer!

Design



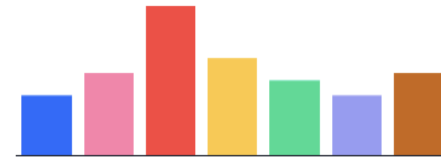
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- Show vote indicator
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Help & Feedback

Pitches by UEI Researchers



Stefanie Horian



Ladislav Krutisch



Ragy Elgendy



Diletta Ricci

Social Housing Associations and their Tenants in the Energy Transition

Stefanie Horian

PhD Candidate

Faculty of Architecture

Management in the Built Environment



Contact:

s.horian@tudelft.nl

Importance of Including everyone in the Energy Transition.

- Netherlands Focus
- Support Renovations including Heat Pump and District Heating Systems
- Theoretical Perspective
- European Focus
- Affordability after Renovation
- Wide Range of Tenures



Social Housing Associations [woningcorporaties] and their Tenants in the Energy Transition



Housing Association [woningcorporaties]

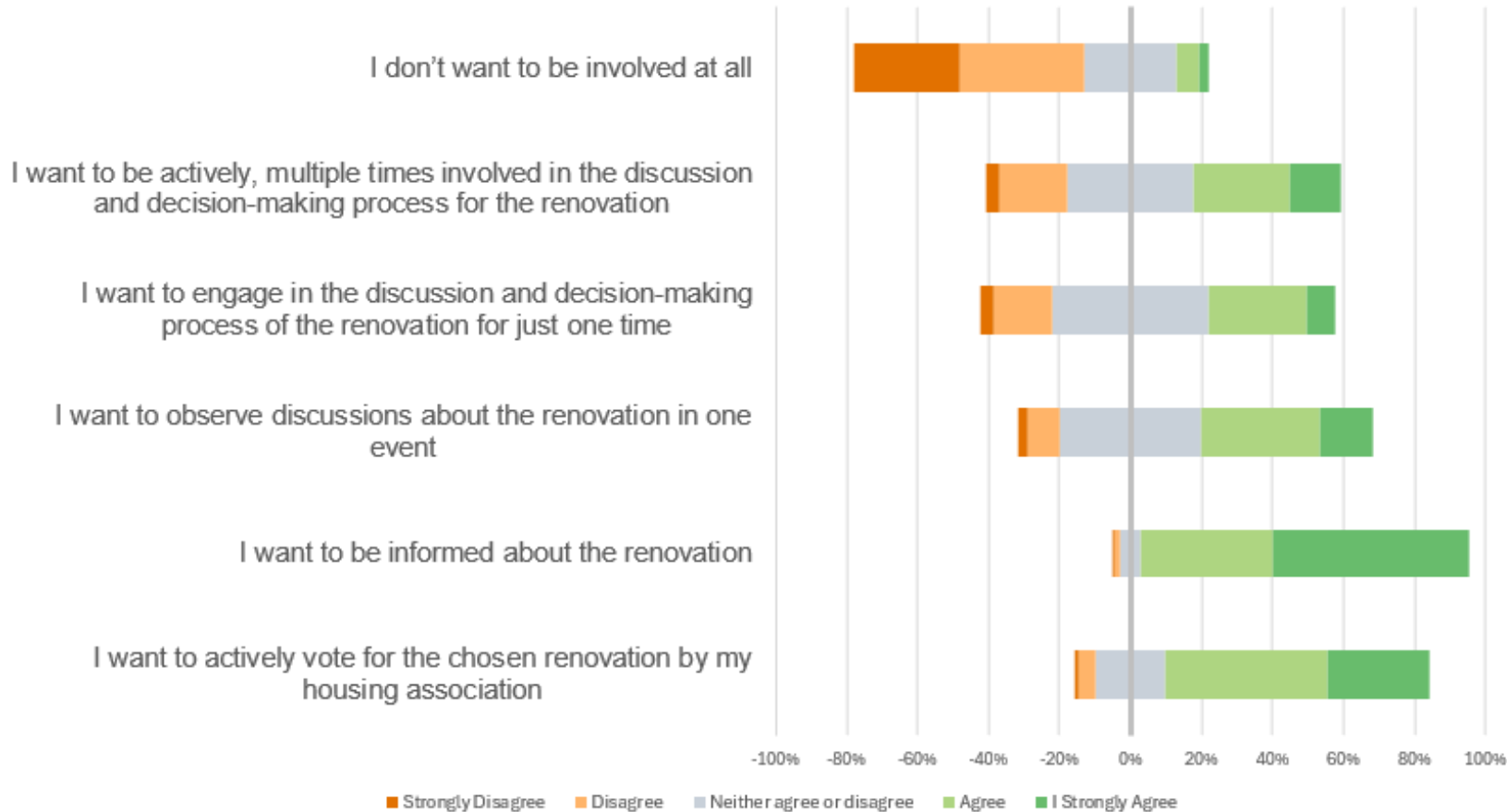
- High Investment Cost
- Don't benefit from reduced energy bills
- Limited to no return on investment due to the affordability of rents
- Have to reach climate goals and other agreements e.g. no EFG label until 2028

Tenants [huurder]

- Don't invest in a home they don't own → rent
- Benefit from reduced energy bills
- Usually do not have the necessary expertise and capacity to understand cost and benefits
- Have other priorities e.g. going to work, taking care of family, free time, if vulnerable status then affected by energy poverty
- Have to agree e.g. 70 %

Engagement of Tenants – no one left behind!

How do you want to be engaged in the renovation process?

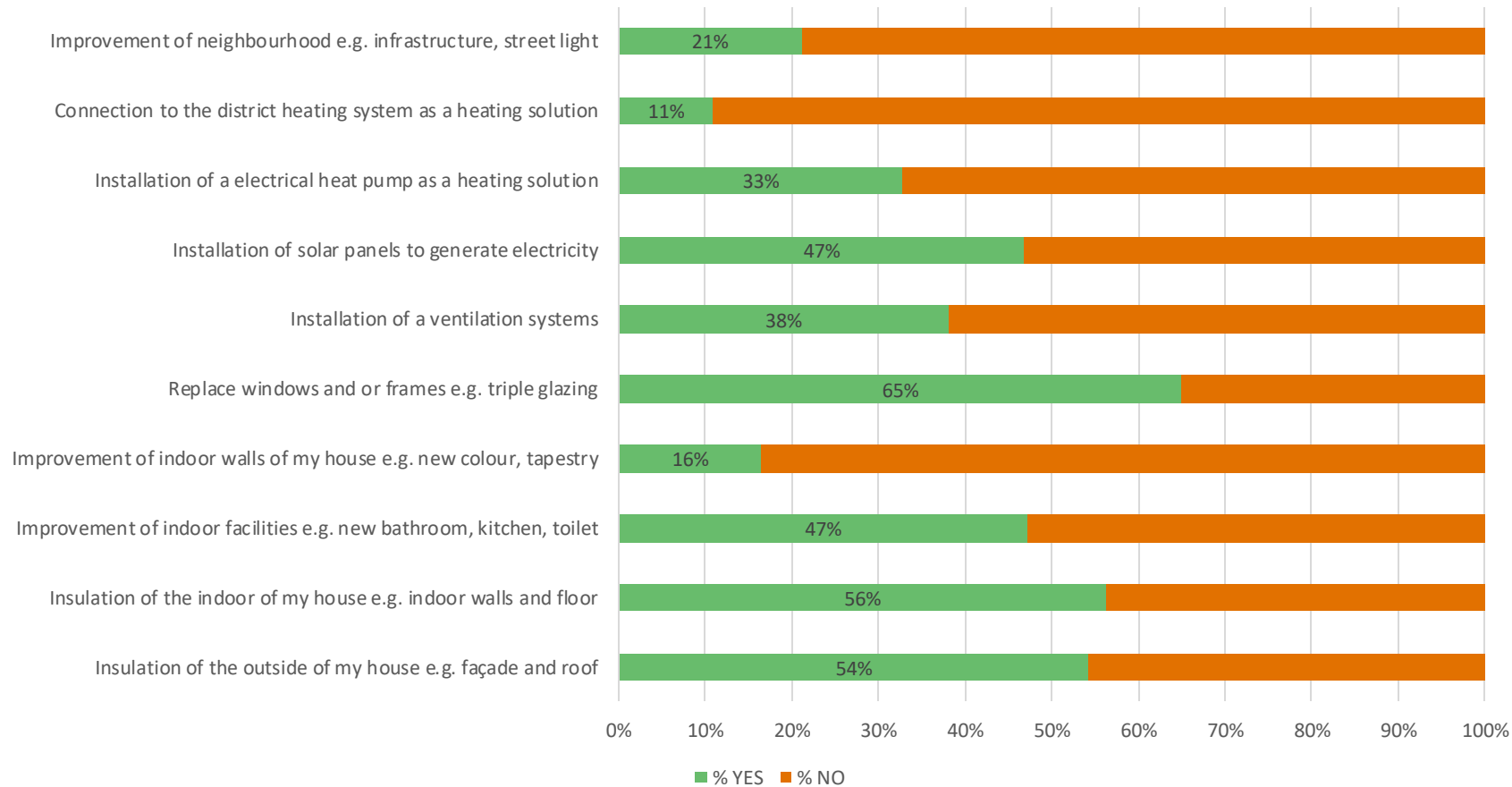


Results:

- **65 %** Tenants want to be involved
- **41 %** Tenants want to be actively involved multiple times
- **36 %** Tenant want to be engaged for just one time
- **49 %** want to observe discussions
- **92 %** want to be informed
- **75 %** want to actively vote

Measures for Energy-Efficient Renovations

Which of the following measures are most important to you to agree to proposed EER-plans?



Important Measures:

1. Replacing Windows
2. Indoor Insulation
3. Outdoor Insulation
4. Indoor Facilities
5. Solar panels
6. Ventilation
7. Heat Pump
8. Neighbourhood
9. Aesthetical Indoor
10. District Heating Systems

Best-practice example of strong support for a smooth process

The case of Tallinn in Estonia

- Multi-ownership challenge
- Meetings and visits to best-practice neighborhoods for affected residents
- City district administration (municipality) initiates and manages the procurement process
- Worked together with the Technical University → to research new technologies and approaches for renovation → received funding to connect scientific thinking with practical work



View of Houses in the Mustamäe District
Source: Handbook of best-practice examples

Best-practice example of co-creation with residents

The case of Aalborg, Denmark

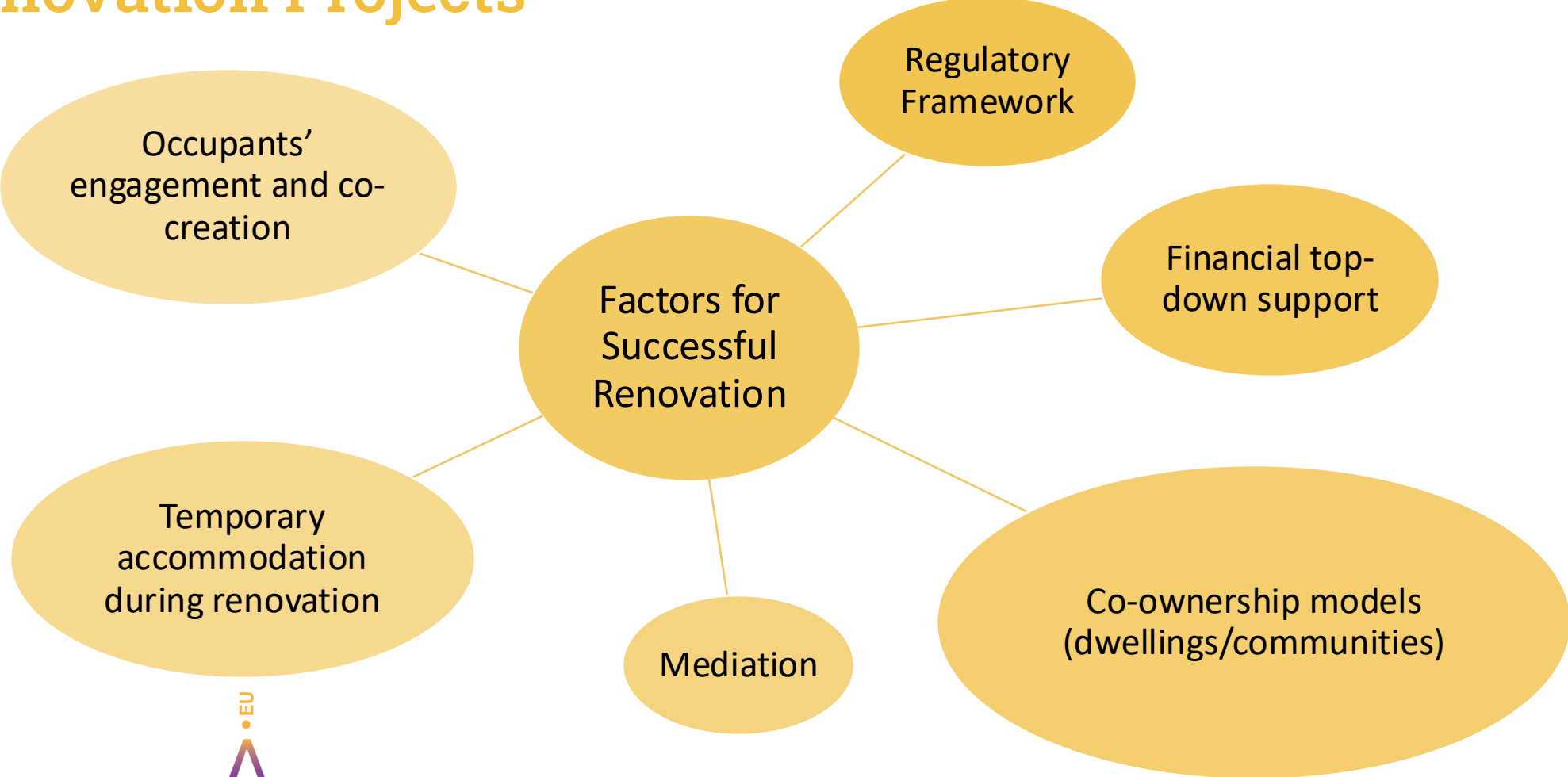
- Social housing company
 - Provided administrative support
 - Lead in setting up and organizing teamwork and investments between different sectors (like government, businesses, and communities)
 - Led tenant involvement
 - Provided temporary accommodation
- Tenants trust the Social Housing Associations to make good decisions
- Renovation of old district-heating pipes & replacement of radiator plus additional sustainable measures like waste grinder, rainwater collector.



View of the Aalborg District

Source: Handbook of best-practices examples

Key Success Factors for the Inclusion of Residents in Renovation Projects



Eager to learn more about practical solutions? Join our next Event in Amsterdam!



EVENT

**Align4energy
session**

📅 December 2
🕒 09.00-16.00
📍 AMS Institute,
Kattenburgerstraat 5

Join the workshop to explore how
to put research into practical
solutions for energy transition
challenges with experts

Thank you for listening! Questions?

s.horian@tudelft.nl



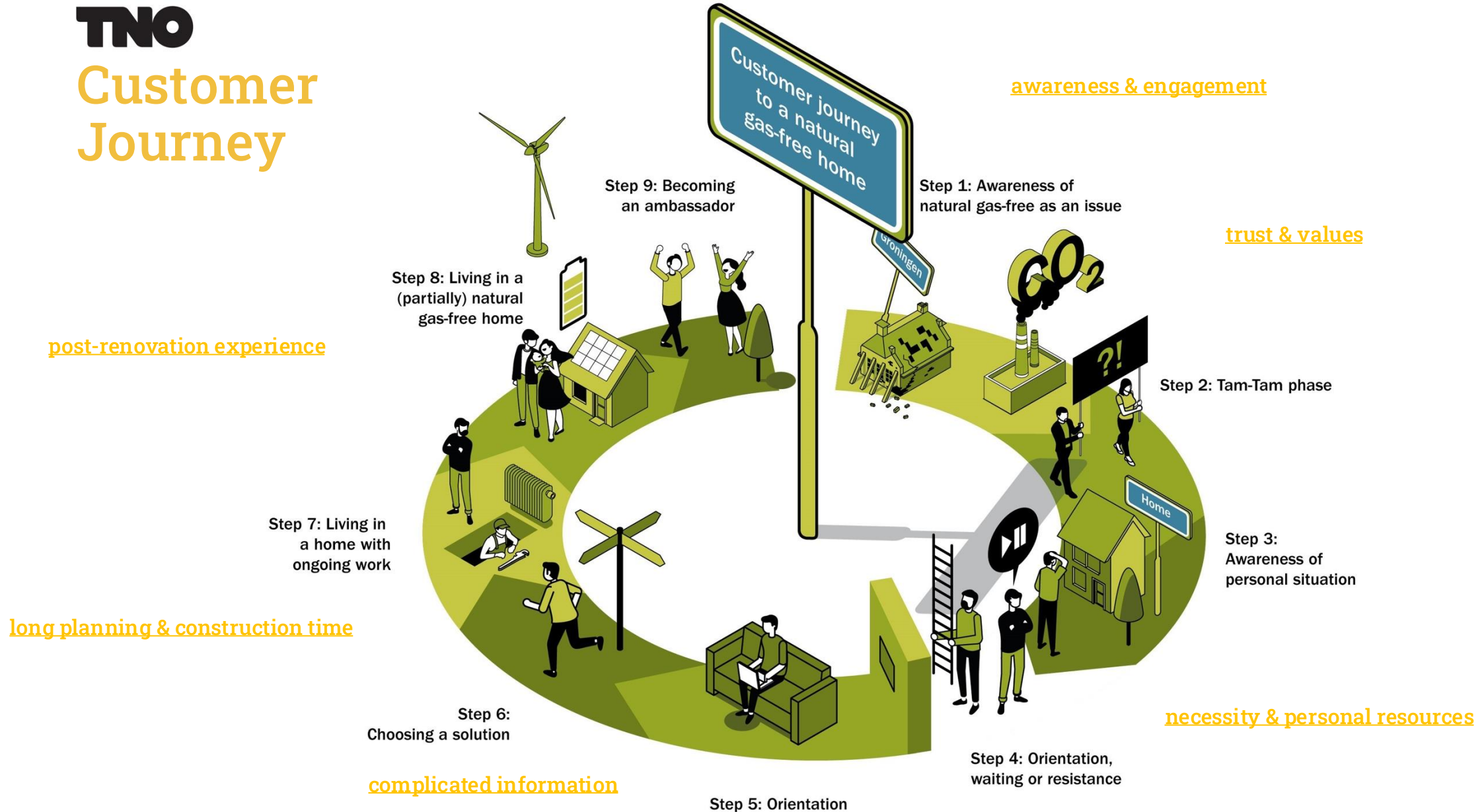
Meer informatie? <https://www.align4energy.nl/>

ENERGY EFFICIENT RENOVATIONS INDIVIDUAL HOMEOWNER PERSPECTIVES

Ladislav Nikolas Krutisch, PhD Candidate
Faculty of Architecture and the Built Environment



The TNO Customer Journey

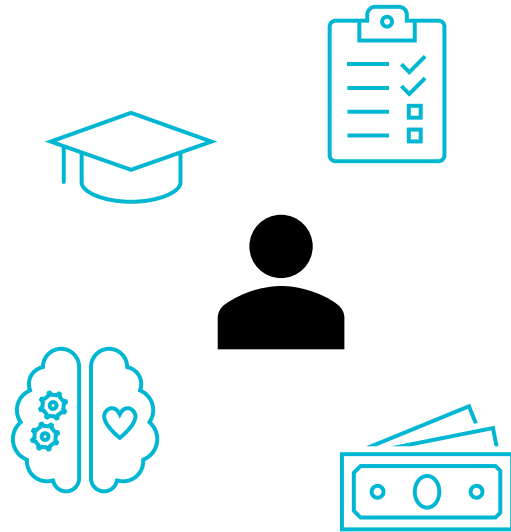


Transaction Costs & Behavioural Insights

- Every renovation has barriers & frictions in the process
 - additional costs in terms of money, time and effort

&

- Every homeowner has a different personal situation
 - age, education, income, trust, values, risk preferences, etc.



no behaviour sits in a vacuum



Preferences: Potential Future Measures

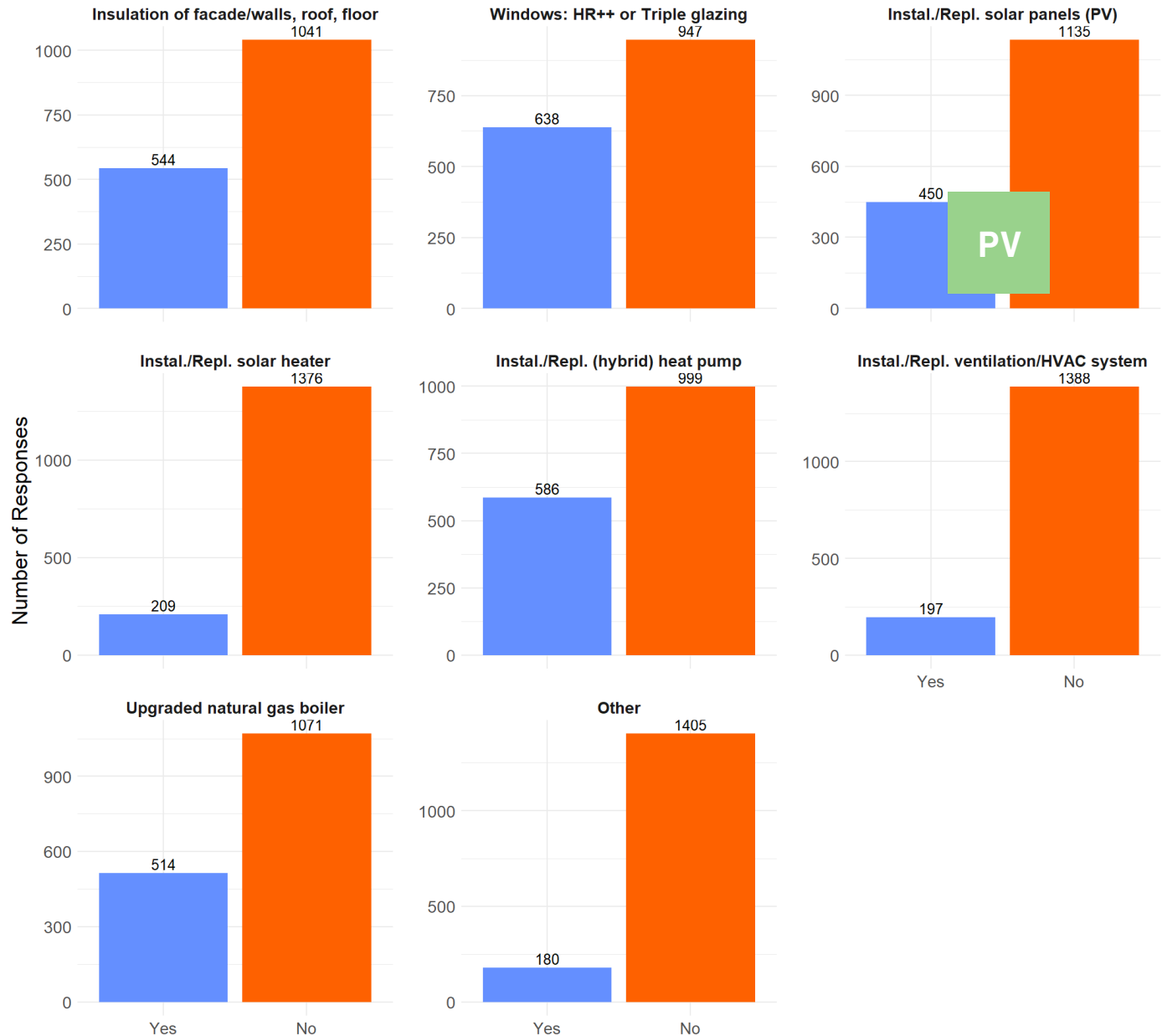
- ~ 28% think about PV

- **DRK** Report:

- Current share of renewable energy: 3.5%
- Milestone to reach by 2030: 25.0%

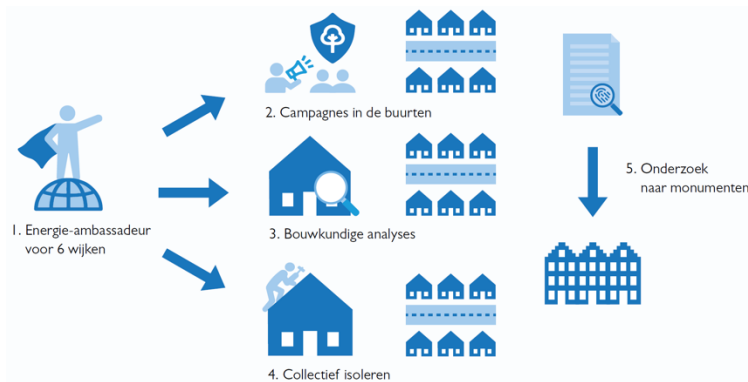
"Interviews indicate that the generation goals of Delft will have to be realized primarily by installing solar panels on business and residential roofs."

"...However, small measures that can be supported should not be overlooked, according to council members."

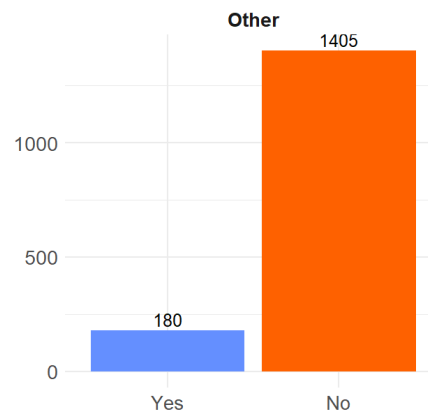
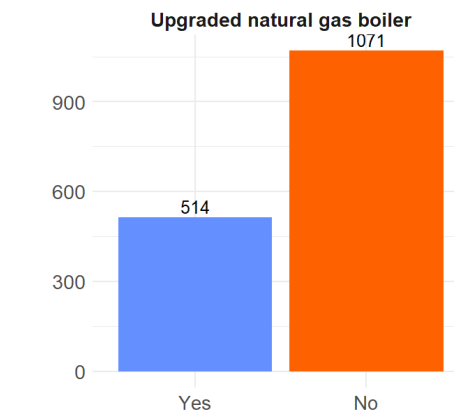
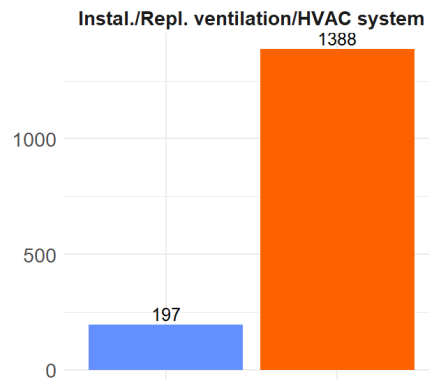
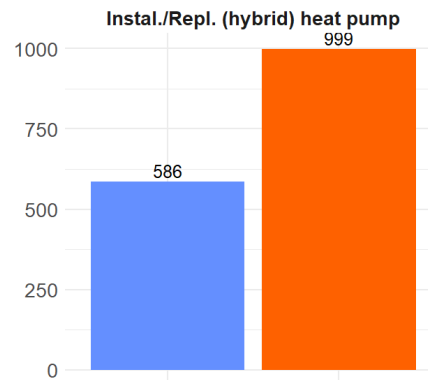
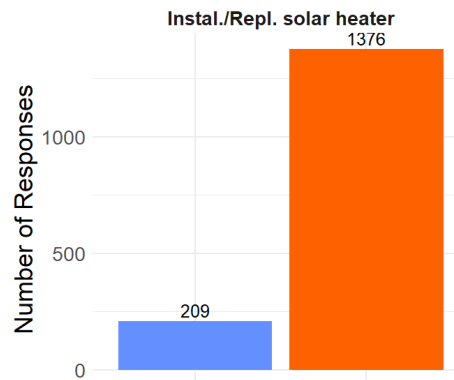
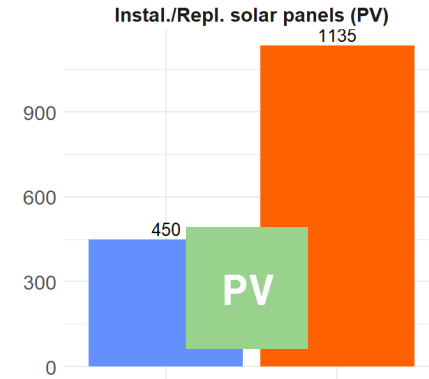
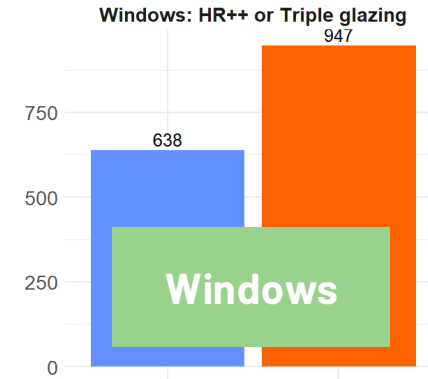
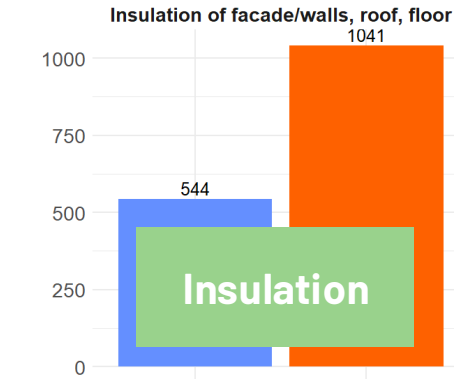


Preferences: Potential Future Measures

- ~ 34 - 40% think about insulation

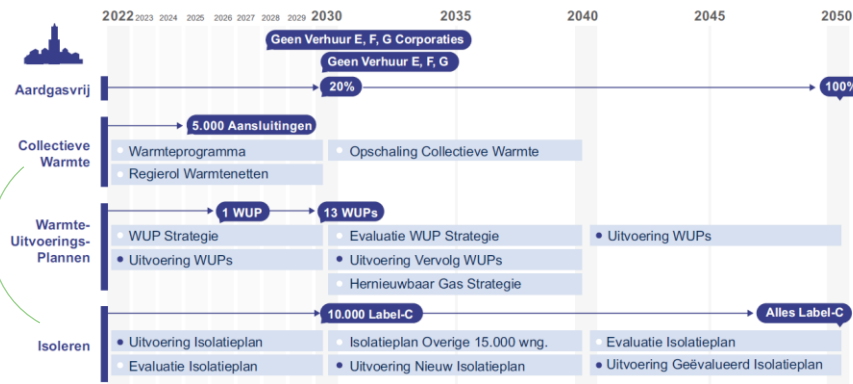


➔ offering combined solutions

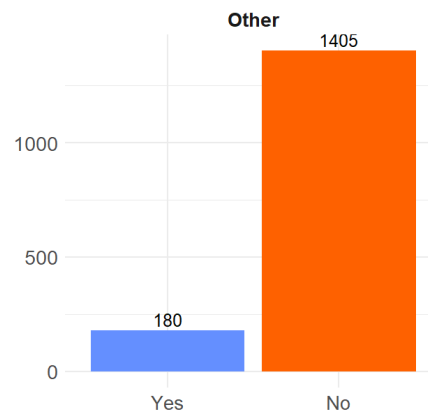
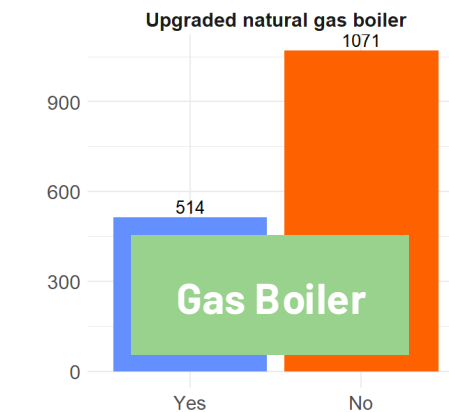
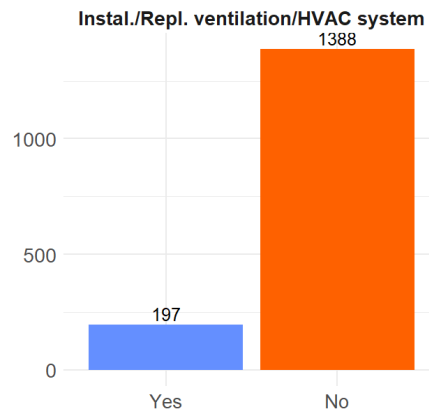
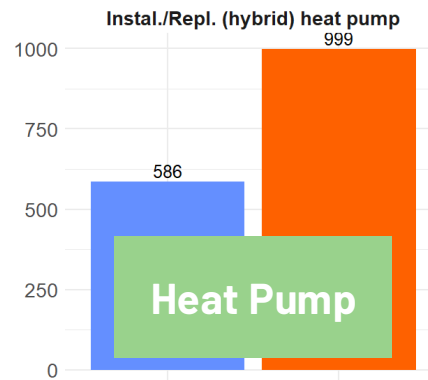
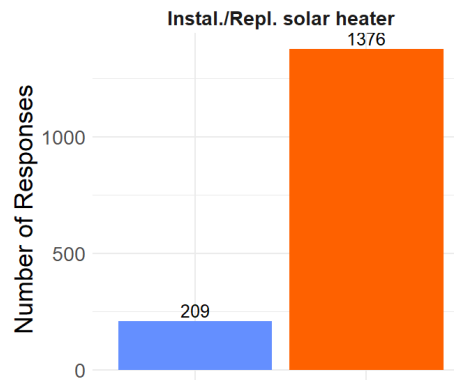
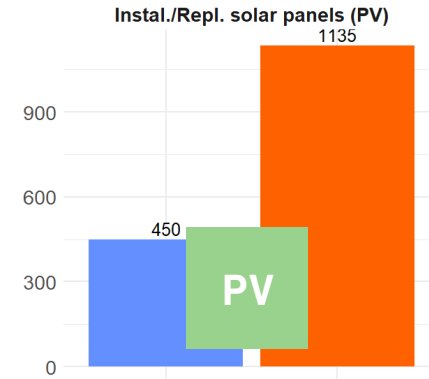
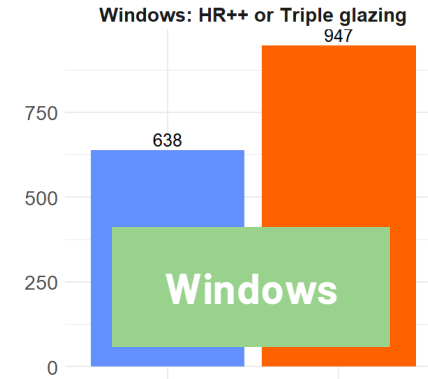
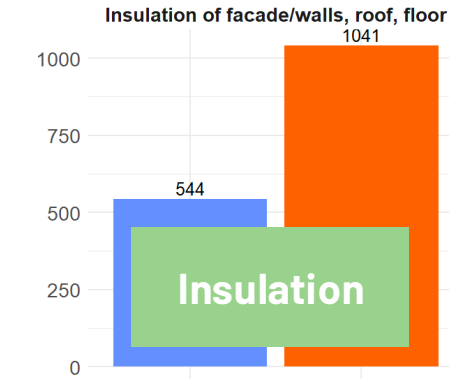


Preferences: Potential Future Measures

- ~ 32 - 37% think about heating



"Deploy appropriate laws, regulations and financial instruments to ensure preconditions." (RES Rotterdam-Den Haag, 2021)



Importance of Potential Benefits

- Thermal Comfort & Health Benefits

- Emphasize 'well-being'
- Voucher for induction stoves when connecting to the heat grid similar to the *Doe-het-zelf isolatieactie?*



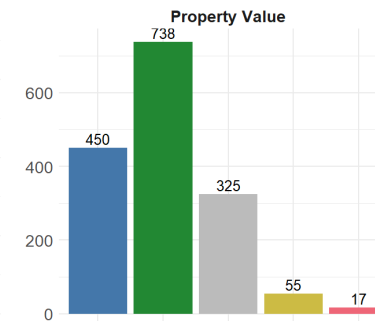
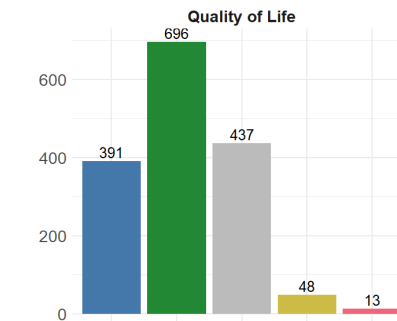
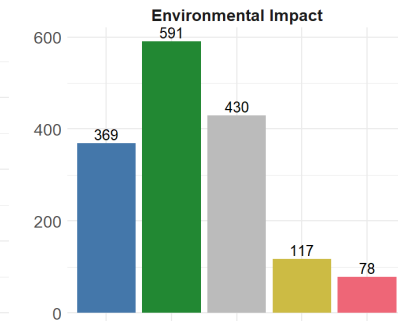
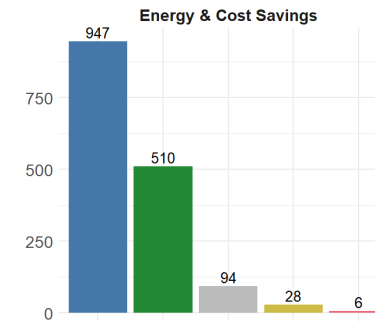
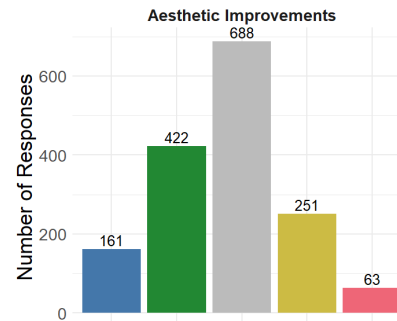
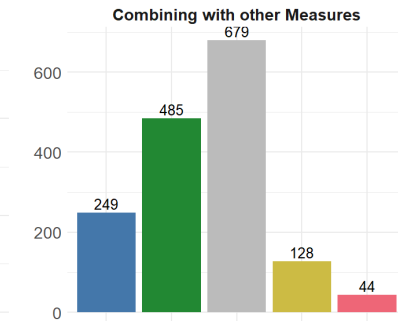
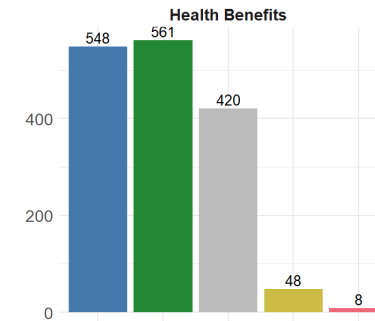
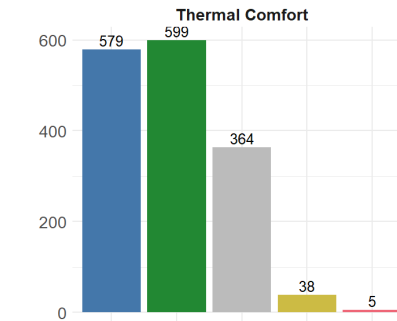
- Combining with other Measures

- Emphasize synergy & scaling effects



- Property Value

- Emphasize increases in property value for homeowners and VvEs



Summary

- Challenges: Coordination & Collaboration - Justice - Time & Effort (before and during renovations)
- Common renovation measures are well-known
 - heat-grids as a special case which requires more attention
 - heat-grids should be promoted as a viable and most importantly attractive (collective) solution
- Benefits of renovations are manifold
 - promotional efforts should demonstrate a broad spectrum of possible benefits to appeal to as many people as possible
- Accounting for the current municipal goals & efforts
 - heat-grid connection, insulation, and PV should be promoted, planned and provided in combination
 - One-Stop-Shops as possible facilitators(?)

will Delft be our next best-practice example?

THANK YOU

FOR YOUR ATTENTION!



ALIGN4energy

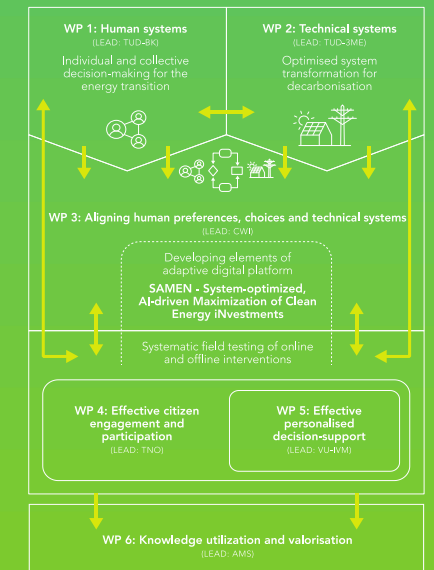
Towards climate-neutral Dutch homes by 2050

Working towards a climate-neutral Netherlands in 2050 requires aligning citizens to use energy in homes more sustainably and end the dependence on natural gas. Our interdisciplinary ALIGN4energy consortium helps to accelerate this energy transition in the Dutch residential sector by aligning citizens, policymakers, and energy system developers with tailored low-carbon energy investments with the help of innovative AI-powered algorithms.

Our Platform Approach

This project uses a bottom-up, data-driven strategy to align and integrate research on human systems (individual and group decisions, social dynamics) with modelling of energy systems. This allows for the simultaneous optimization of investments in clean energy at the individual, collective, and energy system level. The resulting digital decision-support system, the SAMEN platform, will provide tailored information. Subsequent policy measures can be aligned with citizens' preferences and societal needs.

The System-optimized, AI-driven Maximization of Clean Energy Investments (SAMEN) platform



www.align4energy.nl | align4energy@gmail.com | @align4energy | ALIGN4energy
Project Leader: Dr. Sanchayan Banerjee at VU Amsterdam



www.align4energy.nl

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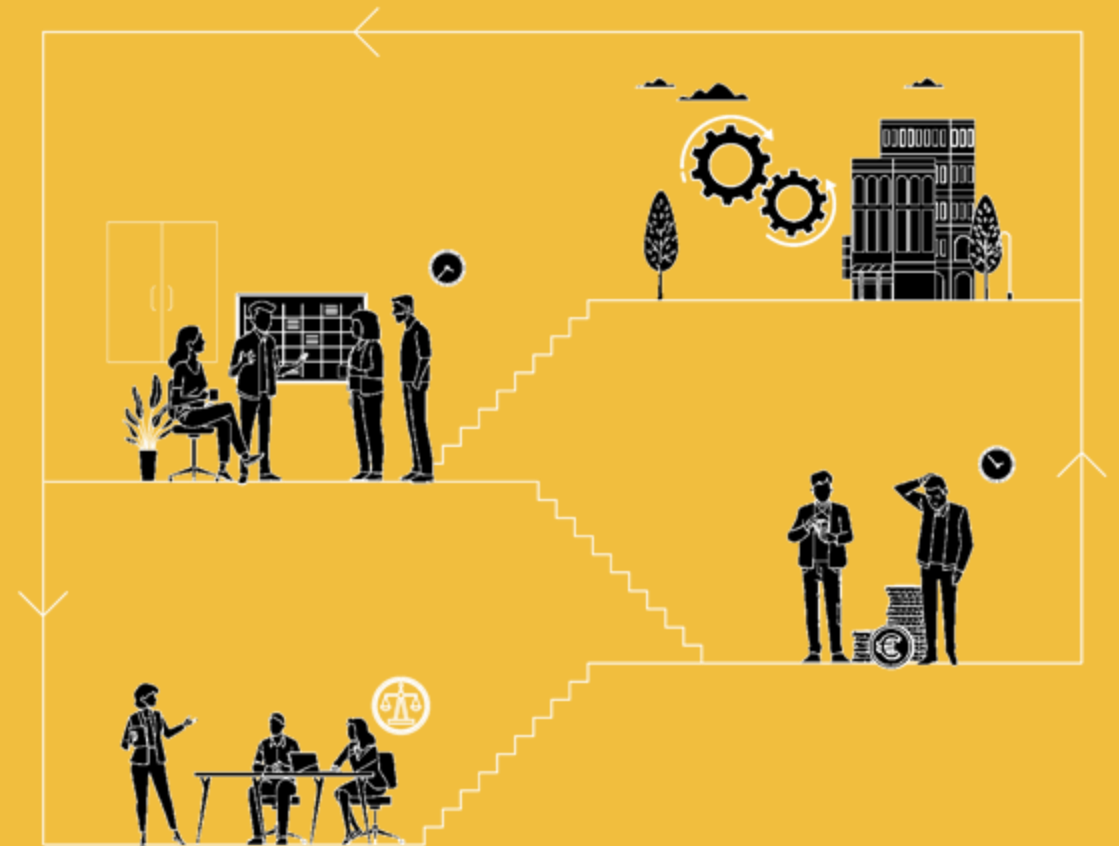


Overcoming Barriers for Homeowners Associations in Energy Renovations

Towards Accelerating Deep
Renovation of Residential Buildings
with Multiple Homeowners

Ragy Elgendy, PhD researcher

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the Built Environment, Delft University of Technology, Delft, The Netherlands



CondoReno

This research is part of the research project "CondoReno" funded by the European Union Programme for Environment and Climate Action (LIFE) MGA — Multi & Mono, under grant agreement.

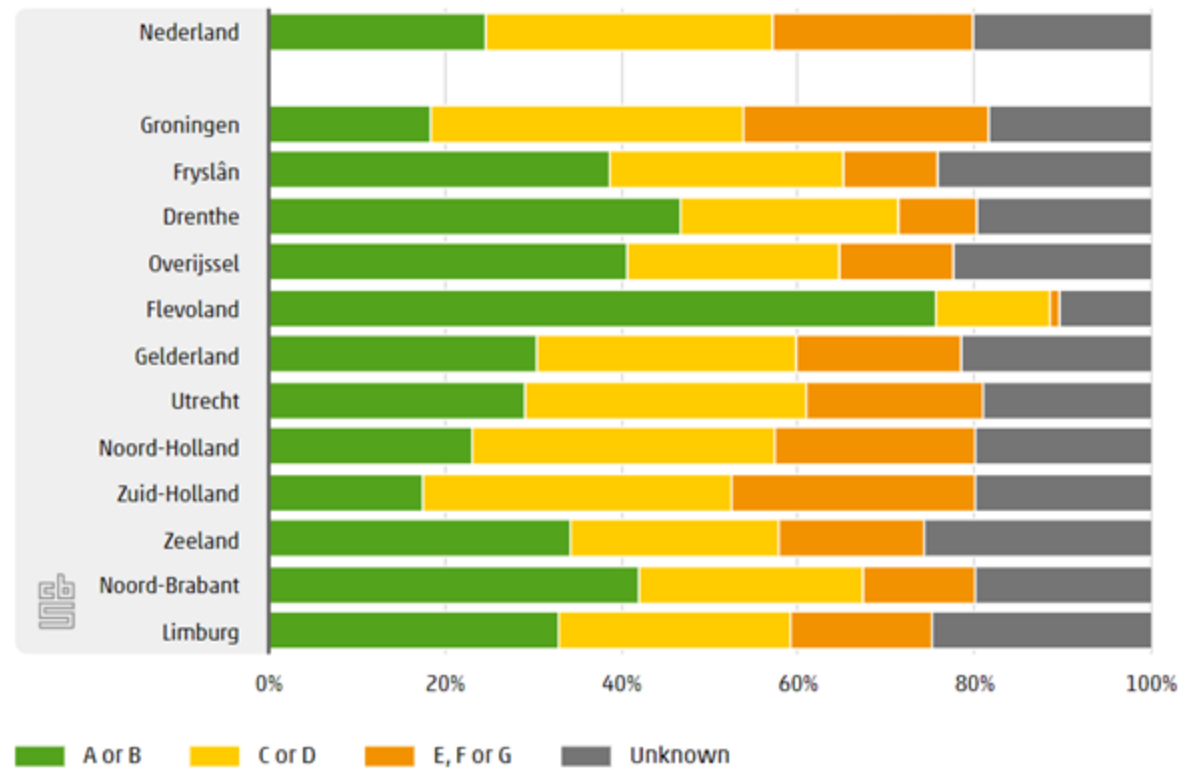
The aim of the project is to **accelerate energy renovations for condominium associations** by creating **6 viable business models for integrated home renovation service providers** to be replicated in 10 European countries.



HOAs in the Netherlands

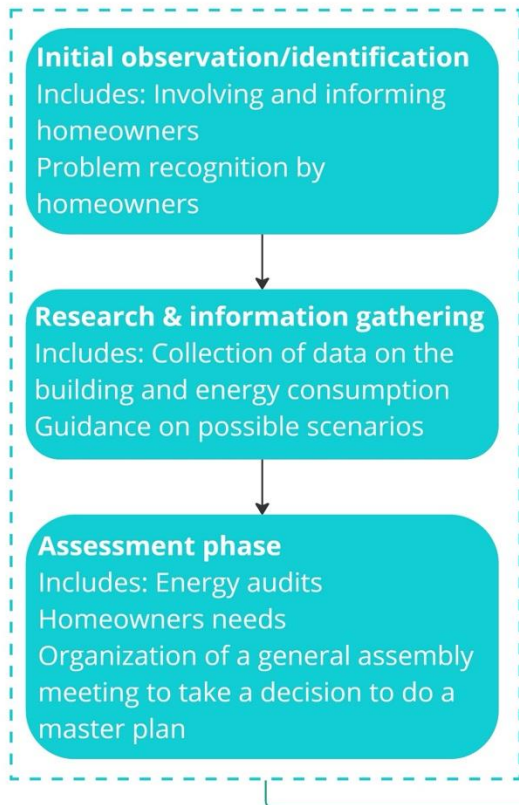


Figure 4.1.2.1 Most recent energy label per VvE



Renovation journey for VvEs

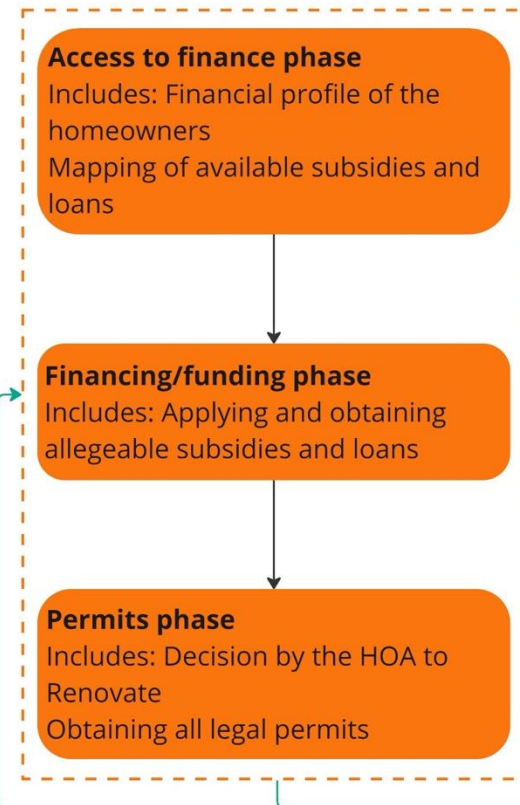
Step 1 : Onboarding phase



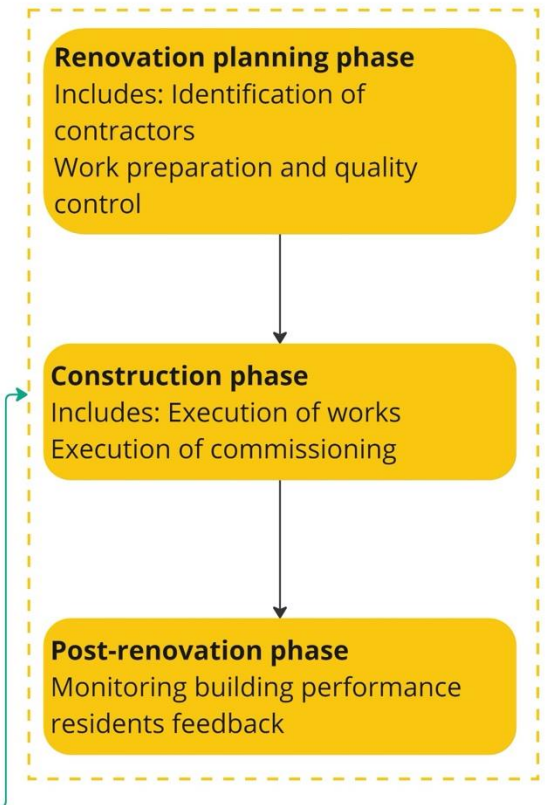
Step 2 : In-depth phase



Step 3 : Transaction phase



Step 4 : Implementation and utilization phase



Mapping of Barriers within the VvE Renovation journey

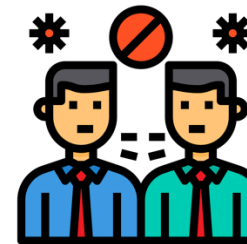
Examples of Barriers & challenges faced by HOAs to undertake energy renovations

Barriers and solutions for homeowners' associations undertaking deep energy renovations of condominiums



1 Financial barriers

- High upfront costs
- Insufficient subsidies
- The financial burden for homeowners
- Split incentives
- Condominium managers business case
- Investors hesitancy



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Keywords

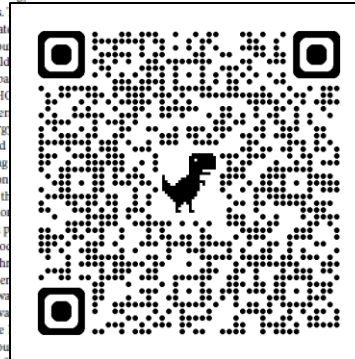
homeowner associations, barriers, solutions, deep renovations, condominiums

energymakers, energy practitioners, and researchers in developing targeted strategies for successfully implementing deep renovation projects for HOAs.

Abstract

Buildings in the EU consume around 40 % of energy and are responsible for 36 % of greenhouse gas emissions. Reducing building energy renovations as a coping strategy to reduce energy use in Europe. Multifamily residential buildings as condominiums, feature individually owned apartments managed by Homeowners' Associations (HOAs) constitute a considerable percentage of the owner-occupied residential sector in Europe. However, the deep energy renovation rate is still low due to the complex process and barriers faced by HOAs. There is a lack of understanding of barriers to undertaking deep energy renovation projects and their potential solutions. Therefore, this study investigates barriers, incentives, and possible solutions to enable HOAs to undertake deep energy renovation projects. The study employs a combination of qualitative methods including archival research, the gathering of information through interviews, and focus group discussions. The findings indicate that communication, cost, and legal structure are the most significant barriers. The incentives play a vital role only in the early phases of the renovation. The findings can inform policy

Introduction



Deep energy renovations often involve multiple tasks requiring coordination among stakeholders (Milin & Bullter, 2021). The findings can inform policy



are

novation



actual

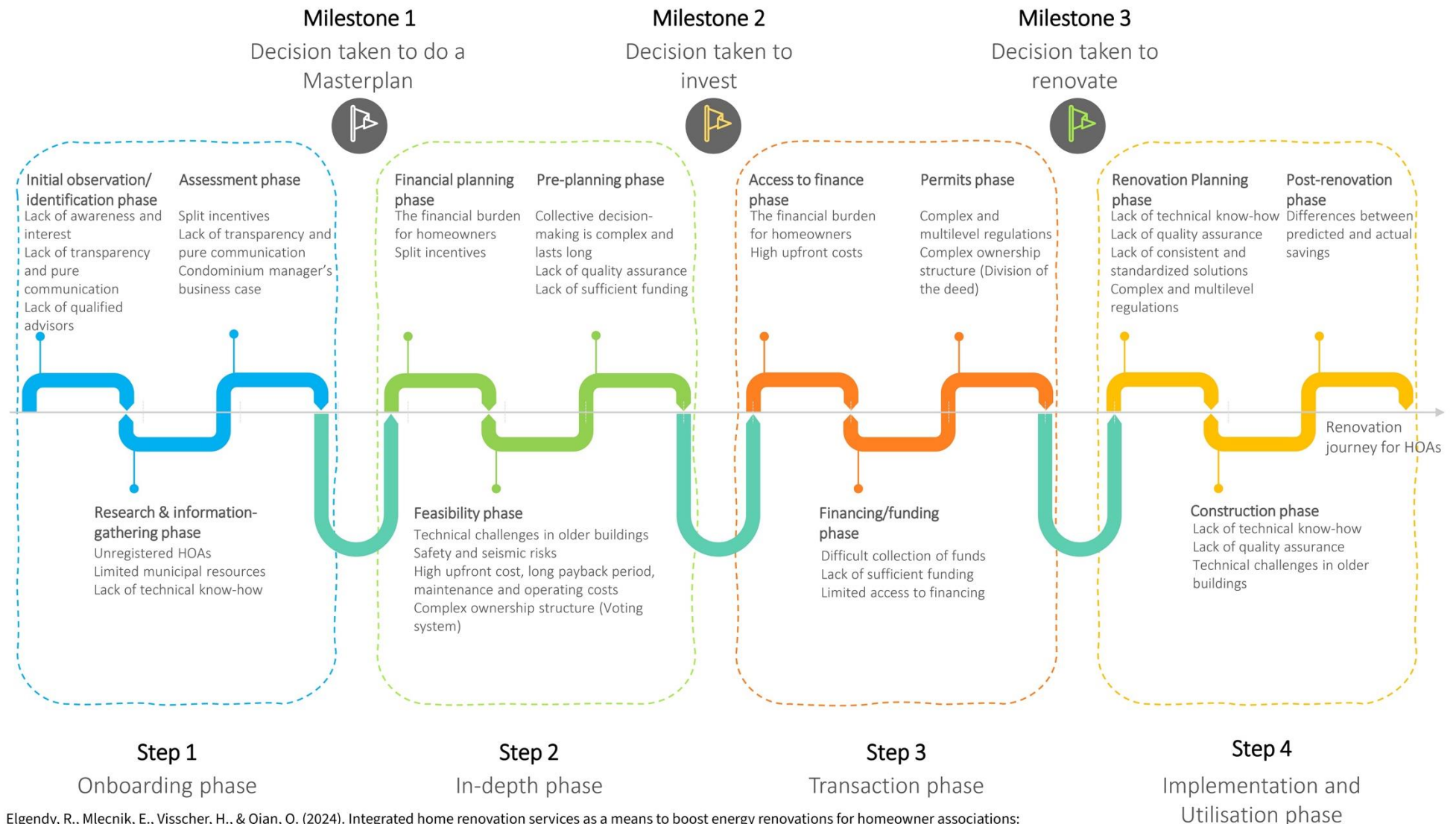


2 Legal barriers

- Complex ownership structure
- Complex and multilevel regulations
- Unregistered Condominium associations
- Limited access to financing
- Ecological policies



Mapping of Barriers within the VvE Renovation journey



Elgendy, R., Mlecnik, E., Visscher, H., & Qian, Q. (2024). Integrated home renovation services as a means to boost energy renovations for homeowner associations: A comparative analysis of service providers' business models. *Energy and Buildings*, 320, Article 114589. <https://doi.org/10.1016/j.enbuild.2024.114589>

IHRS providers business models typologies

Public model

For example, Municipal services of "energy houses" in Antwerp, Mechelen and Ostend in Belgium



8



Private model

For example, Living-cost neutral renovation services of non-profit organization WNR in the Netherlands



3



Agency model

For example, CoachCoPro services Agence Parisienne du Climat in Paris



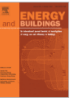
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Journal article



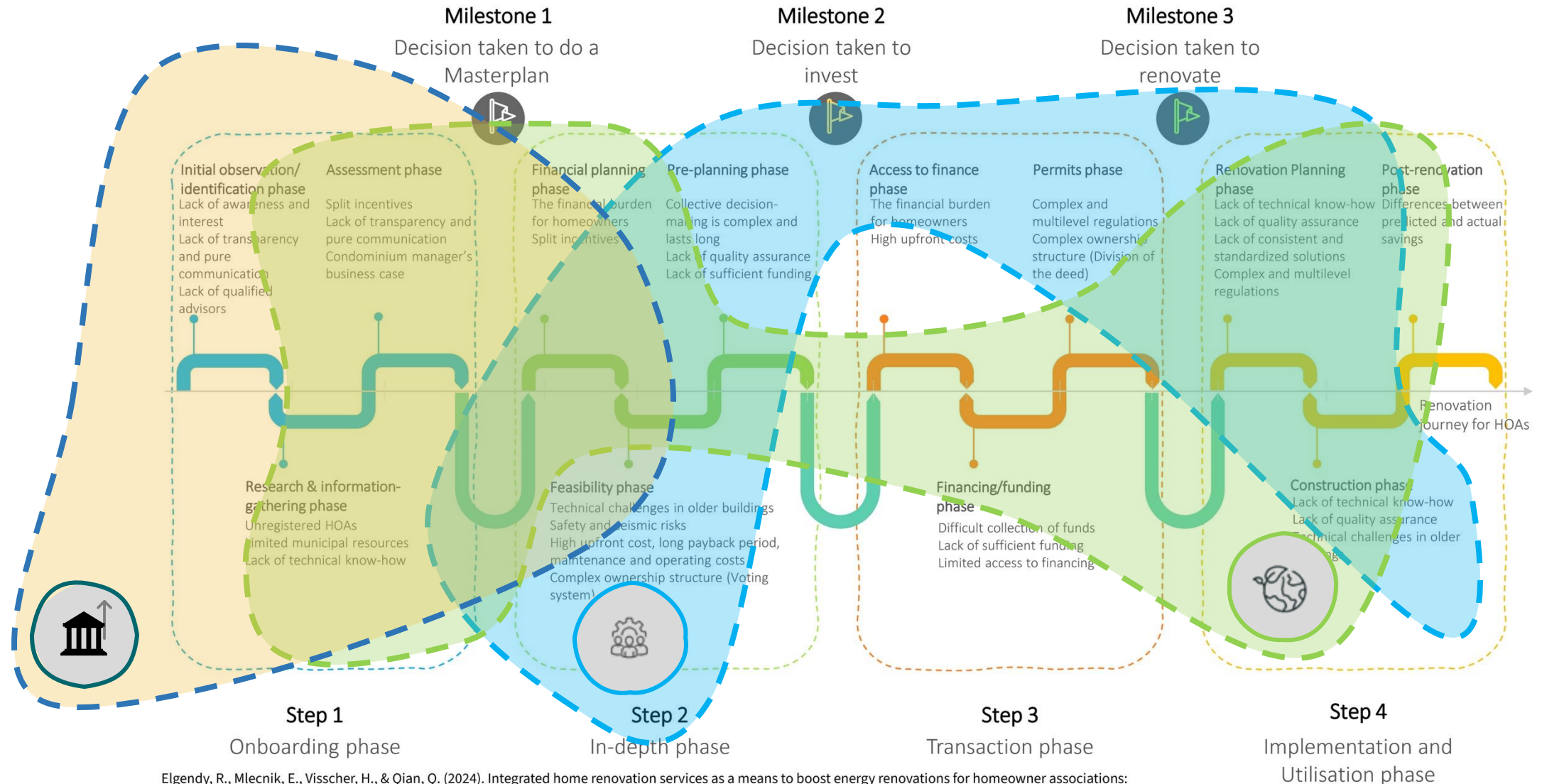
Energy and Buildings
Volume 320, 1 October 2024, 114589



Integrated home renovation services as a means to boost energy renovations for homeowner associations: A comparative analysis of service providers' business models



The main involvement of the three models in the renovation journey



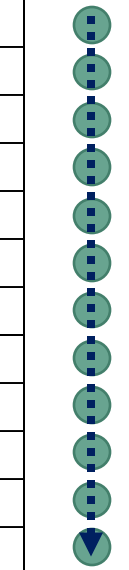
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The Green Model

Comparison of the capability rate per business model to pass each phase

Steps	Renovation phases	Public						Private			Public-Private				
		BM3	BM4	BM5	BM8	BM9	BM10	BM13	BM14	BM2	BM6	BM7	BM1	BM11	BM12
Step 1 Onboarding phase	Initial observation/ identification phase	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Green	Green	Green
	Research & information-gathering phase	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	
	Assessment phase	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Green	Yellow	Yellow
Step 2 In-depth phase	Financial planning phase	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Red	Yellow	Green	Green	Yellow
	Feasibility phase	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Green	Red	Yellow	Red
	Pre-planning phase	Yellow	Red	Red	Yellow	Red	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Step 3 Transaction Phase	Access to finance phase	Red	Red	Red	Yellow	Red	Red	Yellow	Red	Yellow	Yellow	Green	Green	Green	Red
	Financing/funding phase	Yellow	Yellow	Red	Yellow	Yellow	Red	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow
	Permits phase	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Red	Red	Red
Step 4 Implementation and Utilisation	Renovation Planning phase	Yellow	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green
	Construction phase	Yellow	Red	Yellow	Red	Red	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Green	Green
	Post-renovation phase	Yellow	Red	Red	Red	Red	Red	Red	Red	Green	Red	Red	Red	Yellow	Green

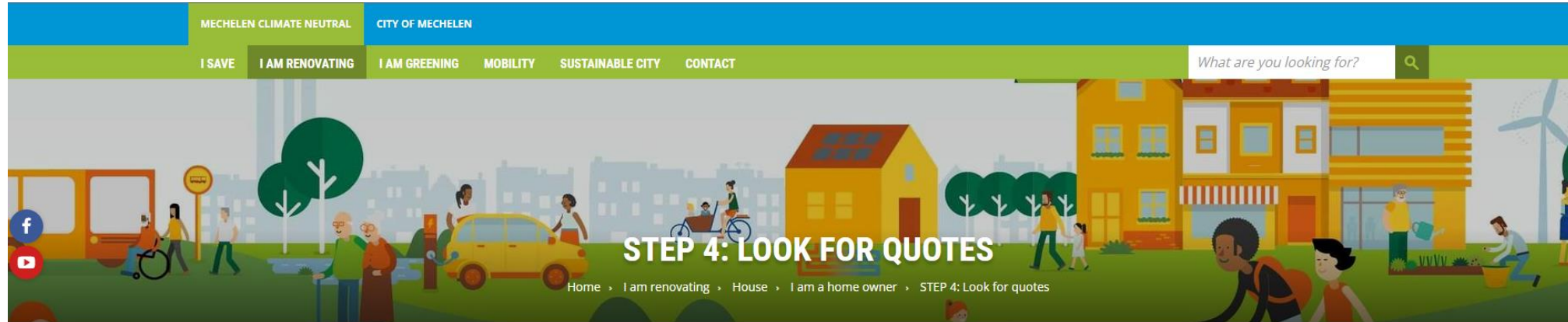
(Green ≥ 67 %, Yellow when <67 % and ≥33 %, and finally Red < 33 %)



Viable
Replicable
Model



Tools to support VvEs



I AM A HOME OWNER

- Step 1: Educate yourself
- Step 2: Get renovation advice
- Step 3: Discover your financial options
- **Step 4: Look for quotes**
- Step 5: Apply for My Home Improvement Loan
- Step 6: Prepare your planned works
- Step 7: Have your work done
- Step 8: Request your premiums

ASK YOUR QUESTION

You read here:

- [Find your contractor](#)
- [Check your contractor](#)
- [Check your quote](#)

Find your contractor

Don't know where to find a reliable professional? Look in our local contractors collective. This is a list of **contractors and professionals** from the region, who have been checked and approved on various points.

CONSULT THE CONTRACTORS' COLLECTIVE

Recommendations

Emphasize Stakeholder
Collaboration



Focus on Early-Stage
Success



Enhance Communic
and Decision Supp



Address Technical
Challenges



Recommendations to enhance the business
models of IHRS providers targeting HOAs

New Report:

Activating Business Models for Condominium Renovations

Identification of viable business models for Integrated
Home Renovation Services for condominiums in the
Netherlands and Flanders

Overcome Financial
Barriers



Legal and Regulatory
Facilitation



Create a Scalable
and Flexible Mo



THAN
YOUR



This work was supported by the CondoReno Project funded by 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.



Ben je eigenaar van een appartement?

Are you an owner of an apartment? Your opinion matters!

De Vlaamse overheid wil VME's en mede-eigenaars ondersteunen bij de renovatie van hun appartementsgebouw.

Dit is jouw kans om mee het verschil te maken!



Scan de QR-code om een korte vragenlijst in te vullen en jouw mening te delen. **Jouw input telt!**

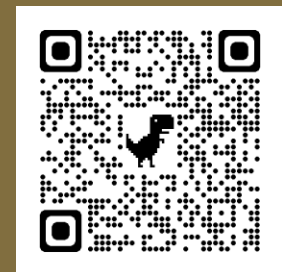
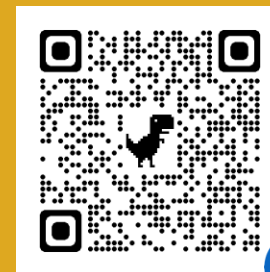
You can give your input in Dutch, English, French, German, Spanish, Italian, Portuguese or Arabic

This Study conducted by Ragy Elgendy, Gebouw 8 / Building 8 Julianalaan 134, 2628 BL Delft, The Netherlands



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PhD candidate

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TU Delft Department of Management in the Built Environment
BK Bouwkunde



JUST ENERGY-EFFICIENT RENOVATIONS IN VULNERABLE NEIGHBORHOODS

Diletta Ricci—JUSTPrepare Project



The JustPrepare project

Putting REsident Practices And REsidential areas at the centre of a JUST and effective energy transition in underprivileged neighbourhoods.

- Thematic agendas developed with a bottom-up perspective
- Retrofit Technologies vs. Residents' Energy Practices
- Residents vs. Solution Planners and Implementers
- Real-life context cases and local Living Labs
- Action-research methodologies



Check JustPrepare website!

Just Prepare
For a Just Energy Transition

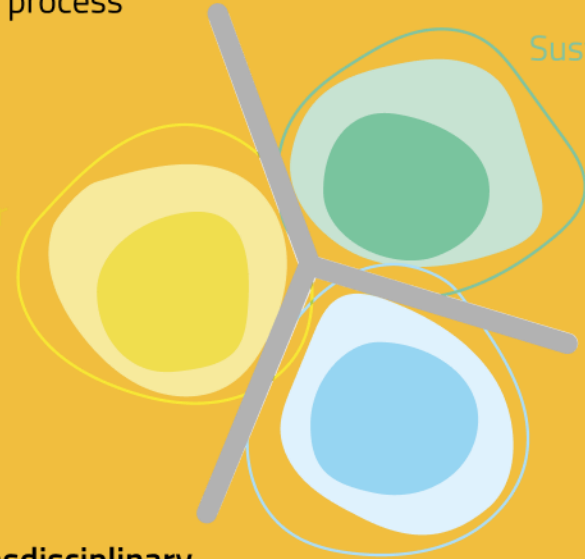
Living Labs: in Rotterdam, Amsterdam, Gemert and Nijmegen, researchers, professionals and residents learn together about energy transition in their neighbourhoods.

Learning Labs: sharing knowledge and solutions in learning meetings with resident groups, other municipalities and organisations in the field.

Involved: local partnerships researchers (UvA, HvA, TU Delft, HAN, Radboud University, TU Eindhoven), municipalities, companies and civil society organisations, NWO

Towards a decarbonized just future

Participatory process



Transdisciplinary approach

Beautiful

Multi-Level engagement

CHANGES FOR A POSITIVE SOCIAL IMPACT OF BUILDING DECARBONISATION IN FIT FOR 55 (EPBD – EED – SCF - ETS2)



OUTLINE MEASURES FOR A SOCIALLY JUST TRANSITION



Comprehensively define **energy poverty**



Draft **Building Renovation Plans** for strategic action on the building stock, having alleviation of energy poverty as the objective

PROVIDE ENOUGH FINANCIAL SUPPORT

Ensure support focuses on **deep renovation of worst-performing buildings**



Mitigate impact of carbon pricing on heating fuels



Accessibility of funds, affordability of measures

Deeply renovated and fully decarbonised buildings in a socially just way

Accessibility of measures



ADOPT MEASURES TO LIFT HOUSEHOLDS OUT OF ENERGY POVERTY



Phase out worst-performing buildings through **Minimum Performance Standards**



Ensure measures specifically targeted at households in energy poverty (Energy Efficiency Obligations Schemes)



Integrate **energy communities** into EU-level legislation

INFORM & ADVISE HOMEOWNERS, MAKING THE TRANSITION UNDERSTANDABLE

Boost **technical assistance and one-stop-shops**



Support local authorities to access EU/national funding



Address the specific needs of **energy-poor households** in reform of EPC framework



Incentivise building owners to use **Building Renovation Passports**



Make **deep renovation the standard ambition level**



Accessibility of information

How to incorporate *Justice*?



Decision-making guide for Just Energy Transition and Renovation projects

RECOGNITION JUSTICE

- Individual and collective variety of (residents') needs, values, capabilities and resources
- The recognition of (renovation processes) barriers to overcome
- Local place identities and conditions (built environment) as well as climate and environmental needs

DISTRIBUTIVE JUSTICE

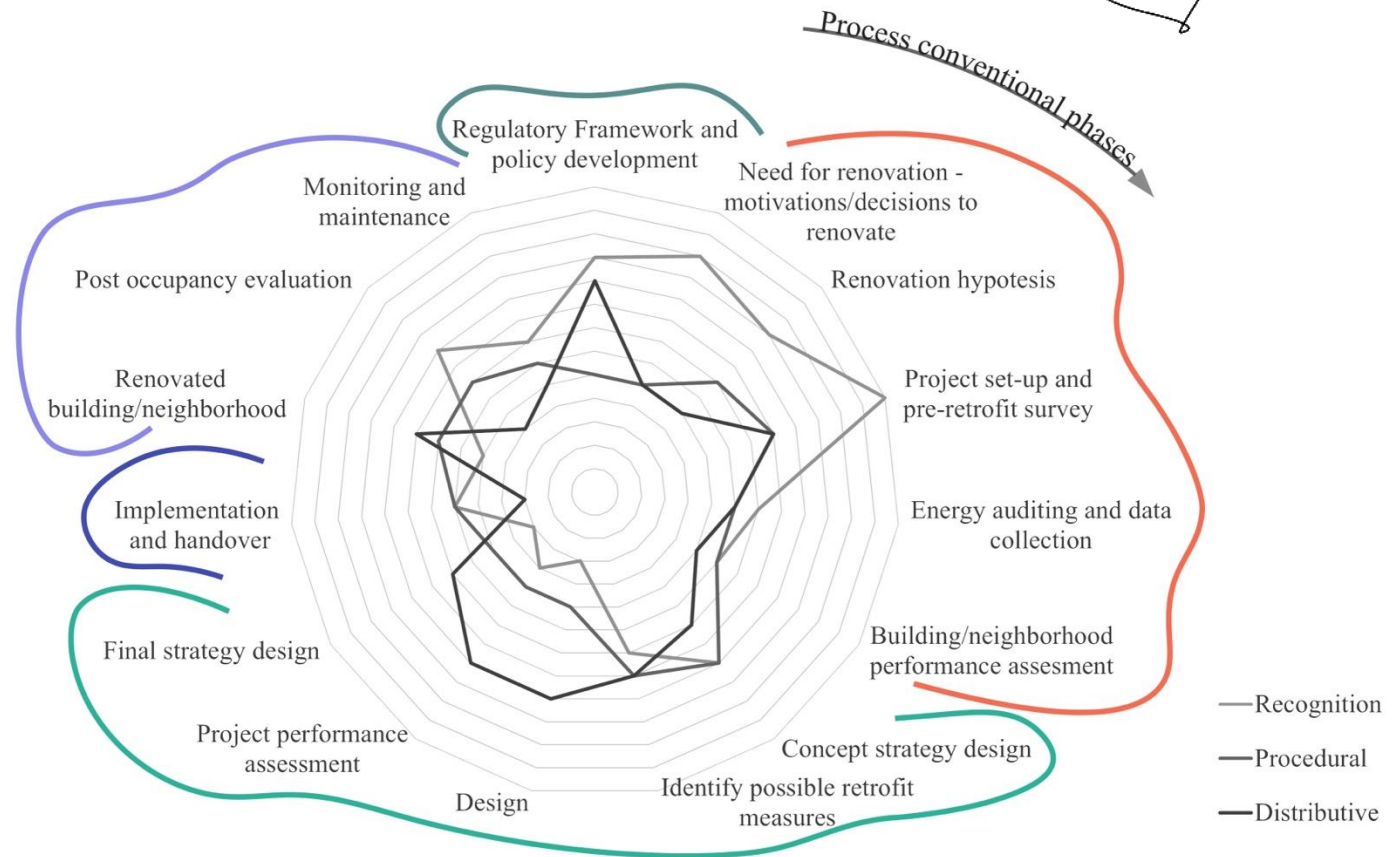
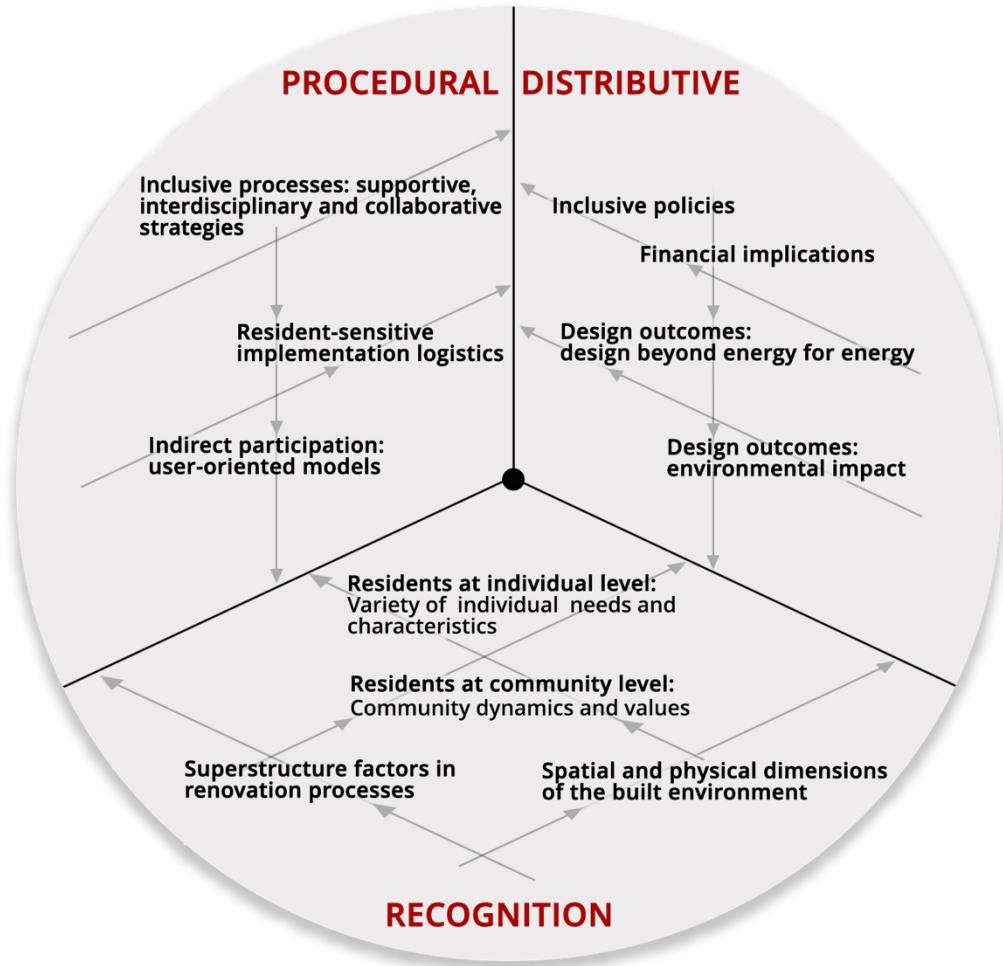
At renovation programs-project-product level:

- Access to energy services and fulfilment of energy needs
- Fair and equal distribution of tangible and intangible, monetary and non-monetary benefits and burdens; including design outcomes related to energy and non-energy aspects
- Impact on community and the environment

PROCEDURAL JUSTICE

- Adopting strategies to remediate injustices
- Involvement and representation in transparent decision-making
- Access to knowledge and information
- Inclusion of social aspects in decisions and evaluations
- Accessible collaboration between stakeholders

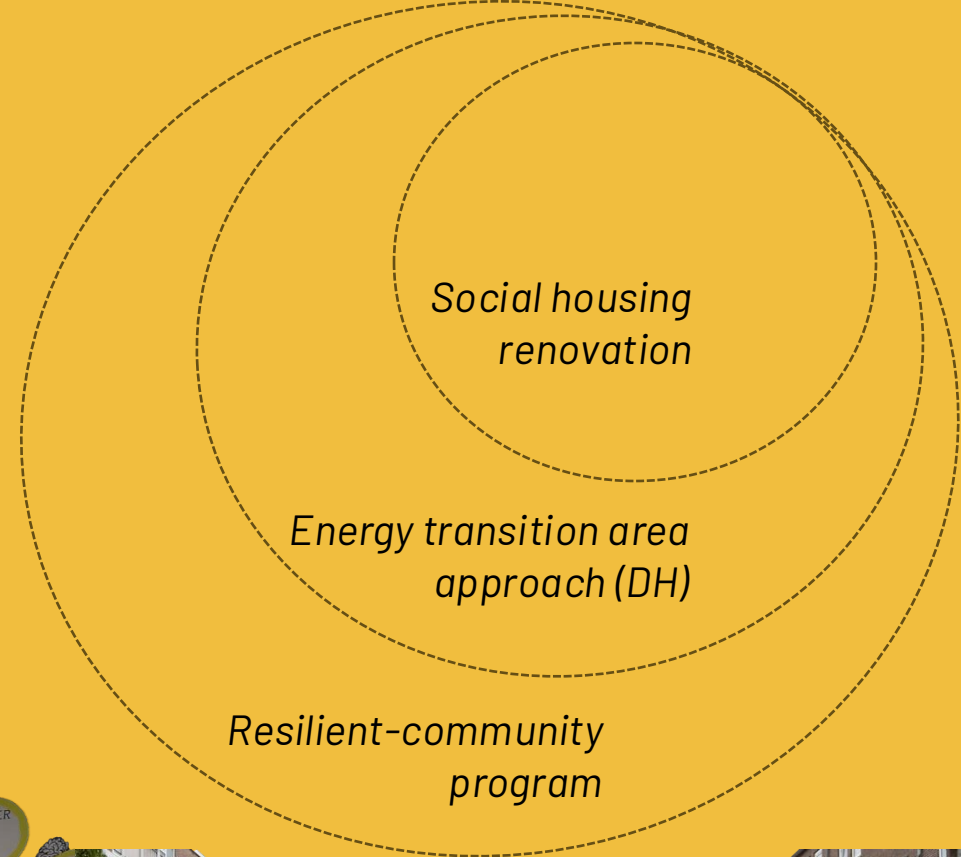
How to incorporate *Justice*? The crucial role of organisational dynamics and design choices

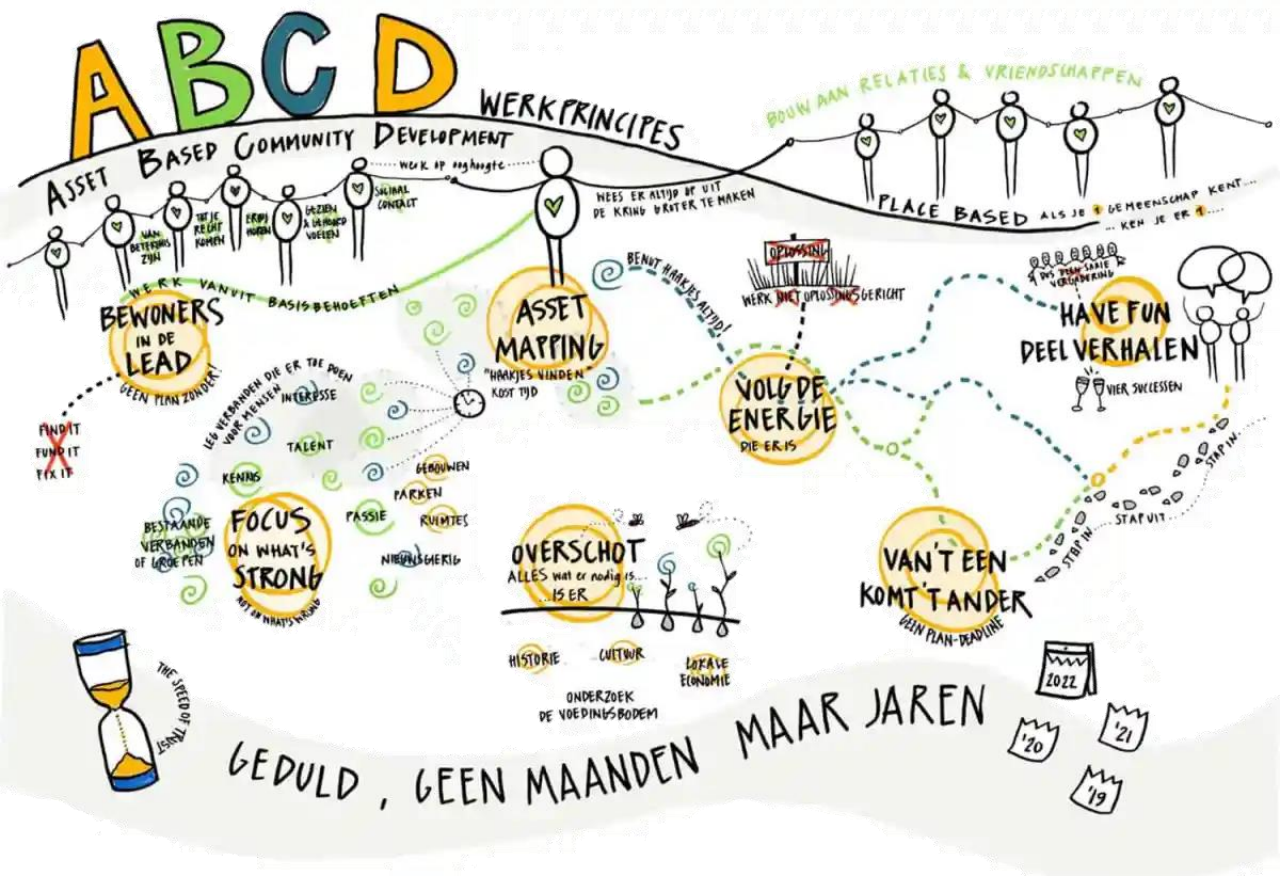


Figures' source: by author. The dimensions and stage of **just trajectories** in the renovation process.

The BoTu Case in Rotterdam

- Pilot project of gas-free neighborhood **area approaches**
- Effective overlap of **social** and **technical transition strategies**: The **Resilient** BoTu 2028 + **District Heating** implementations
- Multi-layered project rich in **coupling opportunities**
- Incremental mutual learning in a **phased plan**
- Socio-economic and urban fragilities
- Support of local community initiatives and properly trained **active residents** (ambassadors)
- **Strategic shift of actor roles** in energy transition



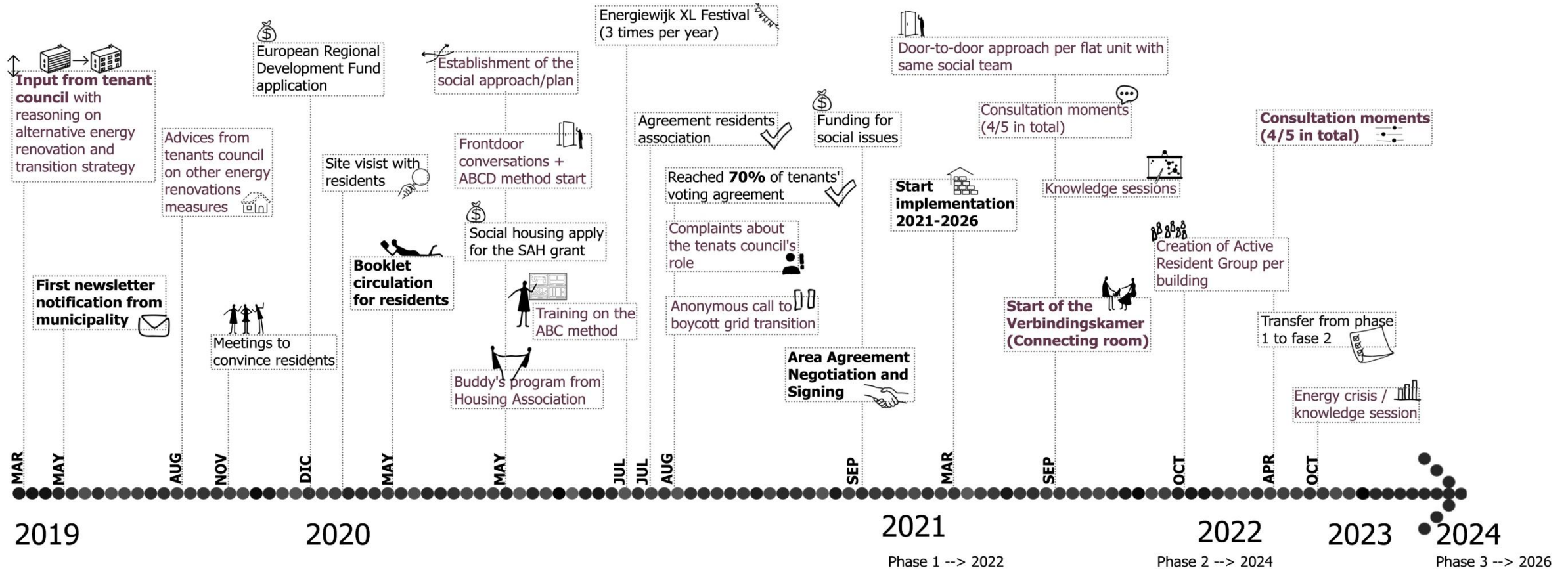


Photographic shots of informal design solutions highlighting practices and discomforts.
 Source: (De Koning et al., 2024)

The ABCD framework implemented in BoTu.
 Source: bospoldertussendijken.nl

Residents-practices driven design

Gas-free BoTu Timeline

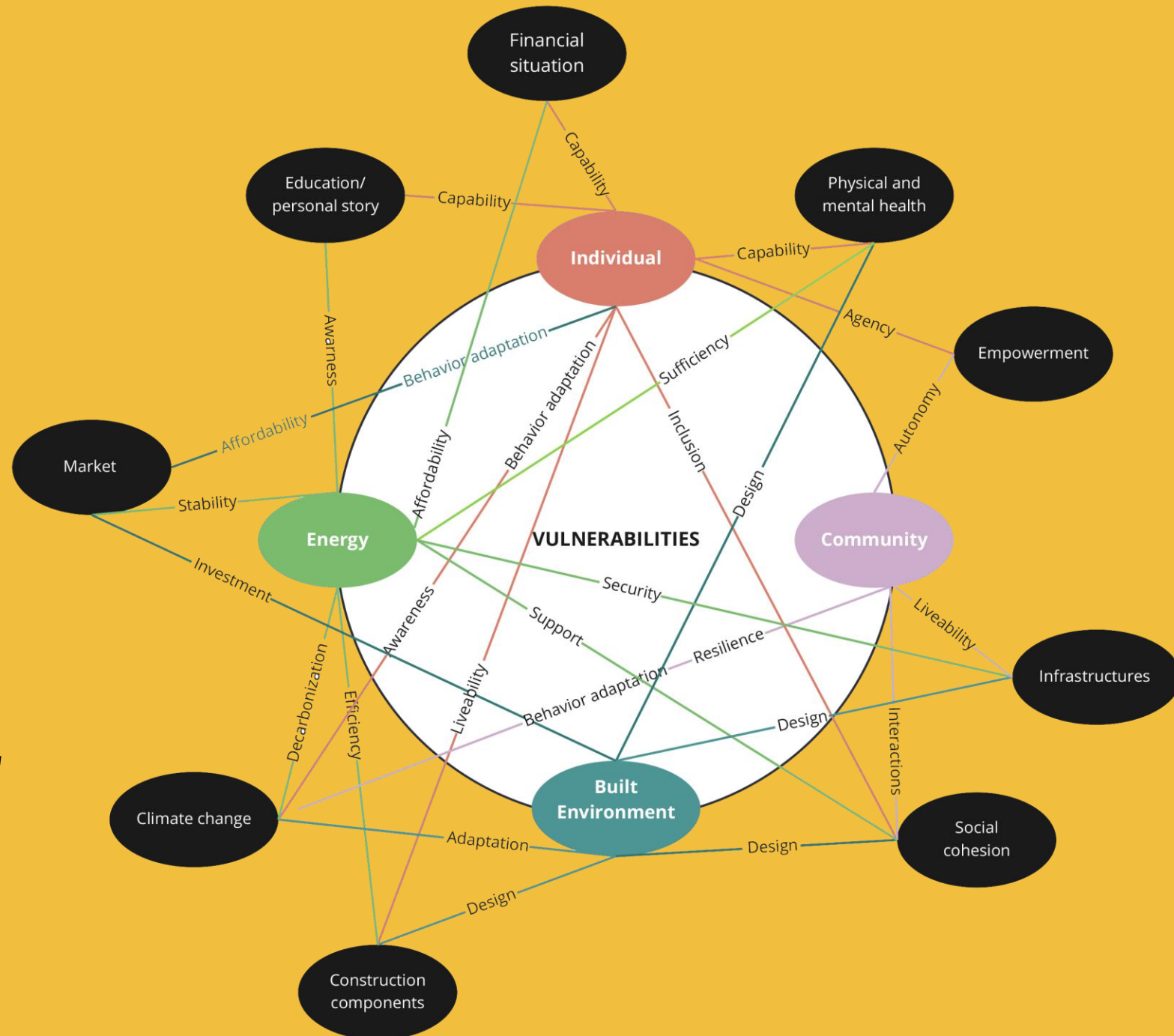


Vulnerabilities net

Identify local vulnerabilities to strategically address them in different aspects of project planning and decision-making structuring.

Integrated strategies to address multiple vulnerabilities: guaranteeing affordable energy access and enhancing neighbourhood technical and social infrastructure.

The relevance of Building services and buildings system components.



How social strategies have helped technical processes

Residents' influence on renovation design: their interest in "more than energy" measures

*Dus de warmtevraag moeten we verminderen en dus isoleren en aansluiten op stadswarmte. Dat is niet veranderd, maar er is gaandeweg zijn er wel een aantal dingen bijgekomen...
Housing Association_Project Mangarar realization*

Intermediaries between technical issues and residents

"Okay, this is when we start. This is what we are going to do. There is always ... also they can address her when there are problems", and there are all kinds of issues that customers don't like. You can't park your car. There is an open street. Contractor

Beyond technical booklet: the effectiveness of personal contacts

juist doordat je persoonlijk contact zoekt met die mensen kun je de vragen beantwoorden. Ookal is dat dan met handen en voeten. Dat maakt dan niet uit, maar dat geeft wel meer vertrouwen dan alleen maar vanuit het boekje gedaan heb. Als we het alleen vanuit het boekje hadden moeten doen, hadden we het niet gered. Contractor

Thank you for your attention!

Diletta Ricci | d.ricci@tudelft.nl
JUSTPrepare Project



Check my personal page!



Rate the following statements from Strongly disagree (1) to Strongly agree (5)

Combining renovation measures with energy transition interventions can help gain support, while also improving participation and occupant satisfaction

Community-based initiatives and local networks are the most effective way to engage people in the energy transition.

It is important for the energy transition to address social inequalities so that all households, regardless of income can participate.

Strongly disagree

Strongly agree



Paneldiscussie



Art den Boer

Gemeente Delft



Ingrid Lips

Bewonersvereniging Heel
Tanthof Delft



Wim Schut

VvE voorzitter

Beoordeel de volgende stellingen van Sterk mee oneens (1) tot Sterk mee eens (5)

Wonincorporaties en VVE's zouden toestemming moeten krijgen voor energiemaatregelen als minstens 50% van de huurders/eigenaren instemt

Huurders die niet stemmen over energie-efficiënte renovaties moeten als neutraal worden beschouwd, niet als tegenstander

Strongly disagree

Strongly agree

Content



Your question

Beoordeel de volgende stellingen van Si

Additional details

Longer description shown on your audience's phones

Your description

Statements

Wonincorporaties en VVE's zouder 16

Huurders die niet stemmen over en

+ Add statement

Dimensions

Bottom of the scale Value

Strongly disagree

1



See mid-values

Top of the scale

Value

Strongly agree

5



UE

Account



Content



Design



Settings



Help & Feedback

Beoordeel de volgende stellingen van Sterk mee oneens (1) tot Sterk mee eens (5)

De energietransitie is alleen succesvol als we de verantwoordelijkheid niet alleen bij de overheid leggen, maar ook bij burgers en ondernemers.

Ik beschouw mezelf als ambassadeur van de energietransitie..

Strongly disagree

Strongly agree

Content



Your question

Beoordeel de volgende stellingen van Si

Additional details

Longer description shown on your audience's phones

Your description

Statements

De energietransitie is alleen succes

Ik beschouw mezelf als ambassad

+ Add statement

Dimensions

Bottom of the scale Value

Strongly disagree 1

See mid-values

Top of the scale Value

Strongly agree 5



Account



Content



Design



Settings



Help & Feedback

Join at menti.com | use code **1537 8778**

 Mentimeter

UE

Een laatste tip om de energietransitie in Delft verder te brengen.

All responses to your question will be shown here

Each response can be up to 200 characters long

Turn on voting to let participants vote for their favorites

Account



Content



Design



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Help & Feedback

Dank aan alle sprekers en deelnemers!

