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SUSTAINABLE ENERGY NETWORK
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CEESEN-BENDER

Training

Social Aspects of Work with Energy Poor Populations



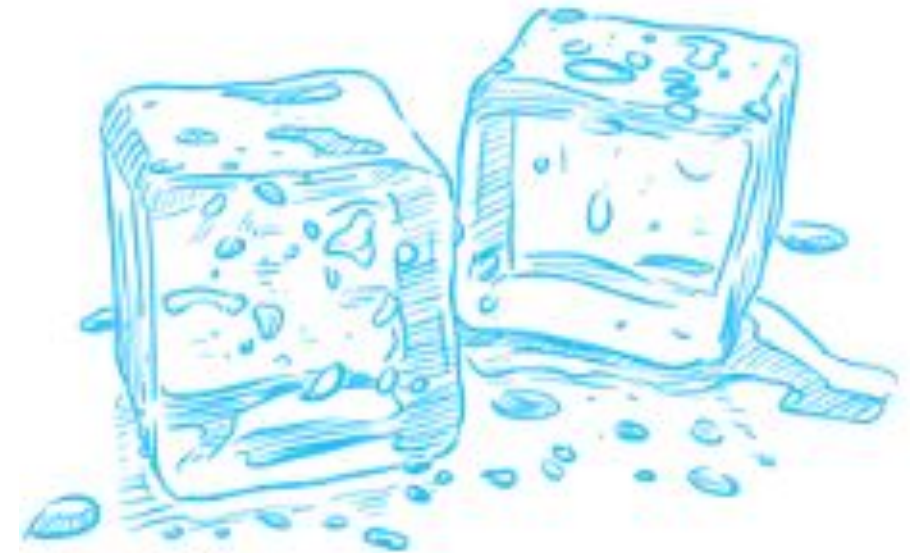
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Ice, ice, baby...

Choose a letter from ABC! Don't worry if others use the same letter.

Take sheet of paper, write your first name on it and describe yourself using words starting with the chosen letter. Use the most words possible.

You have 2 minutes to introduce yourself.



Mindset

A growth mindset is the belief that one's abilities can change and improve over time



Warm up and Training Rules

1. Social aspects of energy

[Drivers of Energy Poverty](#)

[How can Energy be social](#)

[Understanding Feelings and Emotions](#)

[Different Decision Stages of People](#)

[Energy Behaviours](#)

2. Engaging Stakeholders

[Co-creation](#)

[Boosting participation](#)

[Communication tips with vulnerable households](#)

[House vs Home: Understanding vulnerable households in renovation processes](#)

[Co-creation examples](#)

3. Barriers to stakeholder engagement

[Good Practices of financial instruments for energy poor households](#)

[Biases and Scepticism](#)

Asymmetric information

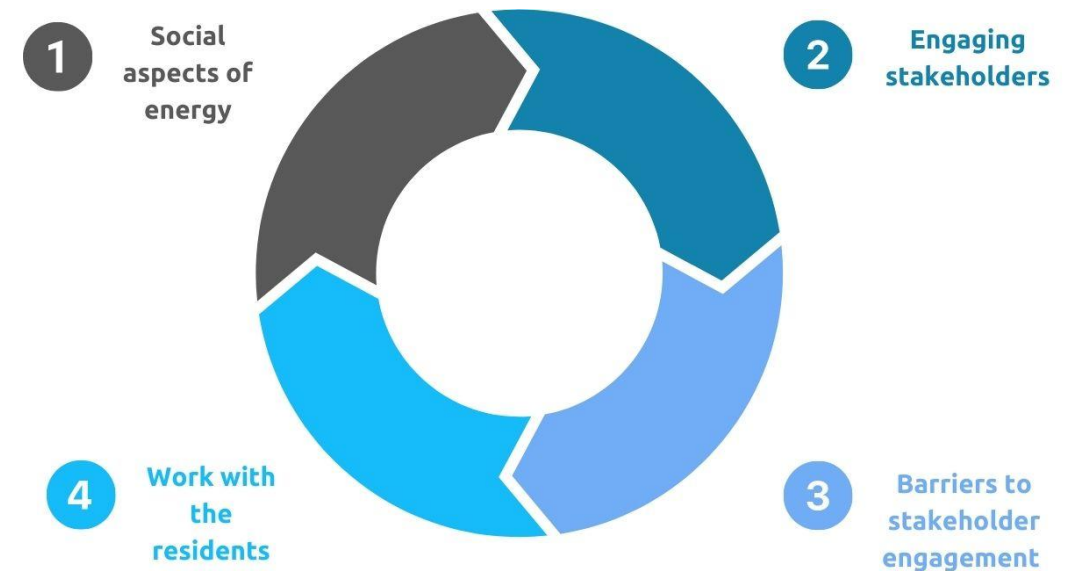
4. Work with residents

[Work with vulnerable people](#)

Creating Energy Savings & Renovation Opportunities: Practical Soft Measures, Renovation Strategies & Funding

[Toolbox: One Stops Shops \(input EU Peers\), District Campaigns \(Input Energy Caravan\), 10 Steps](#)

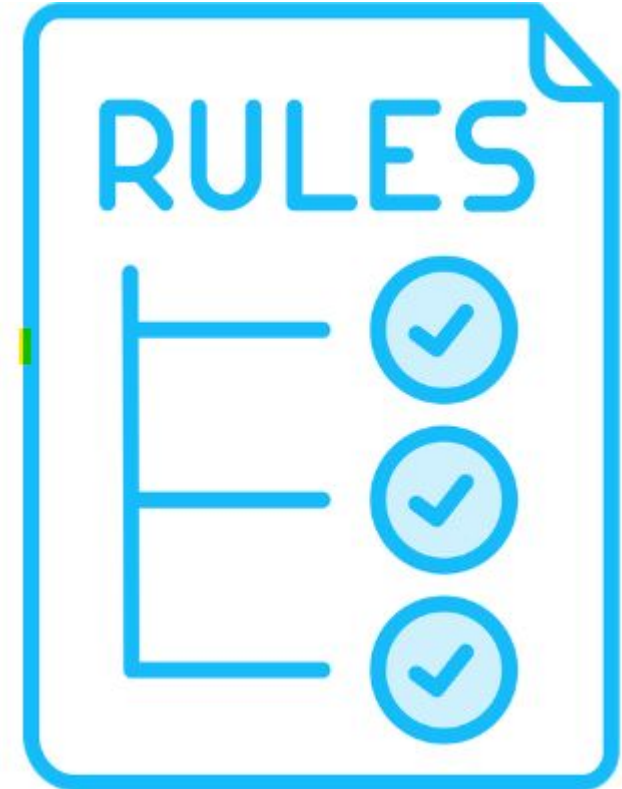
Bonus: How to do it with your experts: scheduling post-training consultations with each country



Training Rules: Recap



1. **Be punctual and prepared:** Arrive on time for all sessions.
2. **Respect the trainer and fellow participants:** Show respect for the trainer, guest speakers, and other participants by listening attentively, refraining from disruptive behavior, and maintaining a positive attitude throughout the training or workshop.
3. **Respect the Diversity:** Treat all participants with respect and consideration, regardless of their background, experience, or perspectives.
4. **Agree to disagree:** accept feedback from peer attendees on your opinions and respect the variety of realities of attendees.
5. **Follow instructions and guidelines:** Listen to the instructions provided by the trainer, and follow any guidelines or rules established for the training or workshop. This is necessary for the workshop to go smoothly.
6. **Use the materials and equipment made available for the Training with care and diligence**
7. **Refrain from making video and/or audio recordings** and from taking pictures on training premises without consent.
8. **Ask clarification when needed:** If you have questions or need clarification on any topic covered during the training, don't hesitate to ask.
9. **Stay engaged** throughout the training.
10. **Take knowledge and skills** with you.



Exercise: Drivers of Energy Poverty

Form Pairs. Each pair receives 8 cards with 8 words:

- Health
- Education
- Disability
- Gender
- Social relations
- Trust
- Being a member of migrant or ethnic minority
- Housing tenure (tenants or owners)

You have 5 minutes. Choose the one card that you think is NOT a factor that contributes as vulnerability to energy poverty.

After choosing, explain to the other pairs why you chose that card.



→ [Task cards available to print](#)

Exercise: Drivers of Energy Poverty part 2

- Share your experience on drivers of energy poverty and vulnerability
- Think of the situation you described in the situation game.



Created by the project team

Interested in a practice example of addressing households? Read this [Good Practice: 10 Steps for renovation in a condominium \(flyer\)](#)



How can energy be social?



Why do we need social expertise?



- **Trust is one of the key obstacles**
- A way to approach split of incentive problem
- **Mitigate asymmetric information**
- **Better understand emotions and feelings**
- **Improve communication with stakeholders involved**
- Policies to address high energy burdens often fail to reach the very lowest income communities



People are complicated

It was assumed that people always choose the most profitable possibility for themselves.

Individuals were considered in isolation from social contexts, such as daily life activities and other social structures.



Learn more about behavioral factors in renovations:

<https://brandcentral.ramboll.com/share/BwfsmRNEBUU4G5oyNURb>

“When I cook at home, I think that I want to eat, not that I consume energy”



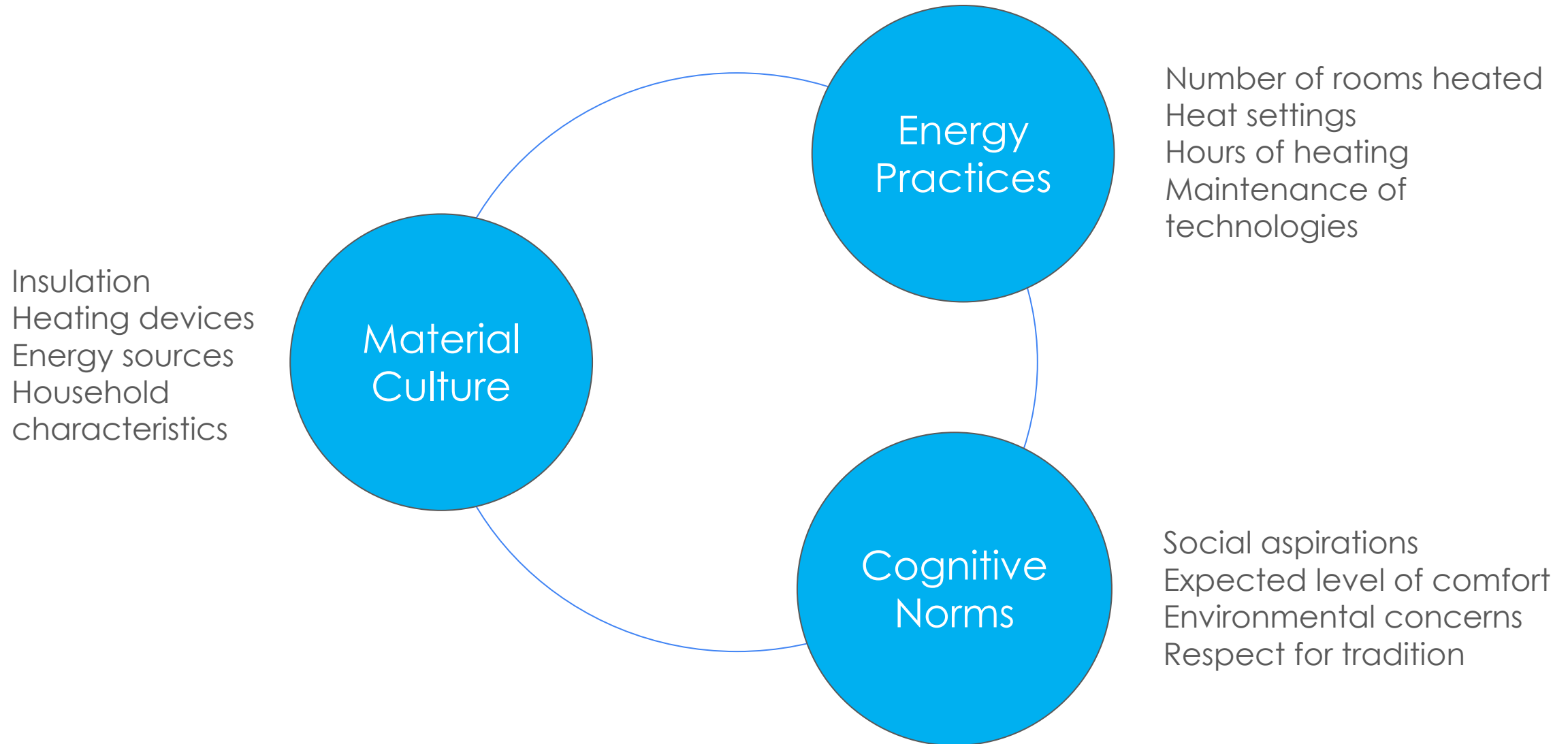
Multiple aspects influence the way we behave around energy:

- Psychological,
- Cultural,
- Technical,
- Economic,
- Social.



Energy behaviour and cultural influences







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Home vs House

How do we speak about one and the same thing?



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- Building renovation is about **Homes**
- We tend to be very technical when it comes to renovation
- As experts, we treat the buildings as and physical structures
- Homeowners do not automatically connect all the technical specifications with the improvement of their quality of life



We do not see things the same way

Households see a house as a livable and meaningful



Owner occupiers' perspective

Architects, engineers, and energy advisors interpret and try to shape the house as a material arrangement



Policy maker's perspective

	House	Home
Approach	Techno-economic	Socio-technical
Intervention	Just improving design, technologies, or other physical aspects of domestic buildings	Understand the comfort, identity, security, privacy issues as connected to emotions and relationships as well as to social and cultural expectation
EE Expert's Role	Architects and engineers, typically employ quantitative and applied methods (large quantitative surveys, modeling, and statistics) based on local climate and building features	Trained experts to carry out qualitative and quantitative methods altogether exploring also social science methods and skills
Occupants' Role	Householders Passive Definable by experts	House owners Active Complex occupant needs

- As an expert, you are in a more powerful position to understand the process in detail
- Technical language and terminology is not something how homeowners speak about their dwelling - you might not be perceived
- Imagine going to a doctor who will speak to you about your health only in complicated terms you do not understand and not being willing to explain it to you



- When people are busy with daily activities at home, they do not think of themselves as energy consumers
- In most cases, people are focused on getting things done when it comes to housework and obtaining the indoor comfort
- Rising energy prices made people more conscious about consumption, what coils stimulates behavioural change



- Behaviors such as household work (cleaning, cooking, doing the laundry), child care, in-home entertainment, hobbies, sleeping, and resting.
- Multiple studies classify different types of energy users and different household energy behaviors, e.g. conservers and spenders
- Energy consumption is determined by multiple factors from comfort perception till the habits, quality of appliances and building systems, as well as prices



Why homes are ethical issue?



We quickly realized that it was a house which looked healthy when we bought it, but in fact it was not at all.

Speaking of homes is also sensitive and ethical issue



- Be aware that people might have very traumatic experiences related to their homes, especially in the conditions of energy poverty
- Be aware on what impacts the participation may have on participants

For example, when you arrange conversations with homeowners, be aware that some of them can feel pressured in taking part

- Be careful with the questions you ask
- Observe the reactions



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Engaging Stakeholders



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Barriers and drivers for building renovation

2

Engaging stakeholders

No Need

Structural

Fiscal & regulatory policies

Access to capital

Dwelling characteristics
Surface, age, individual house, energy performance, localisation

Sociodemographic characteristics
Age, income, presence of children

Behavioral

Environmental concerns
Waste separation, public transportation, ...

Energy context perception
Risk aversion

Enablers

Condition of domestic life

Triggers

Decision-making process

Influences

Social networks

Sources of information
Awareness campaigns, media and internet

Professional networks

Socio-economic factors

Renovation decision



Read more on decision stages of people [HERE](#)

Energy poor do not consider renovation at all. Why?



2

Engaging
stakeholders

**They have different
priorities - sometimes
even meeting basic
needs is a struggle**



Energy poor do not consider renovation at all. Why?



2

Engaging
stakeholders



Normalisation of bad conditions: energy poor are not always aware that the way they live could be better: healthier, safer, more comfortable.



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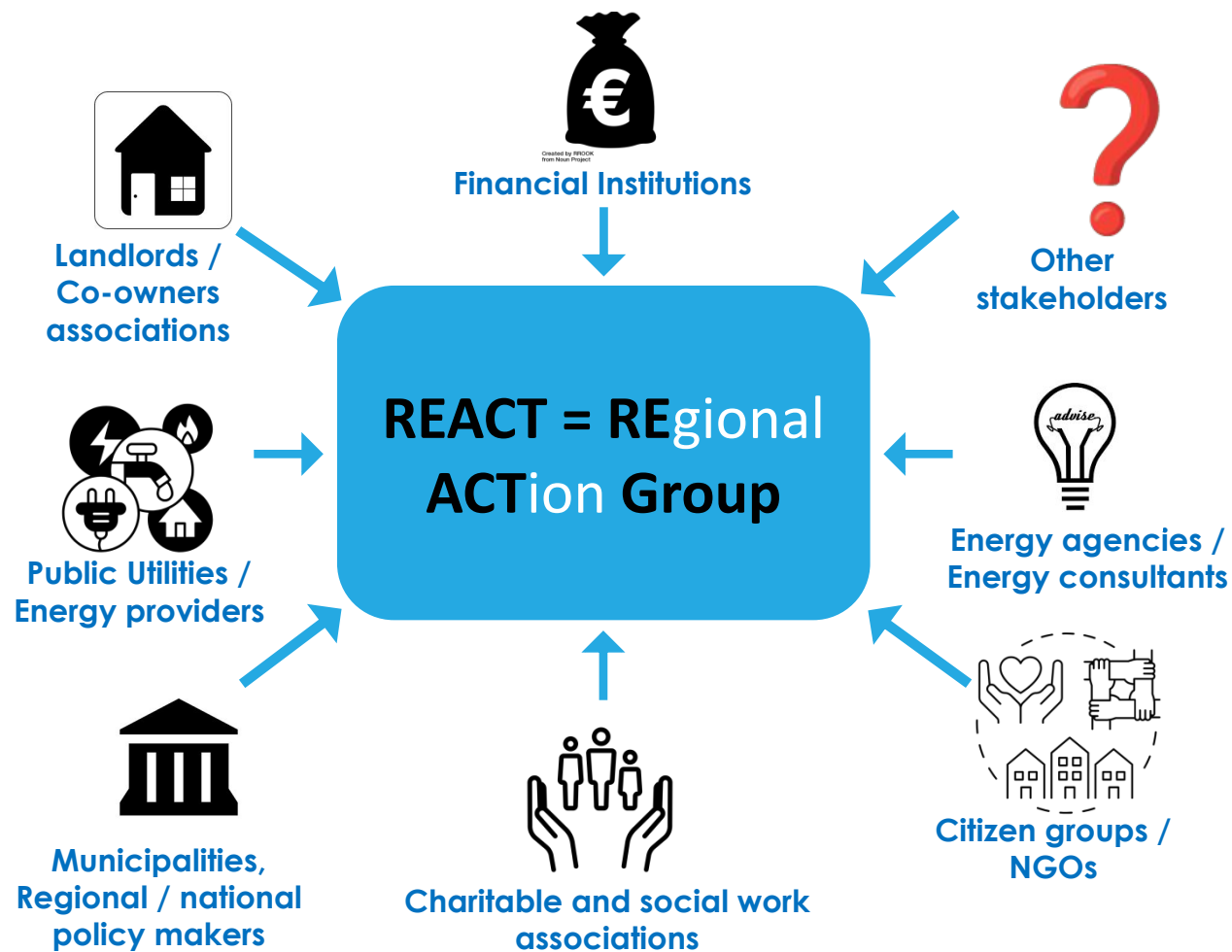
Engaging Key Stakeholders: The co-creation method



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Co-creation is a process where all stakeholders and target groups are participating together in activities that result in a solution (whether a policy measure or a renovation plan) that is beneficial for all participating parties.



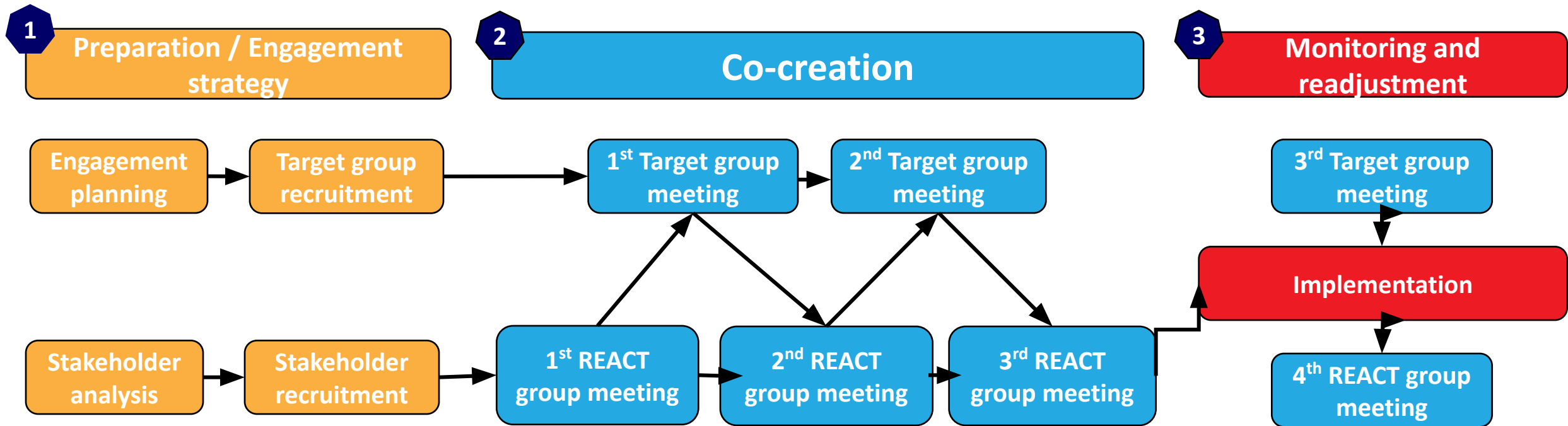
Benefits of co-creation

1. Makes use of different stakeholder perspectives and resources to spark creativity and enable innovative solutions;
2. Removes organisational barriers: invite various departments to represent various perspectives;
3. Includes target groups to ensure design is tailored to their needs;
4. Increases legitimacy among target groups and other stakeholders;
5. Facilitates data collection for impact monitoring.

Increased chances of successful implementation

Schematic co-creation process

2 Engaging stakeholders



Know your stakeholders / The People

Identifying the relevant stakeholders for the co-creation process is the first important step. This task can be guided by asking the following questions:

- Who are potential beneficiaries of a policy?
- Who could be adversely affected?
- Who would resent change and mobilise resistance against it?
- Who has which rights and responsibilities?
- Who has access to relevant resources, skills or key information?
- Who could be the voiceless groups?
- Whose behaviour has to change for success?

Group exercise: Identifying the need of stakeholder groups with Personas

- Understand the target group: create User Personas
- Residents = diverse group, you might need several personas

What to include?

- Age, Gender, Family status
- Income level
- Attitude and behavior
- Risks and motivating factors

Key Questions:

- What do residents want?
- What do residents need?
- In what conditions do residents live?
- What are their fears and obstacles?



[Editable](#) [Persona:](#) [Persona](#) [tool](#) [in](#) [PPTX](#) [format](#)
[Create your own persona using this template](#)





ANNA NOWAK
Pensioner

KEY ATTRIBUTES

Energy efficiency is something too technical for me. I save money where I can.

I don't trust my neighbours

The building manager should always be reachable

I cannot afford expensive renovations

Things should remain the same as long as possible

I don't want to leave debt on my children

I don't like if unknown unannounced craftsmen run around in my home.

ABOUT ME

I am 79 years old, and live alone in a big house from the socialist era, on the 6th floor. The house has 60 other apartments, the elevator is often broken and the central heating cannot be regulated.

MY STORY

Some months ago I noticed several water spots on my ceiling. I contacted the building manager. I live in this house since 32 years. I used to work as a secretary, but only part time to be able to take care of my children after school. My late husband did all things technical in the apartment.

ATTITUDES

Community engagement



Environmental awareness



Open to change



Level of financial savings



MOTIVATION

The best part of my week is Sunday. On this day, one of my daughters comes for Sunday lunch with my grandchildren.

CHALLENGES

My apartment has not been renovated ever since I moved in.



I can't get and don't want credit



I have no idea about technical details.



It is difficult for me to follow the content of the owner's meeting



Note to Trainers

At this point you can opt in or opt-out to the full module “Co-Creation”.

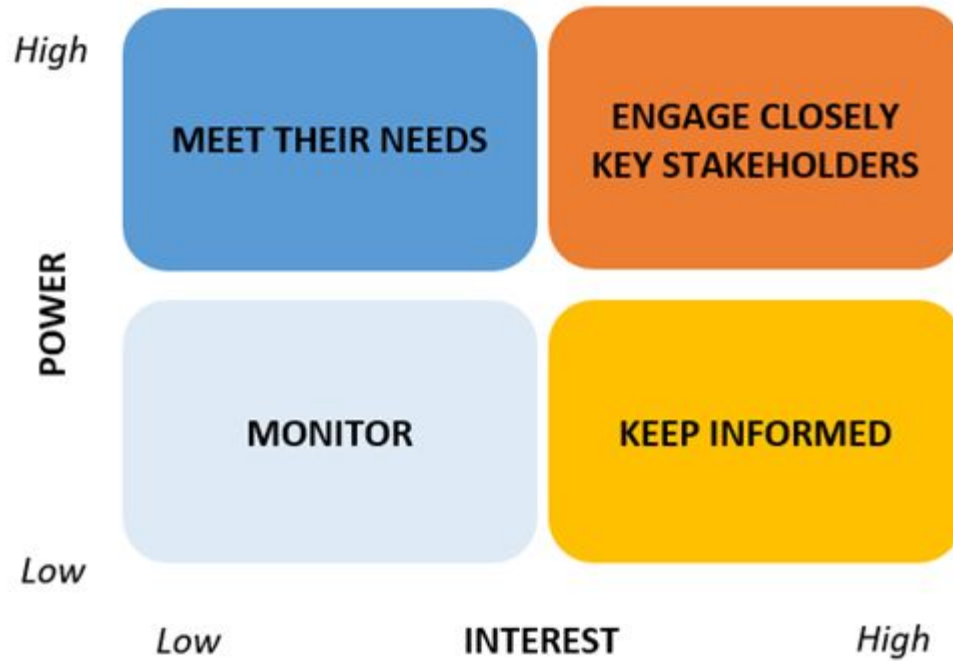


Created by Jodien Coquet
from Visual Project

Module Co-Creation:

[Slides with Notes: Engaging Key Stakeholders: The co-creation method](#)

2 Engaging stakeholders



The context analysis looks at projects, but also at actors that have a direct or indirect thematic connection with the renovation project.

The context analysis makes it possible:

- To recognise and use synergies
- Learn from the experiences/mistakes of others
- To avoid misunderstandings and disagreements

Implementation tip: When analysing the context, organise a small workshop with colleagues from the administration or with actors from outside the administration, such as representatives of environmental organisations.



[You can find a Checklist for the context analysis in the Handout!](#)

CONTEXT ANALYSIS CHECKLIST



Renovation activities/ programmes/ targets



Regular events in building to be used for promotion



Renovation activities completed in the past in the neighbourhood



City/Authority departments to be informed



Examples of good practice for acquisition of funds (for vulnerable households)



Is this my best effort?

Develop stakeholder specific strategies by context analysis

2

Engaging
stakeholders

The context analysis looks at projects, but also at actors that have a direct or indirect thematic connection.

Barriers for engagement	Target group(s)	Possible strategies
Lack of trust	All; Ethnic minority tenants	Engagement via intermediary organisations, e.g., NGOs, etc. Privacy-sensitive design of engagement
Lack of time	All; Single parent tenants (mostly female)	Enable individually scheduled participation Ensure efficient implementation of engagement formats Use of digital formats
Lack of interest	All; Female tenants	Communication of benefits Focus on function/benefit rather than characteristics of technical solutions Provision of incentives
Low sense of self-efficacy	All; Tenants with unemployed family members	Transparent communication of co-creation approach (role of tenants as experts in their own realm)
Lack of resources	All; Single parent tenants	Implementation of engagement activities in spatial proximity Use of digital formats
Lack of ICT hardware or skills	All; Tenants with older family members	Reliance on offline formats Bilateral training on how to use tools
Language issues / low literacy	All; Ethnic minority tenants	Engagement via intermediary organisations Non-technical language Translation of material
Low visibility / low representation in citizen groups	All; Ethnic minority tenants	Active recruiting in specific areas based on e.g., building data, unemployment rates, proportion of migrants etc.

Source: ENPOR Project context analysis of energy poor tenants
(Florin Vondung, Wuppertal Institute)

Engagement strategy in co-creation

Preparation

Resourcing

- reflect on the resources to facilitate the engagement
- vulnerable households might not have either the willingness or the ability to engage independently
- incentives for participation (material or immaterial)
- anticipation of potential barriers that may hinder participation and thinking of possible solutions / strategies to overcome these

Planning

- planning of the practical implementation of vulnerable involvement
- definition of concrete actions in the next steps
- groups should not exceed 10 persons
- reluctance to cooperate: planning needs to allow for a number of interactions with facilitating intermediary organisations

Recruiting

- critical issues with energy poor: shame, lack of motivation, discussing disadvantages with strangers.
- Involve intermediaries for energy poor: should be community-based and have long-lasting connection
- potential intermediaries: consumer associations, tenant associations, social welfare associations, religious organisations, quarter management, community groups, pensioner and women organisations.

2

Engaging stakeholders

Engagement strategy in co-creation

2

Engaging
stakeholders

Sensitizing

- appealing messaging: go beyond monetary savings and place emphasis on possible health and comfort improvements.
- develop a list of incentives and add a message to each incentive
- preparatory actions to be undertaken before implementing the co-design sessions
- bilateral contact with the recruited participants before the sessions in order to elaborate on the named aspects and to start building a trustworthy relationship

Facilitation

- dealing with a sensitive issue, skilled facilitation of the co-design sessions is crucial to both avoid stigmatization
- trusting environment, in which participants feel comfortable and inspired to share their experiences and ideas and to collaborate
- break the ice with harmless questions
- in-group discussions followed by the development of ideas. During this stage, all co-design tools (e.g., role playing, mock-ups, cards, canvas) should be used to empower participants and encourage collaboration and creativity. Three main types of techniques for co-design: telling, enacting, and making.

Evaluation

- focus on session outcomes and compare to your goals
- prepare for the next session: restart process

Engagement Strategy



Communication work can 'make or break' the co-creation process.

“How can I help?”

- Good communication process reduces friction.
- Following through communication actions in the co-creation format provides collaborative mindset.
- Communication activities can increase the legitimacy of decisions providing transparency and well-explained procedures.
- Good communication saves time for the team and the owners.

Co-creation element: communication

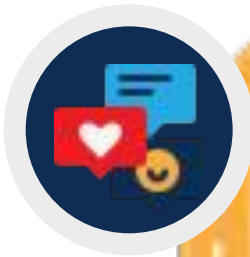
Existing networks

Use existing network structures to reach all relevant stakeholders



Communication as tool for acceptance

Communication measures prepared for resistance reactions and conveying the advantages helps reducing barriers of acceptance. Point out existing disadvantages if necessary



Meet meet meet

Regular meetings and well prepared feedback to concerns of the inhabitants. Regulation related changes should be timely communicated.



Choose your channel fitting to target group needs

Choose your channel considering the target group needs. Focus on positive results but do not forget the negative side-effects. Prepare toolkits, user guides with easy language and visuals. Connect the dots on complicated processes.



2

Engaging stakeholders



Potential incentives and corresponding messages:

- Chance to contribute their point of view in order to develop solutions that add value for both sides
- Higher energy efficiency corresponds with higher value of properties; Chance to grant higher credits
- Share best practice, services and products
- Free access to information and knowledge on possible solutions to create additional value
- Access to new funding, financial support, retrofitting grants
- Increase preparedness for climate change impacts: heat, cold, rain, green energy transition
- Help to achieve their own sustainable development goals
- Improve profitability, environmental credentials and social responsibility
- Find out information about energy poverty issues and engage with topics and targets specific to their needs
- The renovation plan does not consider property owners as a problem but as part of the solution

FRANCE RÉNOV



Service accompanied by a communication campaign using various channels such as general presentations, websites, short videos on social media and mobile demo sites. The videos have a storytelling approach, with renovators sharing their experiences on living comfort and provide concrete information about the costs and subsidies they received.



IN BRIEF

France Rénov' is a public service set up in 2022 to advise and support households in their energy renovation projects. It is run by the State in collaboration with local authorities, accompanied by a large-scale communication campaign using a wide variety of media to encourage homeowners to carry out high-quality energy renovation work. Since 2024, a travelling exhibition of two tiny wooden houses on wheels, is added to meet households across France at each station for two days. Visitors discover a fun exhibition entitled "La Maison de la rénovation" (The Renovation House), presenting the benefits of renovation, the main steps to be taken and the MaPrimeRénov' and MaPrimeAdapt' grants. They will then be meeting France Rénov' advisers in their area at the "Espace conseil" to discuss their ideas, find out about the main materials used to insulate their homes and launch their renovation project.



FACTS

Format: Communication campaign press inserts, radio spots, videos on social networks, freebies such as bread and pharmacy bags and mobile demo sites as tiny homes
Location: France
Area of influence: Supported by a network of over 570 Espaces Conseil France Rénov' and more than 2,400 advisers
Timeline: 11/09 to 17 /12/ 2023
Target group: owner-occupier, owner-tenant, professional, and local authority



MORE INFO

<https://france-renov.gouv.fr/>
<https://france-renov.gouv.fr/actualites/france-renov-part-en-tournee-pres-de-chez-vous>



RENOLUTION.BRUSSELS



A campaign for professionals and public building owners



IN BRIEF

In February 2023, the first RENOLUTION communication campaign was launched for renovation professionals such as architects, contractors, property developers and public building owners.

The aim is to raise awareness of thermal renovation with a circular approach and, more specifically, to inform them about the training, support and tools available in the Brussels-Capital Region.

The campaign is being publicised using billboards at town entrances, videos on YouTube, LinkedIn, Instagram and Facebook, and in specialist renovation magazines.



FACTS

Format: Renovation strategy
Location: Brussels Capital Region
Area of influence: Brussels Capital Region
Timeline: ongoing
Target group: owner-occupier, owner-tenant, professional, and local authority



MORE INFO

<https://renolution.brussels/fr/architectes>

<https://www.youtube.com/@renolution.brussels>



Renolution Brussels

@renolution.brussels · 36 Abonnenten · 71 Videos

RENOLUTION, c'est la stratégie régionale pour la rénovation des bâtiments de la Région de ...

Abonnieren



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Break

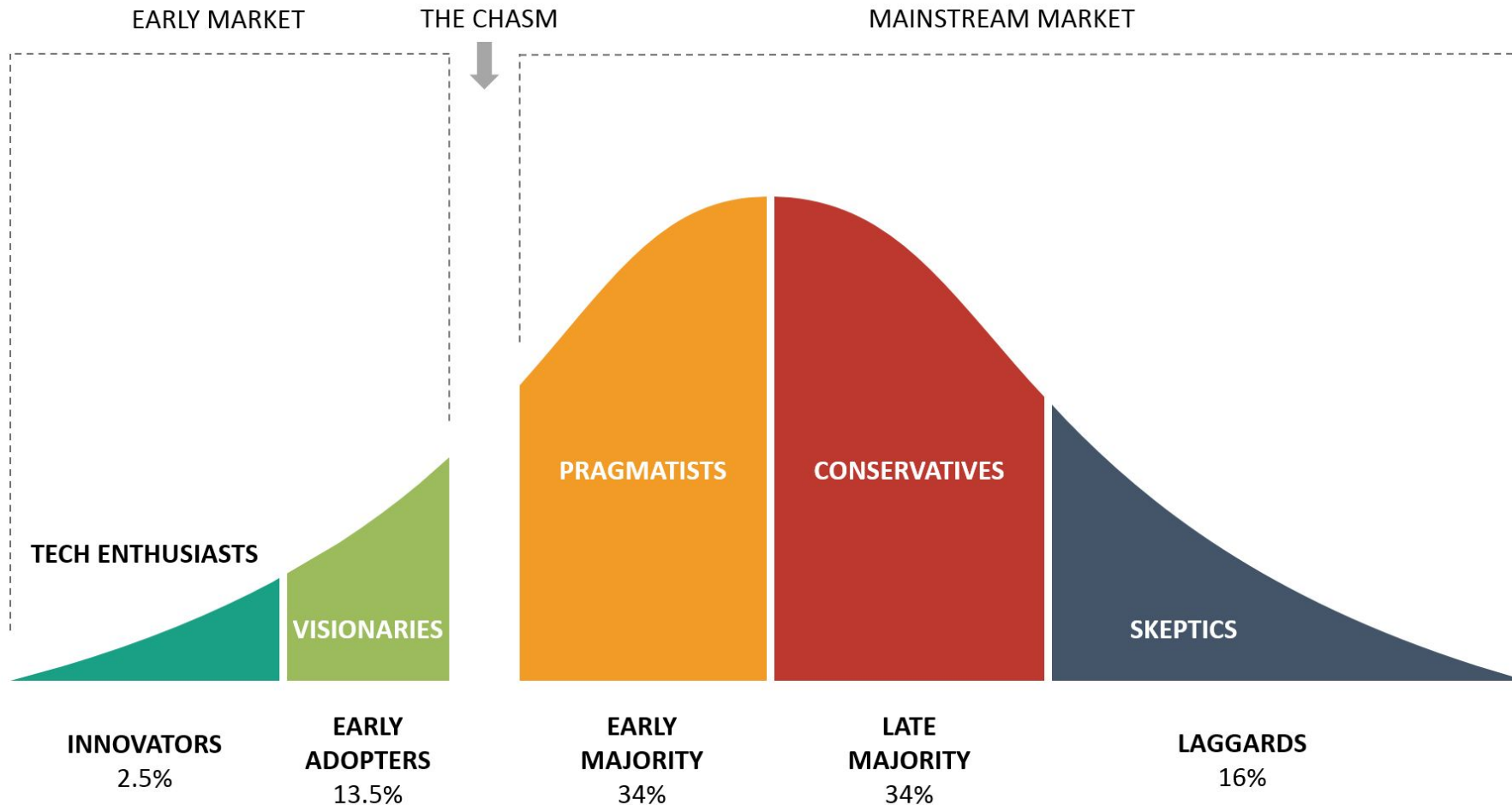


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Exercise: Prejudices of homeowners about the renovation process

Task: Think of biases and scepticism that prevent stakeholders to engage in the co-creation process of renovation. Take a post it and stick it to the flipchart.

What is the problem then? Biases and Scepticism



Learn more in the Slideshow: [Biases and Scepticism](#)

What influences people to engage with the change that the renovation process brings?



3

Barriers to
stakeholder
engagement

- **Relative advantage over the status quo** - eg. what will I get if I agree to the renovation?
- **Compatibility with the existing situation** - eg. the effect of a higher energy efficiency standard
- **Complexity** - eg. if I only hire a window maker who changes my window in 1 day or if I agree to insulate the entire house over the course of several months and then change the windows as well...
- **Trialability** - e.g. I cannot test before buying (like a car)
- **Observability** - e.g. can I see it somewhere so that I am convinced that it is good?

Exercise: How to reach Pragmatists?

3 Groups:

1. Segmenting
2. Build a strong word-of-mouth reputation
3. Find your gatekeepers

Segmenting group: focus on reaching the niche group

Word-of-mouth reputation group: establish a strong reputation discussing ways and factors

Gatekeeper group: find your gatekeepers and consider what will make them get engaged

Exercise: Speaking with the Vulnerable Social Groups

Situation Description:

Energy experts visits one of the meetings of apartment owners to present the possibility of the renovation of the multi-family building. After the expert finished the presentation, the skeptical audience started to ask questions about the benefits of renovation and the overall process. The group is concerned about the necessity of renovation at all, prices and financing opportunities, unclear future, and the overall complex process of not knowing when to start, questioning environmental, economic, and social benefit

Roles:

- Energy expert
- Observer
- Residents



Use the cards for role play

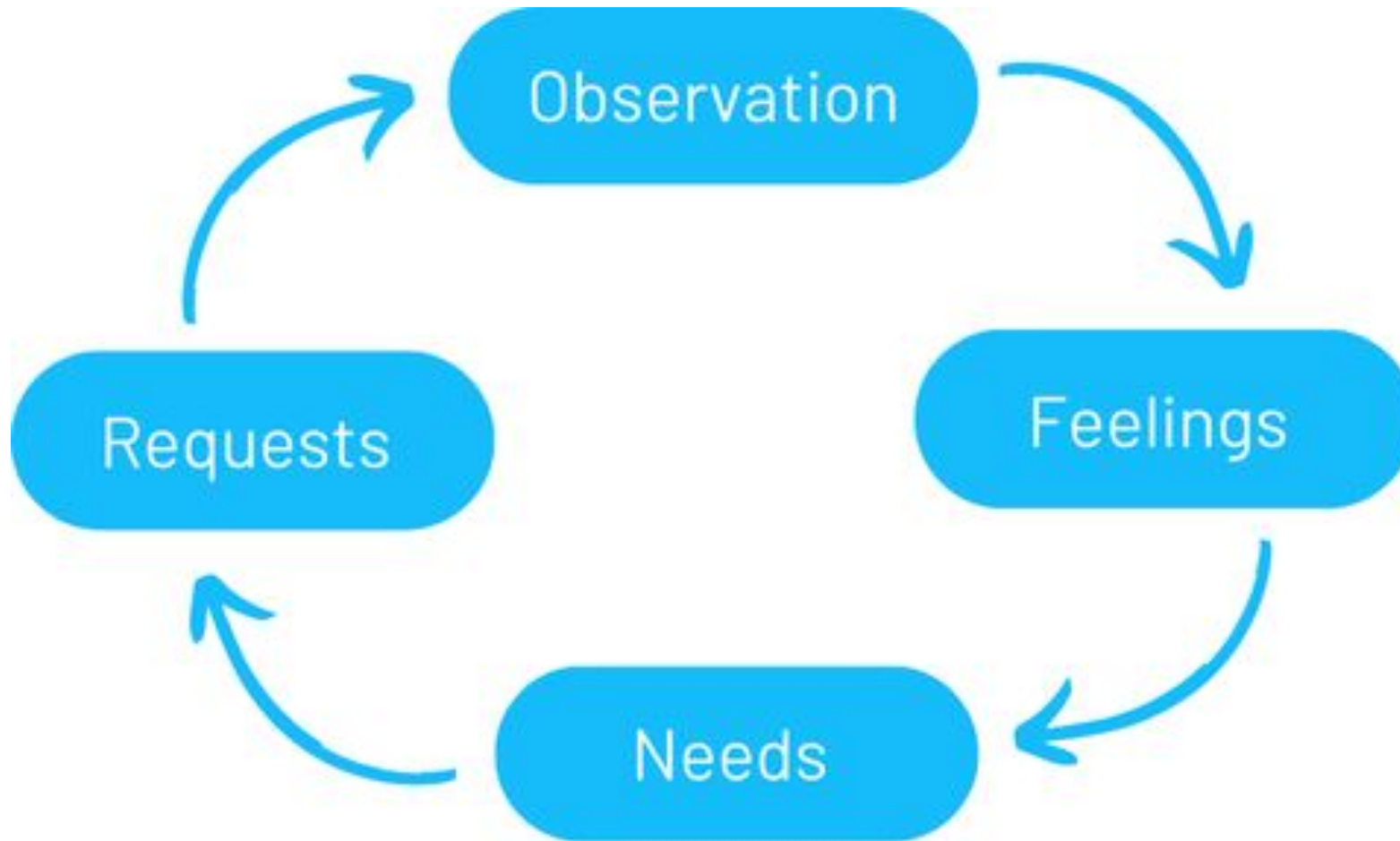
- Participants can feel pressured into taking part.
- Be aware on what impacts the participation may have on participants.
- Be careful asking about potentially traumatic experiences: cold, mould, dangerous conditions of the building.



Let every person know that you have heard and understood them. How?

- Face the speaker and have eye contact,
- Monitor your facial expressions - it reveals your emotions,
- Nod your head, smile and make small noises like “yes” and “uh huh”, to show that you’re listening and encourage the speaker to continue,
- Do not interrupt,
- Repeat back to the people what they have just communicated,
- Take care not to inadvertently approve or disapprove of the information just given,
- Ask open questions: this demonstrates an interest in the individual and their circumstances.





Learn more in the Slideshow: [Non-violent Communication](#)

Conflict

To clash or engage in a fight, or a confrontation between individuals or groups. It is generally characterised by a breach of peace or understanding among parties involved.

1. Identify the source of the conflict;
2. Look beyond the incident;
3. Request solutions from disputants;
4. Identify solutions which the disputants can support;
5. Get the disputing parties to agree to the prescribed solution(s)

Disrupted group dynamics

One or more members of the group experiences difficulties in following the process with the group.

1. Identify the member
2. Request member to describe the issue
3. Request member to list background information
4. Ask member for a scenario in case of non-handling
5. Ask member to estimate envisaged results
6. Ask for concrete change vision
7. Ask for what involved parties should do to reach the vision
8. Formulate action result with involved parties
9. Formulate alternative action in case the first solution doesn't work
10. Check back with member if he/she is back on track.



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4

Work with
the
residents

Creating Energy Savings & Renovation Opportunities:

Practical Soft Measures, Renovation Strategies & Funding



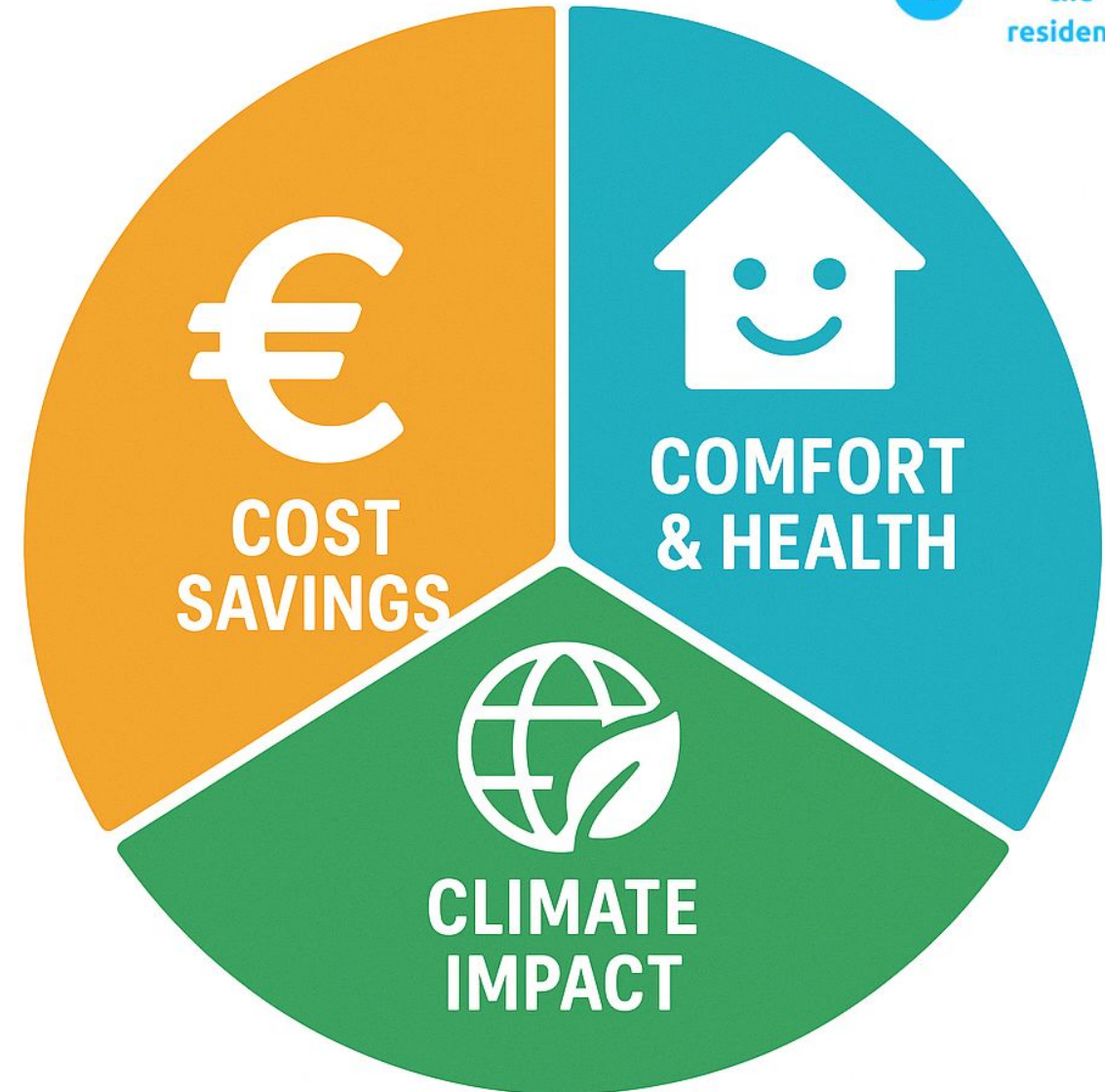
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Why Energy Efficiency Matters

4

Work with
the
residents

- Lower energy bills for households & public buildings
- Reduced greenhouse gas emissions
- Improved comfort and health
- Supports local economy & job creation



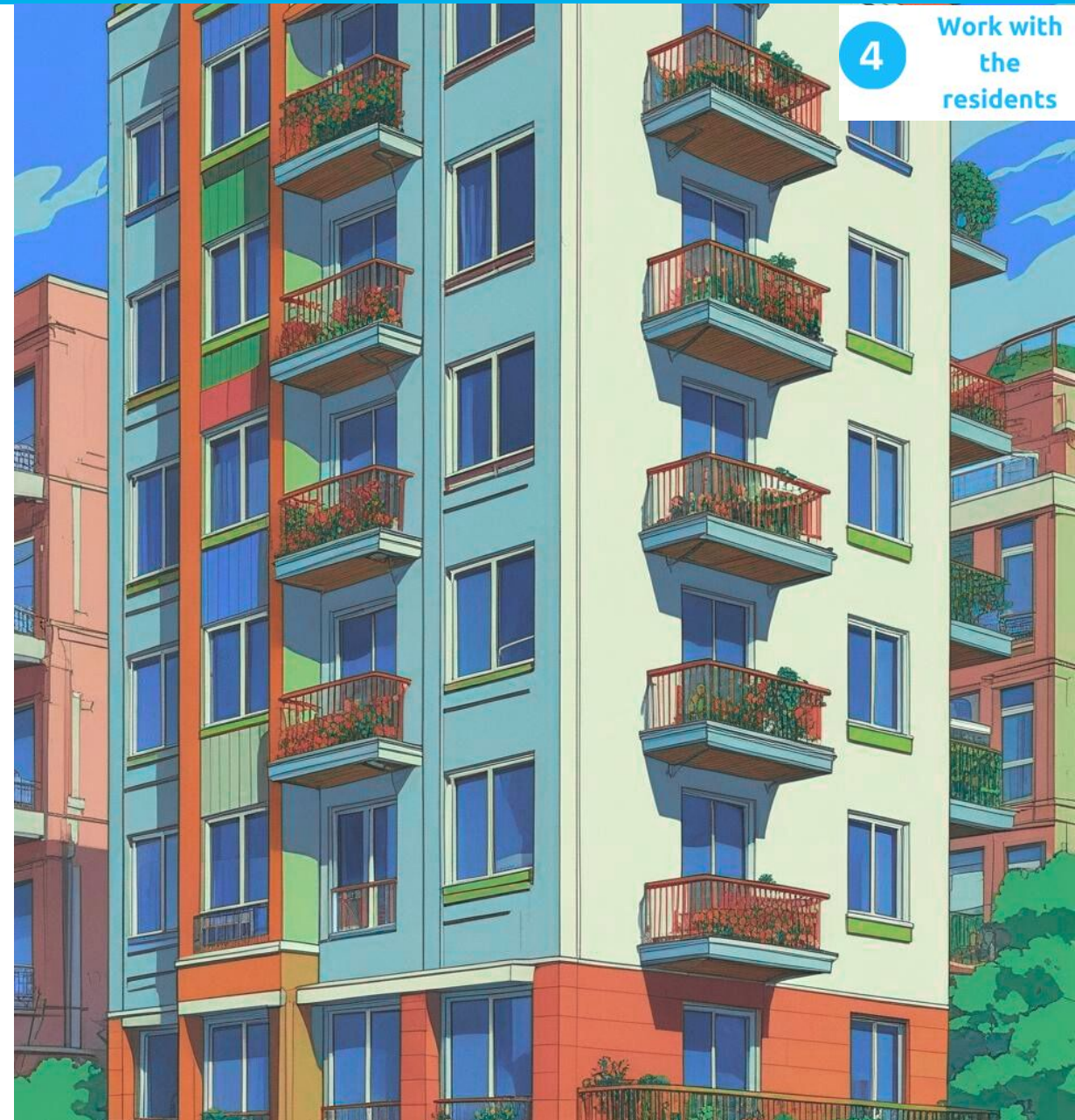
WHY?

Decarbonisation of the building sector is a prerequisite for achieving carbon neutrality.

Energy efficient buildings contribute to low emissions and contribute to carbon neutrality.

Existing not renovated buildings deteriorate and cause more costs to the owner and to the inhabitants.

Living in an unrenovated old and inefficient building can be bad for the health: it is too cold in the winter and too hot in the summer: damp, mould, health problems can occur especially with vulnerable and energy poor households.



4

Work with
the
residents

How?

Municipalities can forge a key link among financiers, craftsmen and homeowners to ensure successful financial schemes to support energy efficiency upgrades.*



Advise on renovation and vulnerable households



Help to identify relevant renovation measures



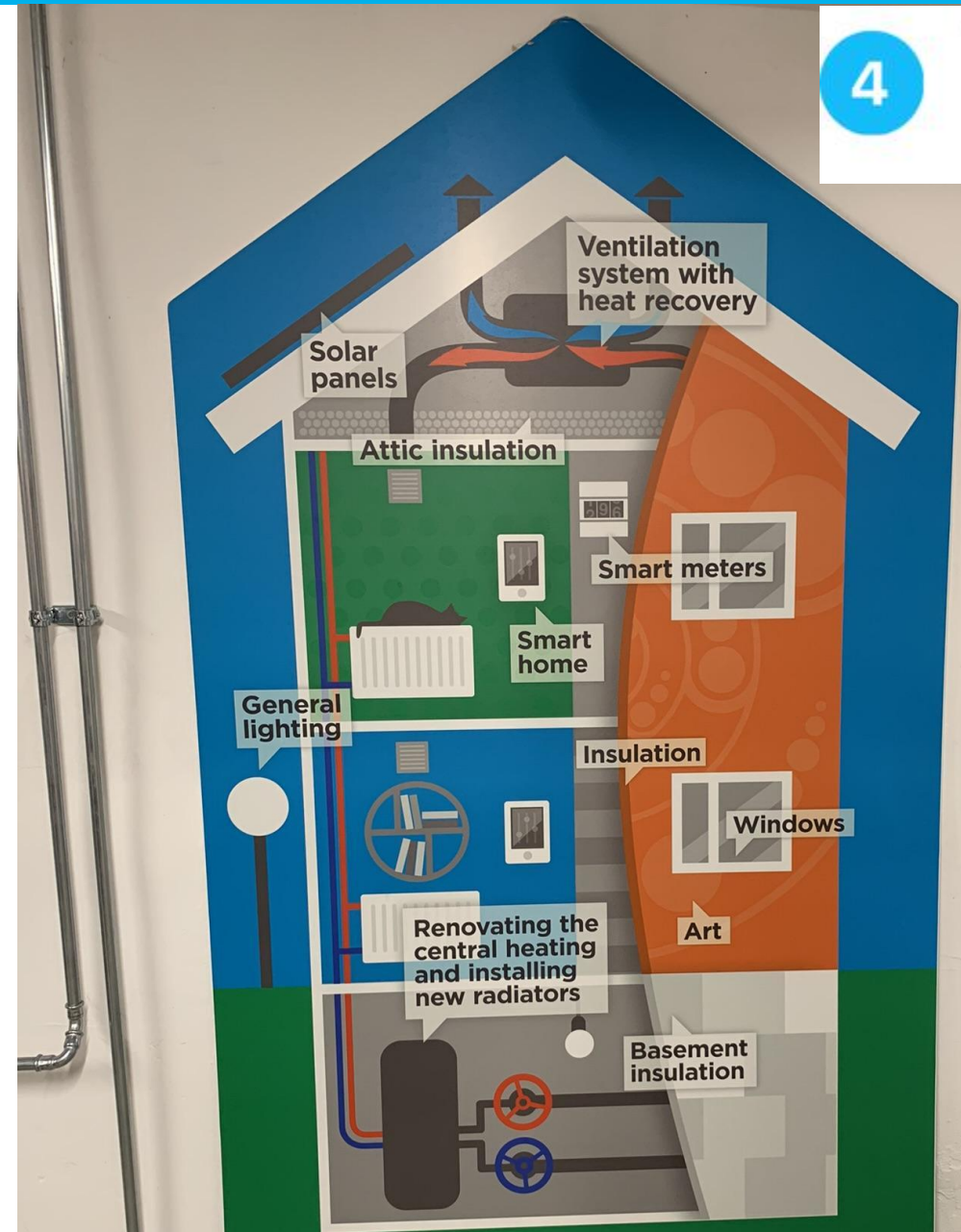
Make it easier to find appropriate craftsmen



Make it easier to apply for subsidies

What?

- Wall, roof, and basement insulation
- Window and door replacement
- Efficient heating & cooling systems (heat pumps, biomass boilers)
- Renewable energy integration (solar PV, solar thermal, heat pumps)
- Ventilation improvements with heat recovery
- Heating pipe insulation



Smart Renovation Example (Tartu MABs in the framework of SmartENCity)



4

Work with
the
residents

Solar panels

The renewable energy generated from sunlight will cover the ventilation and general electricity consumption of the building.

Ventilation system with heat recovery

This keeps the air in the apartment fresh and clean. The recovered heat from the air that is pumped out is used to pre-heat incoming the air or directed to the central heating system.

Smart home

This enables controlling the heating and ventilation of the apartment and monitoring the energy consumption of the apartment and the building.

General lighting

New energy efficient lights are installed in the corridors, basements and outside the building.

Renovating the central heating and installing new radiators

All buildings will receive a new central heating system that heats the apartments, produces hot water and preheats the incoming air. The system allows the residents to control the temperature of their apartments.

Smart City platform

Gathers data on the energy consumption of buildings, which also enables to monitor and analyze the energy consumption of the city, and provides input to the smart home system.

Attic insulation

Attic floors are insulated with up to 40 cm of bulk wool to keep the building warm.

Windows

All windows are replaced with highly insulating triple-glazed windows. The windows are installed in the insulation layer to minimize heat loss. The heat conduction number of the windows is lower than 0,95 W/m²K.

Smart meters

These make gathering and forwarding consumption data easy. Data on heat, water, electricity and gas consumption are sent to the Smart City platform and energy providers.

Insulation

Buildings are insulated with 20 to 30 cm thick EPS insulation or mineral wool.

Art

Every building will receive an original work of art in order to enrich the public space and increase the individuality of buildings. Artworks are created by highly recognized artists from Tartu, Estonia and abroad.

Basement insulation

Basements are insulated with 10 to 20 cm thick EPS insulation.

Consumption based AVG:

Before: 257; After: 101.

Designed EPC 90 kWh/m²•a
(standard use).

A-class EPC<105

AVG construction cost: 506 €/m² (17 buildings):

14 pcs under 600 €/m²

9 pcs under 500 €/m²

4pcs under 400 €/m²

Soft Measures for Energy Savings

- Energy audits for public and residential buildings
- Awareness campaigns for residents and local businesses
- Energy-saving challenges in schools and communities
- Smart meters & monitoring energy use
- Behavior change nudges: district renovation campaigns, heating checks, neighbor-to-neighbor walks

4 Work with the residents



Tartu: A group visits the renovated MAB with SmartENCity approach

TOOLBOX



Supporting renovation process - [Editable flyer for owners/tenants](#)
Communication Campaigns - [3 good practices](#)



ENERGY CARAVAN



An energy consulting campaign at the neighbourhood level with high acceptance and high implementation rate also increasing assignments of craftsmen at a regional level



IN BRIEF

A municipal energy consulting campaign designed to increase the rate of retrofiting of private building stock. It reverses the standard approach of energy advice: municipalities offer citizens in a selected neighbourhood free energy advice from neutral and qualified consultants. The consultation takes place directly at the property and on all building-relevant topics. Thanks to the neighbourhood approach, the Energy Caravan is just as suitable for municipalities with less than 4,500 inhabitants as for big cities.



KEY FIGURES

Over 100 German municipalities
Implementation rate of recommended measures 60%



FACTS

Location: Municipalities (Germany, Luxembourg)

Area of influence: Small or big municipalities, with district/ neighbourhood approach

Timeline: cca 15 weeks

Target group: Homeowners



MORE INFO

<https://www.climatealliance.org>



MAIN ACHIEVEMENTS



Community engagement



Environmental awareness



ENERGIE APERO



An aperitif is a drink, that is consumed before a meal. It is a popular French custom to have an informal drink with colleagues, neighbors or friends, with a time limit, as the aperitif ends when the meal begins.



IN BRIEF

Volunteers invite between 5 and 15 people to their homes to take part in a meeting led by an advisor. This friendly event provides an opportunity to discuss best practices for combating energy waste and reducing energy consumption.



MORE INFO

https://metz.fr/actus/2016/160607_apero_energie.php



FACTS

Location: Metz Métropole

Area of influence: Metz Métropole

Timeline: From May to October

Target group: Citizens

Outreach: cca 200 participants in Summer / 150 in Autumn (2012)



MAIN ACHIEVEMENTS



Community engagement



Environmental awareness



STROMSPARCHECK



Peer-to-peer service for low-income households in their homes for free on how to save energy and water and daily life issues related to energy



IN BRIEF

Advisers are formerly long-term unemployed people, who completed extensive training, understanding the difficult situation of the clients. They visit households that signed up at the municipality, a database calculates potential savings. Beyond practical tips on how to save energy, they install energy and water-saving devices. It combines climate protection, social support, education and employment. The programme also promotes education on active participation in the energy transition and helps long-term unemployed people integrate into the labour market.



KEY FIGURES

CO2 saved: over 970 000 tons
Customers: over 460 000 households



FACTS

Format: Home visits
Location: German municipalities
Timeline: continuous
Run by: Caritas with municipalities
Target group: low income households who sign up to receive the service



MORE INFO

<https://stromspar-check.de/>



MAIN ACHIEVEMENTS



Stromspar-Check

Klimaschutz sozial gestalten



THERMOGRAPHIC WALKS



a friendly format with your neighbours for awareness raising around energy consumption and building energy renovation



IN BRIEF

Equipped with a thermal imaging camera, an energy advisor will show you where the heat is escaping from your home, and then discuss with you the best technical choices to remedy the situation. The walk (about an hour and a half) is supervised by an Energy Advisor. The local authority proposes this service (early in the morning for best results)



MORE INFO

<https://tout-metz.com/balades-thermographiques-metz-metropole-2013-580.php>

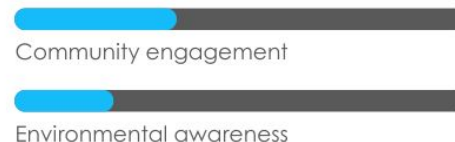


FACTS

Location: at municipality level
Area of influence: a district, a street
Timeline: duration of the campaign: one month / The walk about an hour and a half in the winter season
Target group: Citizens



MAIN ACHIEVEMENTS



Combining behaviour change with building upgrades **maximises energy savings**.

But

Energy poor households adapt already their energy use to small income: pushing it further may be dangerous for health and building structure (eg. mould through cold walls).

Solution example: Learn and implement efficient ventilation+ improved insulation and efficient heating = higher comfort & reduced costs for building owner and user

Municipal Actions: How to make it happen?



4

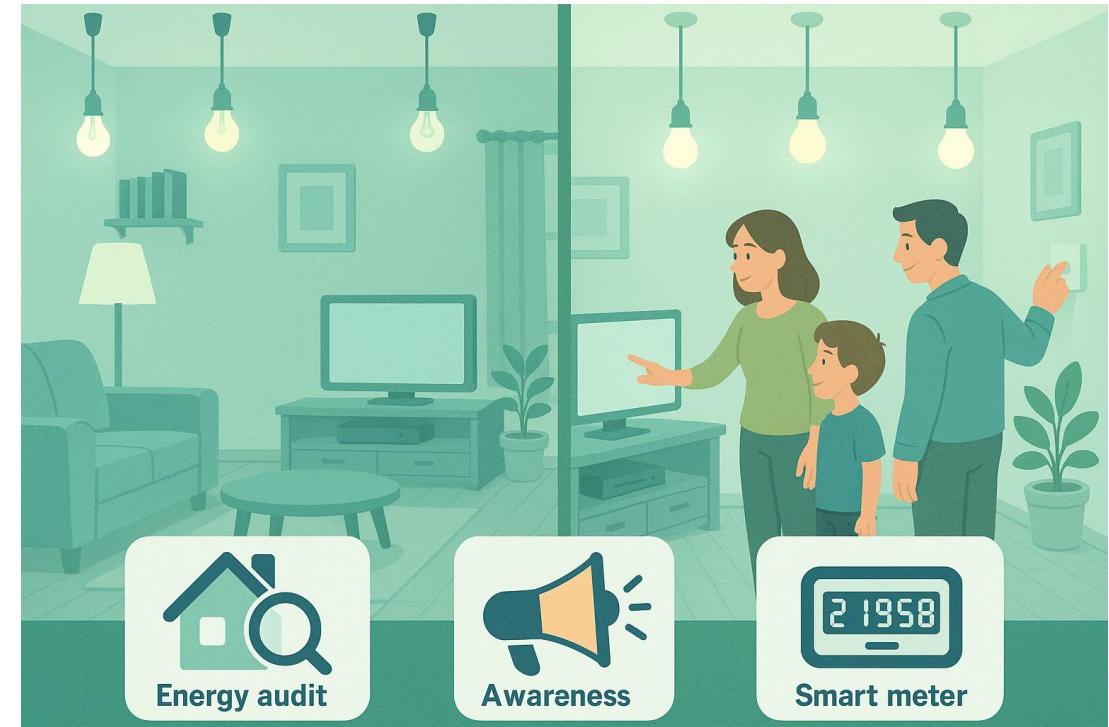
Work with
the
residents



- **Prioritize and support energy audits of private buildings** – finance audits for energy poor
- **Develop a municipal renovation roadmap and gather building data** – consider overlay of social structure by identifying energy poor owners and tenants
- **Monitor and report results:** add them to your SECAP reporting



- **Inform and engage citizens in regular communication campaigns** – consider messages specifically for energy poor
- **Secure funding for own projects and citizen multi apartment buildings** – incorporate energy poverty in the design for social support, make sure conditions are suitable for big and small investments – reduce access barriers for small owners
- **Implement pilot projects** - Organize neighbourhood walks engaging flagship renovations



- **Organise interdepartmental capacity buildings in the municipality**
- **Reduce bureaucracy to access support** – incorporate energy poverty in the design for social support
- **Enhance information management among departments** – adapt your network so that all relevant departments have the information on what renovation measures are possible.



- **Set up one-stop-shops** for renovation for citizens with municipal support. Consider community financing offers for citizens
- **Support multi apartment building managers** with further education offers
- **Offer small incentives to citizens** to do energy checks before renovations: Encourage small investment energy efficiency actions as nudges. Eg. update your building regulations to allow balcony solar panels and support installations



Case Study Example

Location: (Editable placeholder for a municipality)

Actions Taken:

- Soft measure: (Energy-saving workshops for teachers, Energy saving week for pupils by teachers)
- Hard measure: (Retrofitting municipal school building)
- Funding: (National grant + municipal co-financing)

Results:

- Xxx % energy reduction
- Improved indoor comfort

TOOLBOX



Created by Adam Cogan
Renew Project

One Stop Shop Community of Practice: [EU Peers](#)

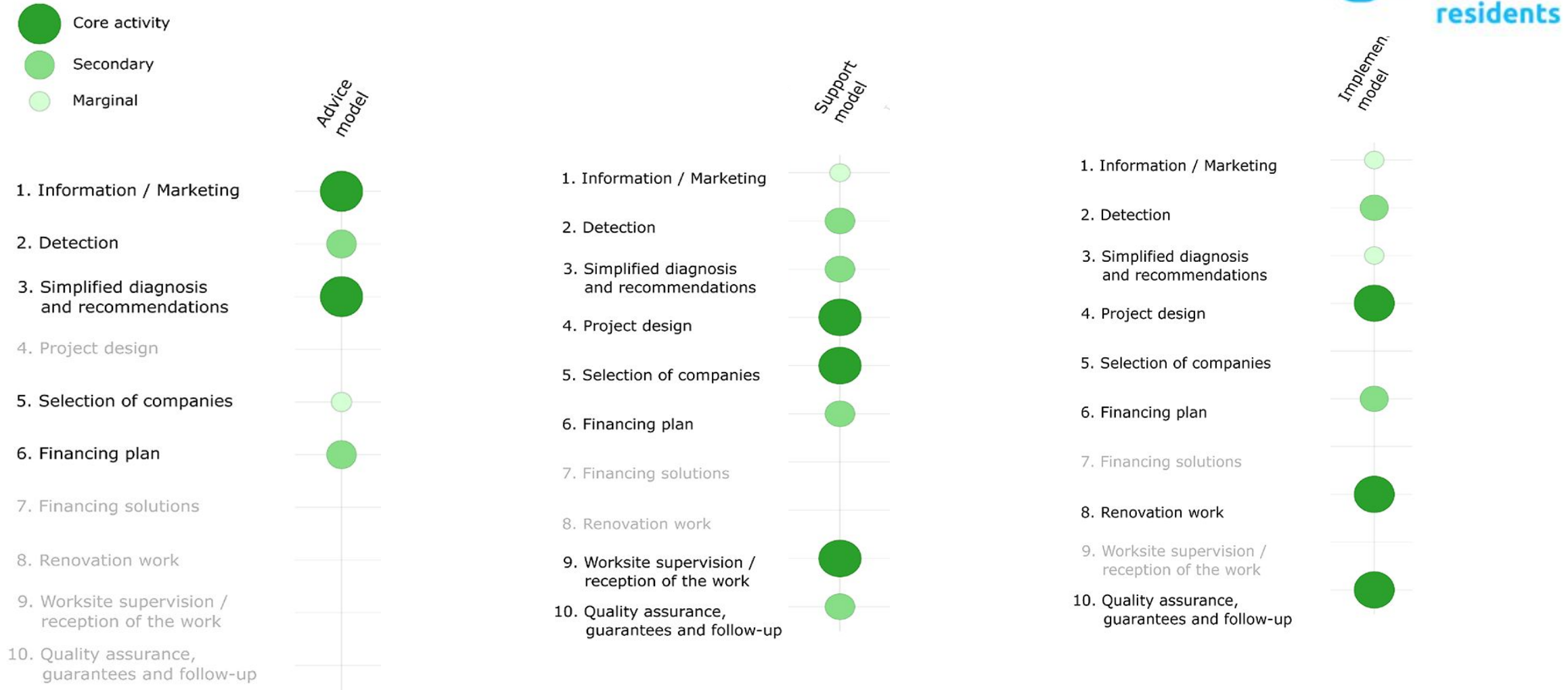
Funding renovations: EU level financial tools

Database on the available financial support options, find your first inspiration [HERE](#)

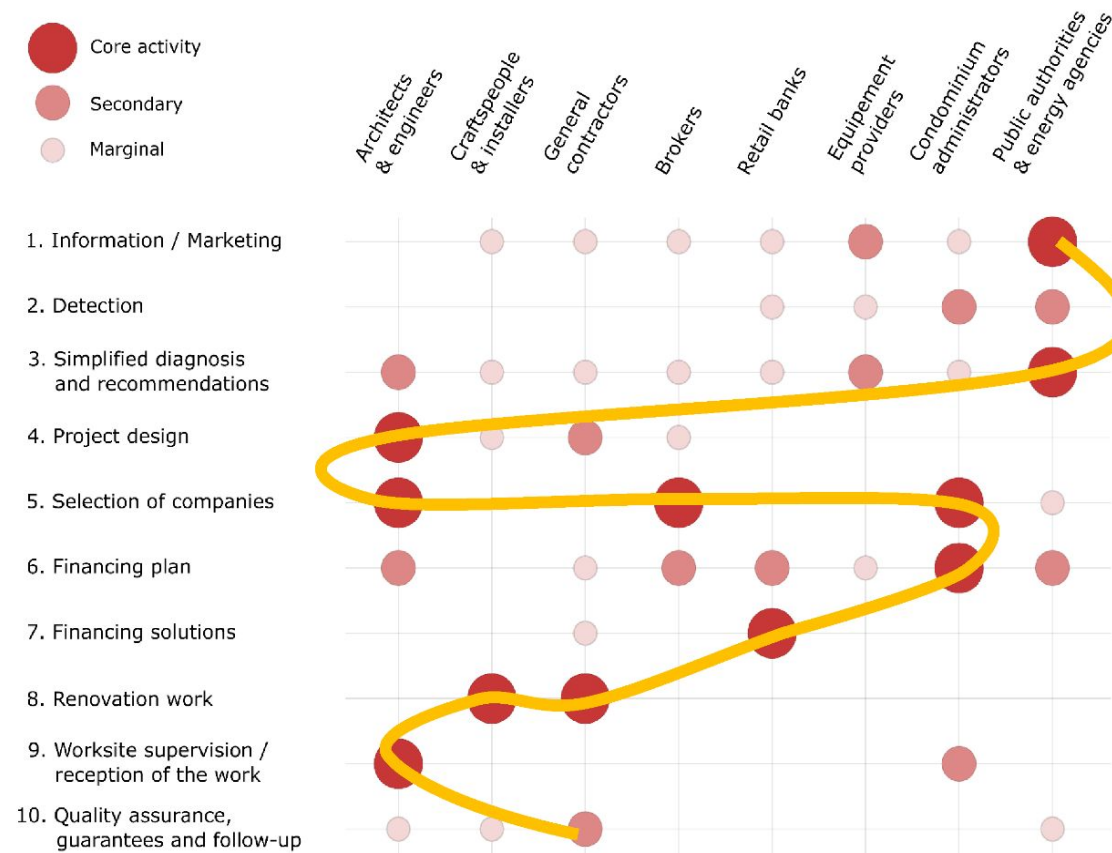
RENOVERTY's [Slideshow on types of financial instruments in various countries for inspiration](#)



One-Stop-Shops = Integrated Home Renovation Services



The windy journey of home energy renovation





CENTRAL & EASTERN EUROPEAN
SUSTAINABLE ENERGY NETWORK
·
CEESEN-BENDER

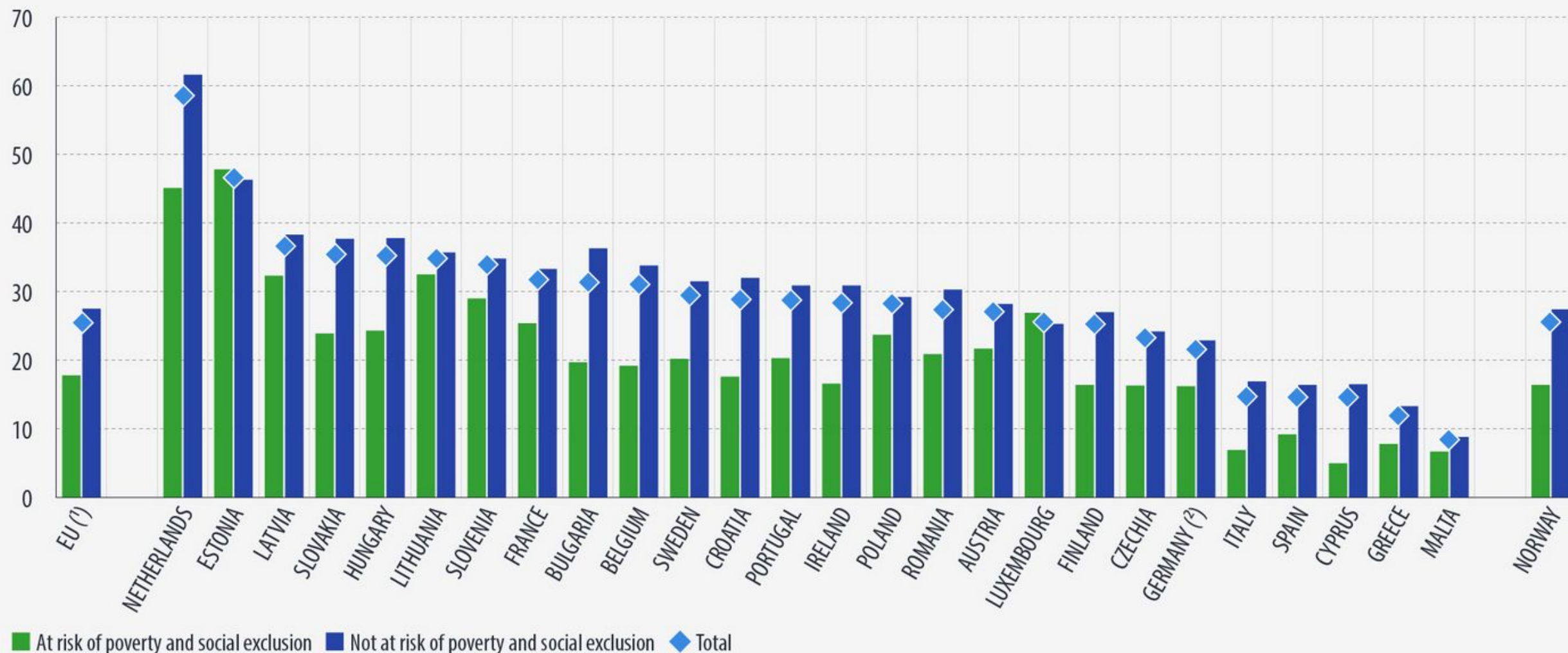
Financial Support for Building Renovation Beyond the National Level



Co-funded by
the European Union

People living in dwellings in which energy efficiency improved in the last 5 years, 2023

(% of the population aged 16 or older; by current risk of poverty or social exclusion)



Note: ranked by the total percentage of persons living in dwellings whose energy efficiency has been improved in the last 5 years.

Data for Denmark not available.

⁽¹⁾ Estimated. ⁽²⁾ Low reliability.

- RRF and cohesion funding combined will provide over 66 billion EUR for energy renovation across the EU until 2029

Current Cohesion Policy Funding (2021-2027)

- **€10.6bn** is allocated to renovation and energy efficiency projects in the **public sector**.
- **€6.5bn** of EU funds is earmarked for energy renovation of the **housing stock**.
- **€2.9bn** is allocated to **enterprises** subject to energy efficiency requirements.

2021-2027 Cohesion Policy Funding for Building Renovation



Cohesion policy funding planned for renovation and energy efficiency, by member state and building segment in €7

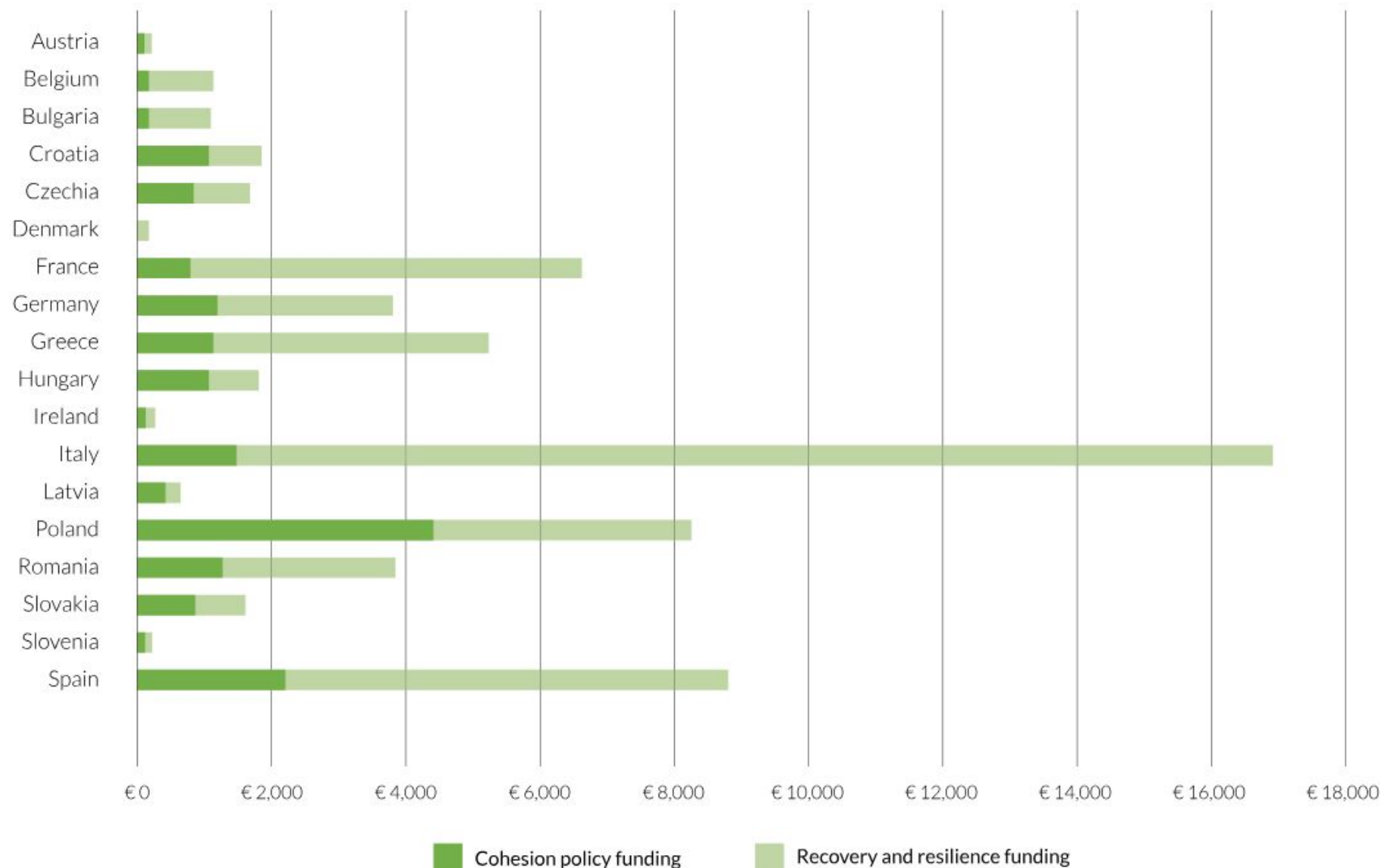


Source: Renovate Europe. (April, 2023). 2021-2027 Cohesion policy support for energy efficiency and building renovation

- National Recovery and Resilience Plans
- In 2021, the [Renovate2Recover study](#) found that amongst the 18 Member States' NRRPs analysed, €39.9bn* was allocated buildings renovation (about 8% of total)
- Planned RRF **investments are concentrated in the residential sector**, which receives over €23bn (58%) of funding.

The Recovery and Resilience Facility (RFF)

Planned funding for renovation and energy efficiency through cohesion policy and the Recovery and Resilience Facility by member state, in €m²⁴



Source: Renovate Europe. (April, 2023). 2021-2027 Cohesion policy support for energy efficiency and building renovation

Provides financial solutions for housing providers, municipalities, and companies in the housing sector

Available to finance:

- Innovative Housing
- Renovated Housing
- New Build Housing



Check out if your project qualifies for support: [The EIB Group Green Checker](#)

Provides **technical assistance grants** for public and private entities.

- Public sector: Preparation costs for design and implementation of energy efficiency, building-integrated renewable energy investments, and innovative urban transport.
- The technical assistance grants cover up to 90% of the project's preparation costs.**
- Residential sector: support for private individuals and homeowner associations to prepare and implement energy efficiency renovations and renewable energy projects targeting privately and publicly owned single-family and multi-family buildings
- Supports investment programmes above €30 million with a three-year period.**



Supports EU Member States, Candidate Countries and other partners in their work on **public-private partnerships (PPPs)**

Well-managed and regulated PPPs can be effectively mobilized for the housing sector

The EPEC offers:

- Sharing good practice and addressing practical issues in PPPs implementation
- Support in the development of PPP legal and regulatory frameworks, institutional arrangements, and processes



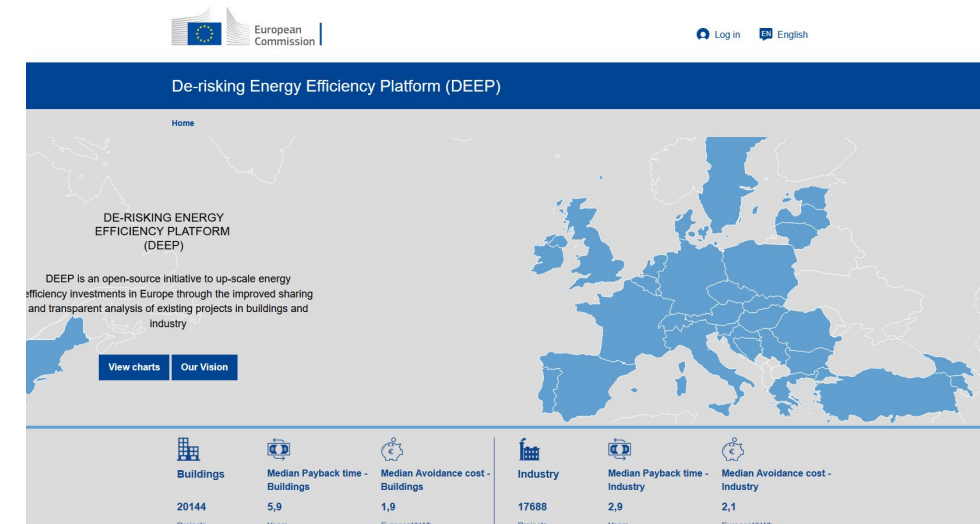
Provides financial support for building renovation projects across the EU, aiming to boost energy efficiency and contribute to climate goals.

- **Guarantee fund, leveraging private and public investment.**
- The InvestEU Advisory Hub - connects project promoters and intermediaries with advisory partners, who work directly together to help projects reach the financing stage.
- Request advisory support: [the Central Entry Point](#)



Aims to increase private financing in energy efficiency, supporting the implementation of the Energy Efficiency Directive and the Energy Performance of Buildings Directive.

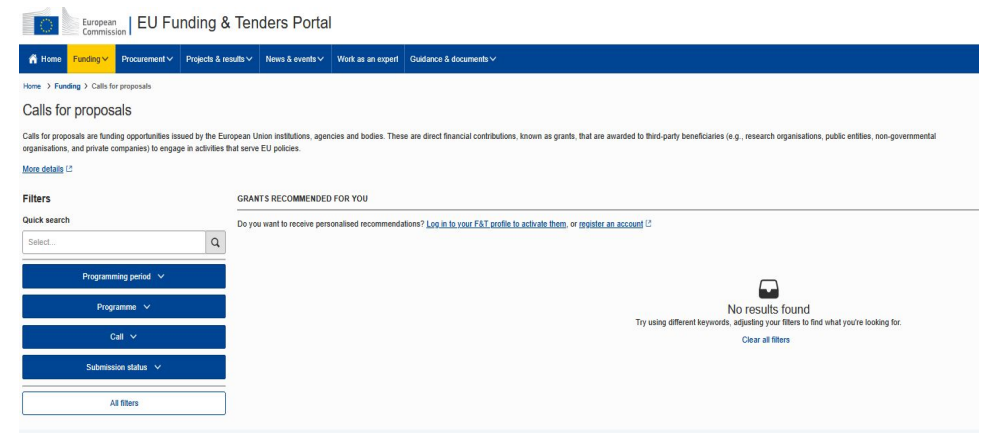
- Brings together the European Commission, the 27 EU Member States, financial institutions and other relevant stakeholders
- Consists of: General Assembly, Expert Platform, National hubs, the Secretariat



[DEEP - the de-risking energy efficiency platform](#)

Supports the delivery of EU policies in the field of sustainable energy

- A budget of nearly EUR 1 billion from 2021 to 2027
- Supports also one-stop shops for energy renovations, skills development, and actions to tackle energy poverty



[Funding & tender opportunities portal](#)

[Support for Applicants](#)

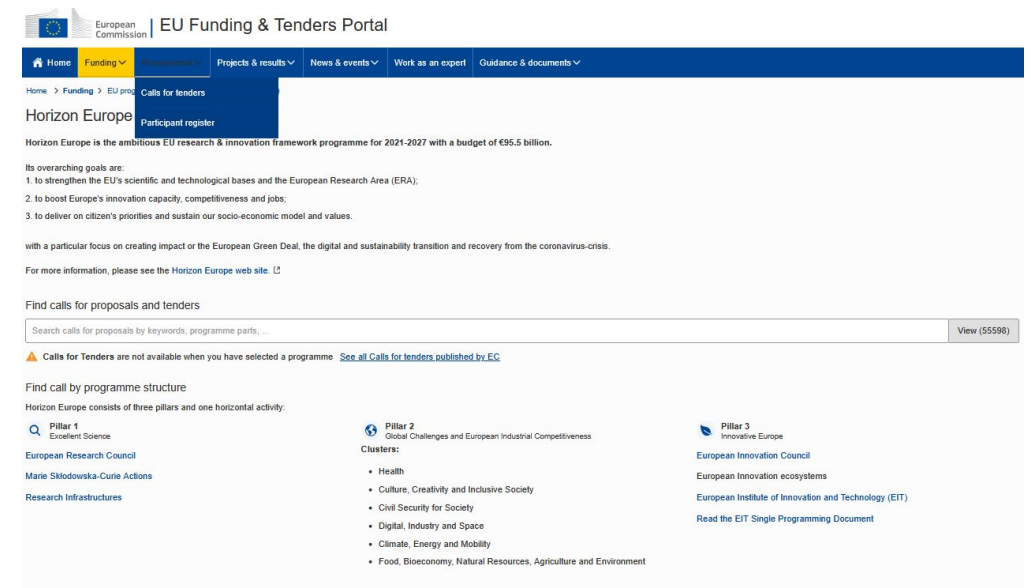
Key funding program for research and innovation

Contact Partnerships!

Follow -> [Partnerships in Horizon Europe](#)

Built4People Partnership

[Funding & tender opportunities portal](#)



- €864 million for the period 2021-2027
- Tailor-made technical expertise to EU Member States to design and implement reforms
- Does not require co-financing from Member States
- Technical Support to implement reforms in the context of EU economic governance, Recovery and Resilience Plans, economic adjustment programs, reform at own initiative.



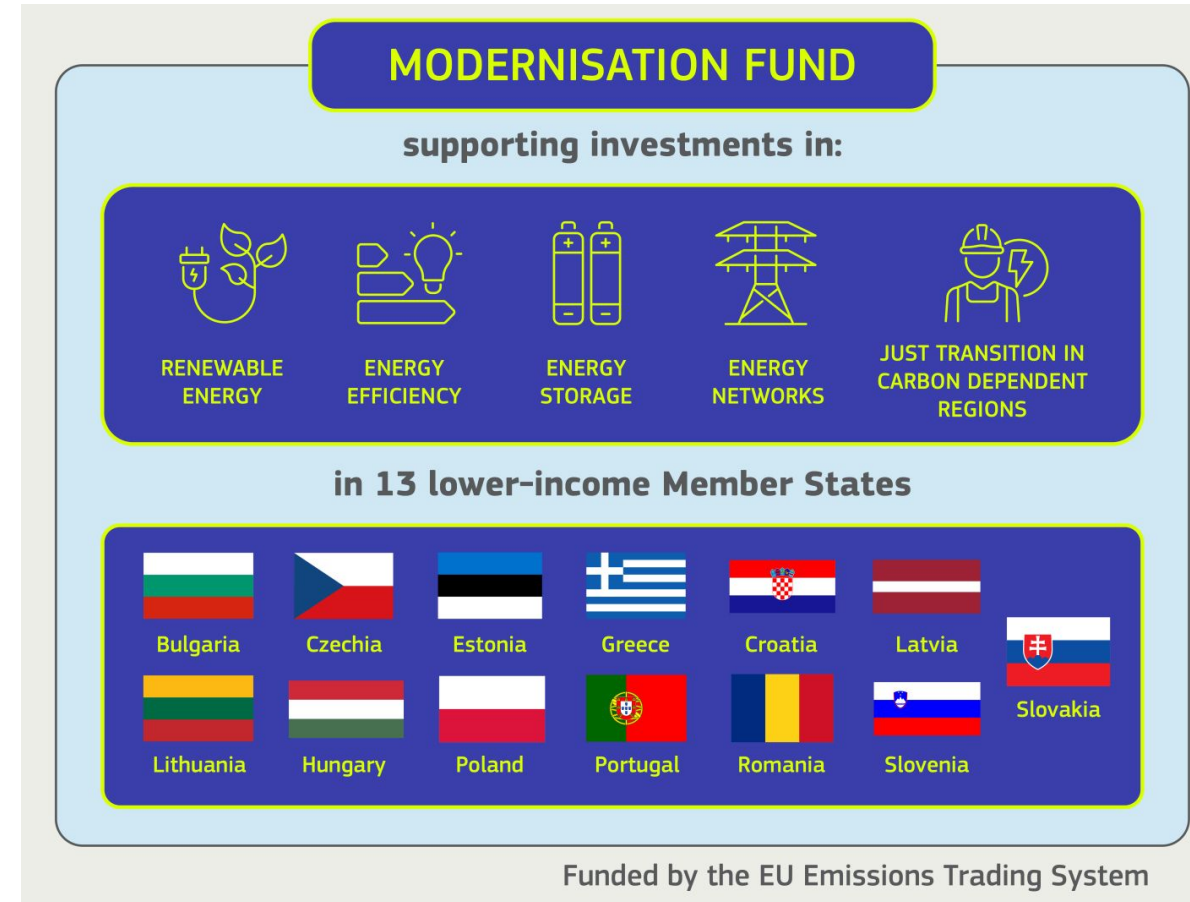
From 2026

- Created to alleviate the social and economic impacts arising from the ETS2
- National Social Climate Plans
- Structural measures and investments in energy efficiency and renovation of buildings, clean heating and cooling and integration of renewable energy, as well as for zero- and low-emission mobility solutions



Check out [the authorities responsible for the preparation of their Social Climate Plans](#)

- Supports modernisation of energy systems in 13 lower-income EU Member States: Bulgaria, Czechia, Estonia, Greece, Croatia, Latvia, Lithuania, Hungary, Poland, Portugal, Romania, Slovenia and Slovakia.
- From 2021 to 2030
- Support available: among others, **energy efficiency in buildings, support to low-income households, including in rural and remote areas, to address energy poverty.**



New EU Budget – New Opportunities

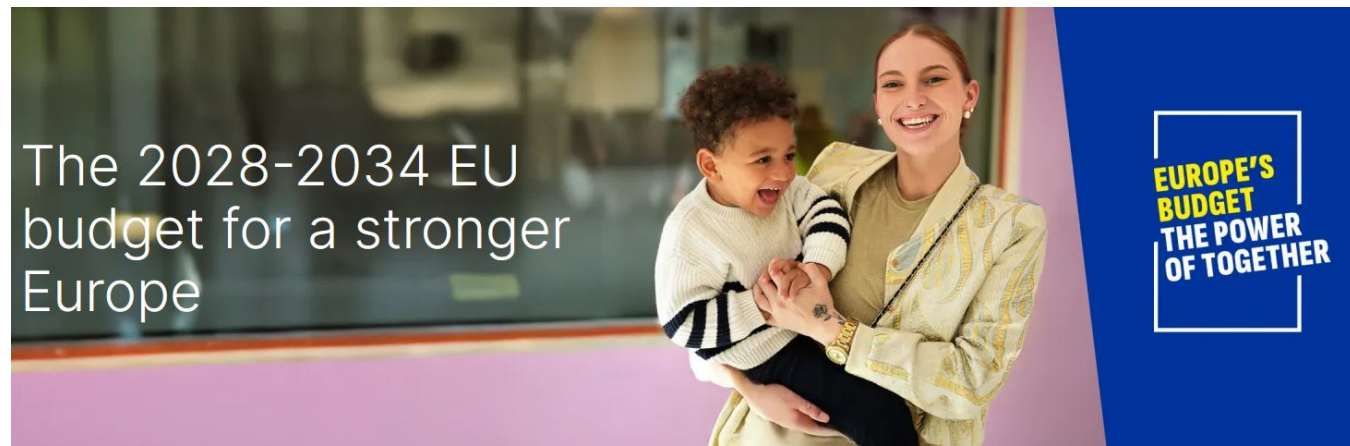


New EU Budget for 2028-2034 – at negotiation Stage
-> Follow the consultations at the EU and National Level

To Contribute -> [Have your say](#)
[Public Consultations and Feedback](#)

To get to know more about the new EU Budget -> [EU Budget Information Hub](#)

- New European Competitiveness Fund
- National and Regional Partnership Plans – future framework for Cohesion Policy



TOOLBOX



Created by Adrien Cougnet
from Next Project

Soft measures and Funding renovations: [Editable PPTX](#)
Database on the available financial support options, find your first inspiration [HERE](#)



- **Government Grants:** In some regions, government agencies offer grants to support specific types of renovations, especially those focused on energy efficiency, historic preservation, or community development. Check with local housing or development authorities for potential grants;
- **Government Loans:** Various government-backed loan programs, are designed specifically for home renovations. These loans often provide favorable terms and can include the cost of both the home purchase and renovation expenses.
- **Local or State Programs:** Some municipalities or states offer programs to encourage property improvement. This might include low-interest loans, grants, or tax incentives. Research programs available in your specific location.

- EU funds: LIFE, ERDF, Horizon 2020, Elena, Cohesion Policy, ESIF,
- National renovation grants and subsidies: Create your databank! [Here is a helping table.](#)
- Revolving municipal funds with social and climate conscious solution conditions
- Carbon tax revenues directly used to fund local renovation scheme
- Energy Service Companies (ESCO) contracts
- Green loans & low-interest financing
- Public-private partnerships (PPPs)
- Combination of national and regional efforts to optimize existing schemes
- Combining multiple streams of funding from the European Investment Bank and own national/local resources
- Combining grant, loan, technical assistance and energy performance contracting

What is funded?

- Direct renovation support,
- General repairs/renovation,
- Services: technical assistance,
- Services: legal assistance,
- Services: energy audits,
- Services: consultancy fees.

Targets



Barriers to
stakeholder
engagement



Work with
the
residents

- Minimum energy efficiency criteria: expressed as a minimum share of energy savings, maximum energy demand expressed in kWh/m², certain level of energy class improvement, compliance with national building codes for renovations or prescriptive-based criteria (e.g. heat pump efficiency factor or U-values for insulation),
- Upgrades of technical systems,
- Insulation of building envelope,
- Installations of RES systems,
- Often, the schemes offer support for multiple interventions per building.

- **Energy Efficiency Vouchers** - (Vale Eficiência, Portugal) targeted at energy-poor households. An individual voucher is a sum of money to be spent by a household for measure(s) improving the energy performance of a dwelling.
- **Consultations and financial starter pack** - (Caritas-Stromsparcheck, Germany) consulted low-income households to identify possible energy-saving measures. After the consultation and visit, the households receive a 'starter package' for energy-saving measures
- **Revolving fund** - (Municipality of Ghent, Belgium). Transformed system of additional subsidies into a revolving fund. People are now able to receive a substantial low-rate long term loan from the city. Up to 30.000 euros. This loan will be aimed at basic housing quality, insulation and investments in renewable energy.



Created by Adrien Coquet
from Nansen Project

Learn more [HERE](#) about financial schemes supporting vulnerable population groups

Build your own database on the available financial support options, find your first inspiration [here](#)

Check RENOVERTY's [Slideshow on types of financial instruments in various countries for inspiration](#)

Thank you!

The CEESEN-BENDER project has received funding from the European Union's Programme for the Environment and Climate Action (LIFE 2021-2027) under grant agreement no LIFE 101120994. The information and views set out in this material are those of the author(s) and do not necessarily reflect the official opinion of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

