



Citizen-led renovation

SOLUTION BOOKLET



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If you're looking to take an active role in transforming your community, this booklet is for you! Developed as a hands-on resource, it offers practical tools, key insights, and recommended actions from the **Citizen-led renovation phase I** project. This booklet serves as a comprehensive guide to help communities understand, plan, and execute citizen-led renovation initiatives. Whether you are just starting or refining an existing initiative, this guide will help you navigate the journey of citizen-led renovation with confidence.



Why should we care about citizen-led renovation?

Urgency of renovating our homes






Renovating buildings plays a crucial role in **reducing energy consumption, improving comfort, and promoting sustainability**. The residential sector, particularly older buildings, faces challenges related to energy inefficiency, high renovation costs, and lack of access to clear information.

To address these challenges, citizen-led renovation (CLR) has emerged as a **bottom-up** approach, putting communities and individuals at the center of energy-efficient building transformations. Unlike conventional renovation models, CLR **empowers citizens** to organize, fund, and implement sustainable building upgrades with local ownership, participatory practices, and community-driven solutions. This puts **communities in the driver's seat** of decision-making, allowing residents to collectively plan and implement renovations tailored to their needs.

What are the benefits?

CLR is not just about energy savings - it is about fostering **resilient, self-sufficient communities**.

Beyond energy conservation, what other positive outcomes can be achieved through CLR?

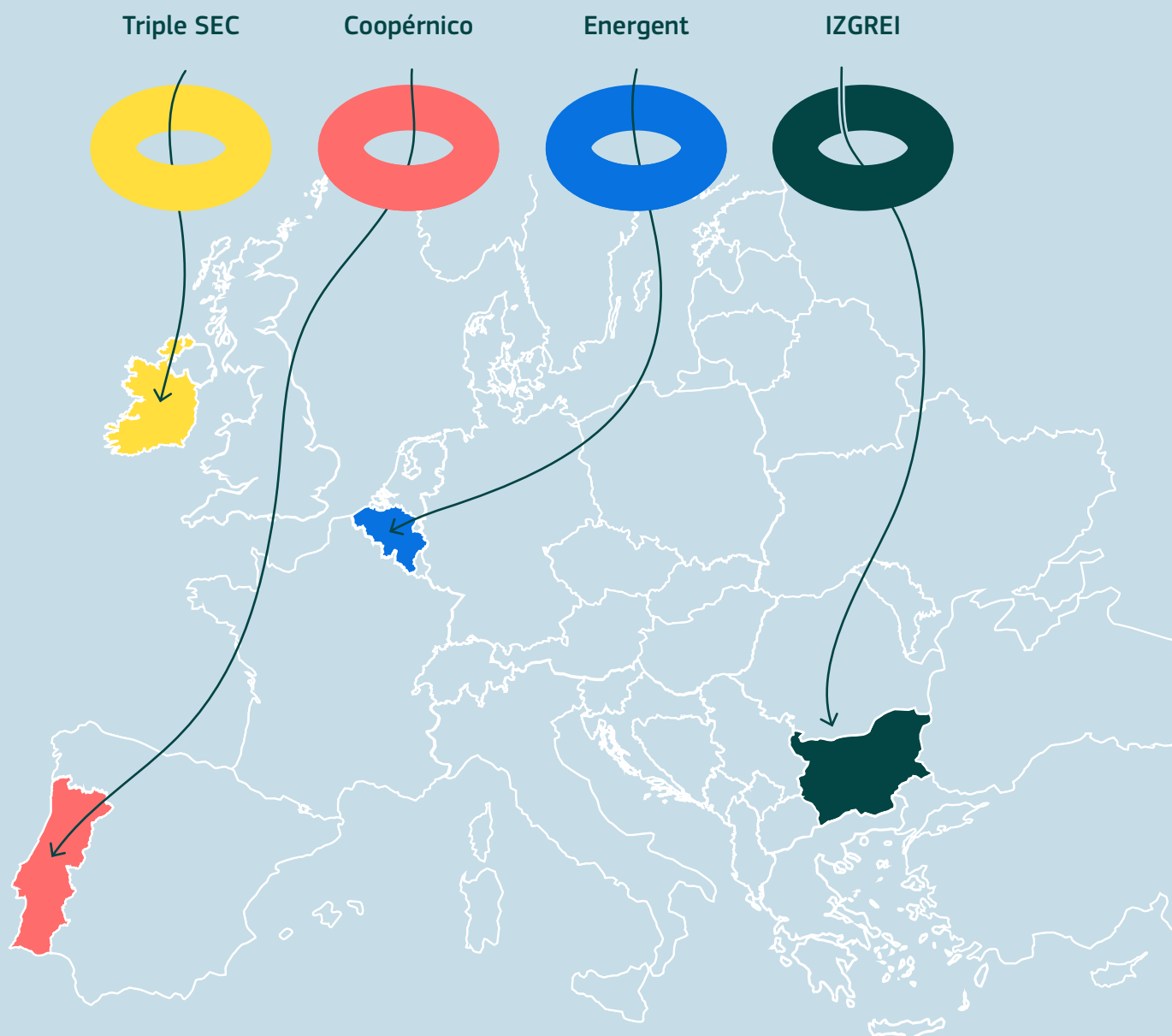
-  **Lower energy bills** through improved insulation, efficient heating, and renewable energy solutions.
-  **Healthier living environments** by reducing indoor air pollution, dampness, and thermal discomfort.
-  **Community empowerment**, as residents take control of decisions that impact their homes and neighborhoods.
-  **Local economic growth**, creating jobs in the energy efficiency and construction sectors.
-  **Social cohesion**, fostering collaboration between neighbors, cooperatives, and municipalities.

**Others have
done it, so
can you!**

Successful CLR initiatives

Citizen-led renovation has gained momentum across Europe, with various successful initiatives showcasing best practices. However, there is **no single formula** for ensuring a successful CLR. Each initiative is unique and faces its own challenges as it gets shaped by factors such as **regulatory conditions, available funding mechanisms, social dynamics, and existing community networks**.

In this booklet, we share examples and key insights from the four pilots of CLR I, navigating their unique societal context. To help you navigate the content easily, each pilot is visually distinguished by its respective color.



The Triple SEC initiative brings together three sustainable energy communities in Dublin - Connecting Cabra, Phibsboro Village Climate Club, and Cosybatter - to empower citizens in their energy transition.

The project focuses on:

- » Community **energy audits** to identify inefficiencies and prioritize retrofitting actions.
- » Retrofitting **walk-and-talk events**, where citizens can visit renovated homes, explore insulation techniques, and engage with homeowners who have undertaken renovations.
- » The **Connecting Cabra Renovation Handbook**, offering technical and financial guidance for deep energy retrofits.
- » A **peer-learning program** to support citizens in navigating grant applications, selecting contractors, and exploring DIY improvements.



Triple SEC

Through **targeted retrofitting, community engagement, and support mechanisms**, Triple SEC successfully empowered citizens to take meaningful steps toward more comfortable, energy-efficient homes.

The initiative delivered tangible benefits in energy efficiency, citizen engagement, and community collaboration:



Enhanced home energy efficiency:

Retrofitting efforts focused on insulation improvements, with 40% of participants upgrading roof insulation, 46.5% retrofitting windows, and 61% improving attic insulation.



Strong demand for further upgrades:

A post-project survey revealed that 57.1% of participants prioritized renewable heating systems, while 42.9% identified external wall insulation as a critical next step.



Increased female participation:

Triple SEC saw higher engagement from women, reflecting the local dynamics of community involvement.



Identifying key support needs:

Participants highlighted the importance of additional support, with 85.7% requiring technical planning assistance, 75% seeking financial aid, and 60.7% needing administrative guidance.



Fostering collective action:

Community-driven strategies encouraged collaboration, with 39.3% of respondents open to joint renovations and 50% interested in shared purchasing of energy upgrades.



Beyond energy savings:

The retrofits also improved overall living conditions, with 25% of participants reporting reduced noise levels and 21.5% experiencing fewer summer overheating issues.

As Portugal's first renewable energy cooperative, Coopérnico operates an innovative One-Stop-Shop (OSS) model to streamline citizen-led renovations.

The initiative focuses on:

- » A **digital platform** that provides legal, financial, and technical support to simplify retrofitting projects for citizens.
- » Enabling **collective self-consumption of solar energy**, lowering energy costs and increasing local renewable energy use.
- » **Workshops and mentoring programs** that educate citizens on available funding, legal frameworks, and technical solutions for home renovations.
- » **Collaboration with municipalities to design a financial assistance scheme**, ensuring fair and equitable access to renovation opportunities.



© Coopérnico

Coopérnico

Through its OSS model, Coopérnico is **empowering citizens** to take control of their home renovations, reducing energy costs, improving comfort, and accelerating Portugal's transition to a more sustainable built environment. This approach has driven significant impact, including:



Targeted energy efficiency improvements:

Renovation activities focused on window retrofitting (42%), roof insulation (28%), and attic insulation (9%), enhancing home comfort and reducing energy waste.



High demand for renewable heating systems:

60.5% of participants prioritized upgrading to cleaner heating solutions, highlighting the shift toward sustainable energy use.



Improved thermal performance as a priority:

51.2% of respondents cited external wall insulation as essential, underscoring the need for better home insulation.



Strong need for financial support:

72.1% of participants identified affordable financing as a key barrier, reinforcing the importance of Coopérnico's collaboration with municipalities on financial assistance schemes.



Technical guidance as a critical factor:

76.7% of participants stressed the need for expert advice and structured renovation planning to ensure efficient implementation.



Streamlining administrative processes:

51.2% of respondents requested administrative support, highlighting the complexity of coordination, permitting, and regulatory compliance.



Embracing community-based renovation approaches:

60.5% of participants expressed openness to joint renovations, while 72.1% showed interest in collective purchasing to lower costs and increase efficiency.



Beyond energy savings:

Renovations also improved living conditions, with 30% of respondents reporting reduced noise levels and 40% experiencing relief from summer overheating.

Energent, an East Flanders cooperative founded in 2013, which unites citizens in their ambition for a sustainable and climate-neutral society, pioneers persona-driven communication strategies to engage citizens who might not otherwise consider energy renovations.

Key achievements include:

- » A **communication toolkit** that provides clear guidelines for community engagement via social media, local events, and direct outreach.
- » A **structured decision-making process** that guides homeowners through financial and technical considerations, making renovation choices more accessible and informed.
- » Targeted **financial literacy programs** that help vulnerable populations access funding and navigate the complexities of renovation financing.



Energent



By **tailoring communication** to different citizen profiles, Energent successfully broadens participation in energy renovations, ensuring that more households benefit from improved efficiency and comfort. Through tailored communication, technical expertise, and market-driven innovation, Energent continues to accelerate energy renovations, empower homeowners, and expand its **role as a leader in citizen-driven energy transition**. As a result Energent delivers tangible results in energy renovations, citizen engagement, and market transformation:



High-impact renovation efforts:

The initiative prioritized roof insulation (82%) and window retrofiting (86%), significantly improving home energy efficiency.



Growing demand for renewable heating systems:

53% of respondents identified the need for cleaner heating solutions, reinforcing the shift toward sustainable energy.



Fostering collective action:

39.3% of participants expressed interest in joint renovations and collective purchasing, demonstrating increased openness to community-driven solutions.



Encouraging deeper renovations:

Projects focused on PV installations, roof and window insulation, and renewable heating systems, motivating homeowners to pursue comprehensive energy upgrades.

IZGREI builds trust in citizen-led renovations by pioneering a replicable model for multi-family building retrofits.

Its efforts focus on:

- » The **“How-to guide for citizen-led renovations”** providing a step-by-step framework on financing, stakeholder coordination, and legal compliance, making retrofits more accessible for homeowners.
- » A transparency-driven **engagement campaign**, fostering homeowner participation through informational meetings, webinars, and testimonial videos that showcase real renovation experiences.
- » **Overcoming administrative barriers**, proving that bottom-up approaches can successfully align with municipal and national energy policies, paving the way for broader adoption of citizen-driven retrofits.
- » By **equipping citizens with knowledge, tools, and strategic support**, IZGREI strengthens trust in energy renovations and empowers communities to take an active role in improving their homes.



IZGREI's approach resulted into the following results:



Ensuring long-term sustainability:

Developing replicable frameworks that address both technical and financial barriers, equipping other communities with tools to adopt similar renovation models. These frameworks support ongoing energy efficiency improvements and cost savings.



Successful renovation achievements:

A pilot implemented collective renovations focusing on insulation improvements, window upgrades, and solar system installations, significantly enhancing energy performance and reducing operational costs for participating households.



Strengthening community engagement:

Awareness campaigns and educational initiatives deepened community ties, increased participation rates, and encouraged collaboration. The establishment of local champions helped sustain engagement and drive renovation efforts forward.



Breaking financial barriers:

Bundled financing strategies and cooperative models provided affordable solutions, enabling more households to invest in renovations. These approaches demonstrate the viability of collective investments for scaling energy retrofits.



Reaching diverse households:

Participants include single-family homeowners and representatives from multi-family buildings, reflecting a broad spectrum of renovation needs and priorities.



Delivering environmental benefits:

Renovations led to lower energy consumption, enhanced indoor comfort, and reduced greenhouse gas emissions, contributing to broader sustainability and climate goals.



Strengthening trust in energy renovations:

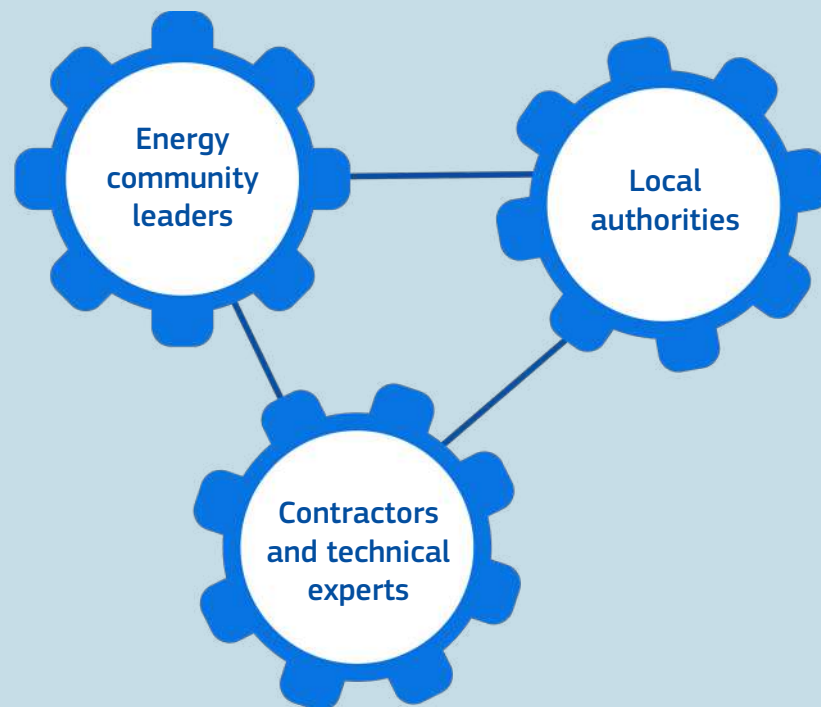
By empowering citizens with knowledge, financial solutions, and collective action strategies, IZGREI accelerates community-driven sustainability efforts.

Roles and responsibilities

Different stakeholders

Different stakeholders play **complementary roles**, each bringing essential expertise and resources to the process. Energy community leaders engage residents, raise awareness, and coordinate local projects. Local authorities streamline administrative processes, provide regulatory support, and facilitate access to funding. Contractors and technical experts deliver practical solutions by implementing retrofitting measures and training local workers.

For CLR initiatives to succeed, these stakeholders must **work together seamlessly** - aligning their efforts, sharing knowledge, and addressing challenges collectively. By fostering **strong collaboration**, CLR ensures that energy renovations are **efficient, inclusive, and scalable**, making sustainable housing more **accessible to all**.



Coopérnico Portugal

Energy community leaders

- » Established renewable energy communities and launched **Portugal's first OSS**.
- » Delivered **workshops** on PV design, financial planning, and legal frameworks.
- » Supported **pilot demonstrations** and formed partnerships to expand scalability.

Local authorities

- » Supported **policy frameworks** for RECs and facilitated **partnerships**.
- » Simplified **access to grants** under the Recovery and Resilience Plan.
- » Ensured **legal compliance** and scalability of renovation models.

Contractors and technical experts

- » Conducted **feasibility studies** and designed PV systems.
- » Provided **training** to support replication and scalability.
- » Ensured **compliance with energy standards** and expanded services to underserved areas.

Triple SEC Ireland

Energy community leaders

- » Increasing **awareness** of the benefits of energy retrofiting.
- » **Sharing information** on conducting different types of energy saving measures such as solar PV panels, insulation of the walls and roofs.
- » **Coordinating** retrofitting projects and **training** residents.
- » Organising **Walk-and-Talk** and **Open Home** events.
- » Forming **partnerships** with local clubs for renewable energy integration.
- » Developing **educational resources** to empower residents.
- » **Lobbying** for more support on energy community's activities

Local authorities

- » Streamlined **grant approvals** and supported regulatory compliance.
- » Promoted partnerships with **housing associations** and contractors.
- » **Reduced administrative burdens** and supported scalability.
- » Joined the energy community to **share information about grants and subsidies** in simple, easy-to-understand language.

Contractors and technical experts

- » Installed solar panels, insulation, and **energy-efficient upgrades**.
- » **Addressed labour shortages** by training local residents for minor retrofitting tasks.
- » **Reduced costs** and increased engagement through skill-building programs.

Energent Belgium

Energy community leaders

- » Operated as an OSS, focusing on **outreach, marketing**, and technical assistance.
- » Developed **persona-driven strategies** and enhanced digital presence.
- » Provided **training** on Canva and Google analytics to improve marketing campaigns.

Local authorities

- » Provided building **data access**, financial incentives, and streamlined approvals.
- » **Promoted partnerships** between municipalities and energy cooperatives to strengthen sustainability.

Contractors and technical experts

- » Executed **renovations**, delivered technical solutions, and ensured regulatory compliance.
- » Addressed labour shortages through **training programs** for community members.
- » Promoted **professionalisation** within the OSS framework.

IZGREI Bulgaria

Energy community leaders

- » Developed a **scalable model** for multi-family building retrofits.
- » Created a **“How-to Guide”** for best practices and replication.
- » Organised **workshops** and events like “Let’s Renovate Bulgaria – Together” to promote engagement and collective action.

Local authorities

- » Supported **legal reforms** to enable Renewable Energy Communities.
- » Streamlined **funding programs** and facilitated partnerships with municipalities.
- » Ensured **policy alignment** and financial transparency.

Contractors and technical experts

- » Performed roof repairs, façade insulation, and **energy efficiency upgrades**.
- » Provided **compliance oversight** and scalable solutions to streamline future renovations.





Diving deeper into different strategies

Key insights

The Citizen-led renovation phase I pilot projects provided **valuable lessons** on the challenges and opportunities in implementing CLR initiatives across **diverse local contexts**. Through practical experiences, stakeholder engagement, and structured experimentation, these pilots highlighted key factors that influence the success of CLR efforts, from expectation management to financial sustainability.

A recurring theme across the pilots was the importance of structured and long-term support: empowerment does not happen overnight, and community-led renovations require sustained financial, technical, and administrative backing. The pilots also demonstrated the need for strong collaboration frameworks, leveraging partnerships with policymakers, financial institutions, and technical experts to facilitate the renovation process. Furthermore, engaging communities beyond the usual early adopters proved essential in ensuring inclusivity and avoiding social divides in the energy transition.

This section synthesizes key insights into an approach consisting of four focus areas:

-  **Expectation management:** Understanding the time, resources, and commitment required for CLR to succeed, while ensuring realistic planning and long-term sustainability.
-  **Creating lasting structures:** Developing governance models, networking platforms, and replicable strategies to support community-driven renovation beyond project timelines.
-  **Community building and outreach:** Implementing effective tools and engagement strategies to expand participation, reach underserved groups, and sustain momentum.
-  **Financial support and resource constraints:** Addressing funding barriers, providing legal and administrative support, and ensuring that financial mechanisms facilitate broad participation.

By analysing these key insights, stakeholders in future CLR initiatives can anticipate common challenges, adopt proven solutions, and design scalable approaches that align with their specific contexts. The following sections explore these lessons in detail, providing a foundation for strengthening and expanding citizen-led renovation efforts across Europe.

Expectation management

Empowerment does not happen overnight.

1

CLR empowerment occurs at **multiple levels**, requiring clarity on its scope. Key aspects include **over-seeing renovation processes, understanding project management, and navigating financial and legal complexities** - skills that take time, training, and structured support to develop. Achieving broad-scale empowerment within a two-year support period is unrealistic. Instead, efforts should focus on establishing a structured pathway that fosters gradual **empowerment beyond the project's duration**.

Although energy communities existed before the CLR pilots, empowerment remained a slow process. Raising awareness of renovation benefits, engaging residents in decision-making, and providing technical and financial guidance required continuous effort. Tracking renovation uptake also proved challenging, highlighting the need for **persistent outreach and follow-up strategies**.

Triple SEC

For instance, in Triple SEC, raising awareness and engaging households was a lengthy process due to skilled labour shortages and complex administrative procedures for funding. Community-led initiatives like **walk-and-talk events and pop-up energy shops** were instrumental in sparking interest, but long-term commitment from residents

Coopérnico

remained a challenge.

Similarly, in Coopérnico, providing legal and financial guidance to communities looking to install solar PV systems required sustained effort. Securing commercial offers from PV installers was a lengthy process, demanding **continuous follow-up and patience**. Despite expert support, financial constraints often delayed installations.

IZGREI

IZGREI also faced difficulties in maintaining long-term participation. While **workshops and advisory sessions** helped initiate discussions on energy renovations, **sustaining engagement and tracking** actual implementation remained a persistent challenge.

Sustainable structures, rather than short-term interventions, are essential for lasting engagement. Practical steps include developing **long-term advisory frameworks, community-driven governance models, and ongoing financial and technical assistance** to support CLR initiatives beyond the project's duration.

Set realistic expectations about the duration, budget, and capacities of support.

2

The pilots underscored the importance of aligning project timelines, resources, and stakeholder commitments with realistic long-term goals. **Structured planning** is necessary to ensure financial and human resources are used efficiently to sustain progress.

Triple SEC

In Triple SEC, the process was significantly delayed due to difficulties in gathering **reliable building data**, which was crucial for defining different renovation scenarios. The absence of accurate baseline information slowed planning and decision-making, highlighting the need for a more structured approach to data collection from the outset.

Coopérnico

Similarly, in Coopérnico, the cooperative struggled to ensure long-term engagement from community members due to uncertainties in **financial incentives and regulatory support**.

Ensure continuity after the support period ends.

3

During the CLR initiative, objectives, activities, and timelines were defined at the outset, and the pilots, supported by the CLR consortium, made significant efforts to implement and achieve these goals. However, maintaining momentum beyond the official project period remains a **major challenge**.

Triple SEC

For example, in Triple SEC, as a **voluntary** energy community, board members may not have the capacity to **sustain their efforts** due to professional and personal commitments.

IZGREI

In IZGREI, resistance to renovation efforts stemmed from **distrust in public funding mechanisms** and a lack of clear information on renovation benefits. Ensuring continuity requires strong governance structures, clear leadership succession plans, and continued access to financial and technical assistance.

Creating lasting structures

Strengthen collaboration and networking platforms.

1

Building strong partnerships between **energy communities, cooperatives, policymakers, and financial institutions** facilitates knowledge sharing and resource mobilisation. The pilots demonstrated the benefits of structured collaboration through **workshops, joint events, and advisory services**.

Triple SEC

In Triple SEC, collaboration with local authorities enabled the project to **navigate regulatory hurdles and access funding**.

Coopérnico

In Coopérnico, partnerships with financial institutions were essential for securing **innovative financing solutions** for collective PV installations.

IZGREI

Similarly, in IZGREI, cooperation with municipal bodies helped streamline the **legal framework for recognising and supporting energy communities**.

Develop scalable and replicable models.

2

Successful approaches from CLR I should be adapted and **expanded** to other communities.

Triple SEC

In Triple SEC, a structured approach to **data collection and partnerships with local authorities** enabled the development of **replicable retrofitting strategies for similar housing types**. Efforts to establish **local advisory groups** helped maintain engagement and provide guidance beyond the project's timeline.

Coopérnico

In Coopérnico, the community-driven energy cooperative model allowed households to **jointly invest in PV systems**, reducing financial burdens and increasing participation.

IZGREI

IZGREI successfully navigated **regulatory complexities** through municipal collaboration, demonstrating how **policy advocacy and legal support can enhance energy community viability**.

Energent

Another example comes from Energent, where **group renovation offers** significantly improved participation rates by streamlining **access to contractors and funding**.

Increase visibility and communicate successes.

In Triple SEC, a structured approach to **data collection and partnerships with local authorities** enabled the development of **replicable retrofitting strategies for similar housing types**. Efforts to establish **local advisory groups** helped maintain engagement and provide guidance beyond the project's timeline.

Triple SEC

In Triple SEC, collaboration with local authorities and **visible community advocates** increased participation in renovation programmes.

Coopérnico

Coopérnico leveraged municipal **partnerships** to expand communication beyond early adopters.

IZGREI

In IZGREI, involving influential community figures **enhanced renovation awareness and encouraged broader participation**.

Energent

Energent successfully used **targeted digital tools and persona-based engagement strategies** to reach underserved groups and strengthen community networks.



Community building and reaching out

1

Going into the neighbourhood.

Direct engagement within communities, including door-to-door outreach, participatory workshops, and local events, helped **build trust** and **facilitate dialogue** on energy renovations.

Triple SEC

Community building was a key activity in Triple SEC, where **extensive community interaction** was essential to ensuring **long-term participation** in renovation efforts. Triple SEC employed various approaches to promote energy retrofits:

Organising **social events** created informal engagement opportunities, where residents could **share experiences** and **gain insights from peers** who had already implemented energy renovations.

- » **Hosting open house events** allowed homeowners to directly witness successful renovation projects and understand their benefits firsthand.
- » **Establishing pop-up energy shops** in accessible community locations provided direct support and consultations.



©Energent

Expanding outreach beyond early adopters and engaged homeowners was a key challenge. The pilots highlighted the need to **target underserved groups**; those without the time, resources, or access to renovation support. These communities often lack awareness of available programs and face barriers in accessing financial incentives, leading to broader social consequences such as disengagement from sustainability efforts. The inability to include these groups **risks exacerbating social divisions**, as those who receive renovation support are often more privileged, while others feel left out of the transition. **Addressing these disparities** is essential to **maintaining social cohesion** and ensuring **broad participation** in sustainability efforts.

Triple SEC

In Triple SEC, **walk-and-talk events** have been an effective method for physically reaching and engaging diverse community members. This approach helps **break social bubbles** and ensures that renovation support is accessible to a broader audience. The Warmer Homes Scheme has been instrumental in supporting vulnerable households in adopting energy-efficient measures.

IZGREI

In IZGREI, limited awareness and financial constraints prevented many from taking advantage of energy-saving opportunities. Expanding outreach requires a **targeted communication strategy** that leverages local networks such as schools, churches, and sports clubs to extend beyond traditional early adopters.



Financial support and resource constraints

Improve access to funding.

1

Financial constraints remain a significant barrier. Pilots highlighted the effectiveness of **revolving funds, collective purchasing, and microfinancing** in making renovations more affordable. Grants and subsidies play a crucial role, particularly for **vulnerable groups**.

Triple SEC

In Triple SEC, securing **funding** for deep retrofits was a major challenge.

Coopérnico

In Coopérnico, **financial** limitations delayed solar PV installations.

IZGREI

In IZGREI, many households were unaware of available subsidies, highlighting the need for **improved outreach** and simplified application processes.

Ensure dedicated staff for long-term impact.

2

The presence of dedicated **coordinators and technical advisors** significantly improved the success of CLR initiatives. Ensuring funding for expert guidance and administrative support enhances efficiency.

Triple SEC

Ensuring dedicated staff for long-term impact was particularly important for Triple SEC, where **volunteers** play a crucial role in implementing various activities.



Legal barriers, including unclear regulations and complex administrative processes, **slowed progress** in several pilots.

Triple SEC

In Triple SEC, Unclear rules on liability kept energy communities in **advisory roles instead of taking action**, showing the need for clearer laws on responsibilities.

Coopérnico

In Coopérnico, challenges arose in defining legal frameworks for collective self-consumption, as existing regulations did not fully support cooperative energy-sharing models. Addressing these barriers required **advocacy efforts and legal assistance** to update statutes and qualify as energy communities under national legislation.

IZGREI

In IZGREI, the absence of clear legal recognition for CLR initiatives complicated efforts to access public funding and subsidies. Efforts to provide **legal training sessions** and workshops helped local stakeholders better understand regulatory compliance and strengthen their case for policy adaptation. Providing **legal assistance** for adapting statutes to qualify as energy communities, ensuring compliance with regulatory requirements, remains critical to sustaining community-driven renovation projects and expanding their impact.






Tools to get inspired by

CLR-developed tools

A wide range of tools can empower and guide communities in their citizen-led renovation efforts. These include **funding databases, assessment frameworks, and renovation roadmaps**.

This chapter highlights some of the most impactful resources, offering an overview of the tools co-created with pilot projects throughout phase I of the Citizen-led renovation project. From information sharing to technical support and community engagement, these tools serve as practical solutions to support informed decision-making, inspire action, and foster collaboration.

-  **Information and guidance:** The OSS platform centralised resources, making renovation support more accessible (e.g., Energent's technical and financial advice hub).
-  **Technical support:** Triple SEC created tailored guidebooks addressing different housing renovation needs (e.g., Warmer Cheaper Concrete Homes in Cabra). IZGREI developed step-by-step toolkits explaining retrofitting techniques and funding options.
-  **Community engagement:** Persona tools were used in Energent to customise outreach strategies for different community segments. Websites and social media played a key role in broadening visibility.

Personas Guide

The Personas Guide was developed as part of the Citizen-led renovation (CLR) initiative to help Energent better tailor its group renovation services to **different customer needs**. Personas are detailed, fictional profiles representing diverse customer segments, **enabling the communication team and energy advisors to refine their strategies and engagement approaches**.

By using these personas, Energent can improve **communication**, streamline **service offerings**, and ensure a more **effective renovation journey** for all types of clients. Understanding specific behaviors, motivations, and concerns of different types of residents, Energent can create more targeted outreach and support mechanisms for homeowners considering renovations.

The guide introduces **four key personas**, each representing a distinct segment of Energent's audience:

- » **Wealthy William** (the affluent homeowner needing reassurance about investments),
- » **Cipher-oriented Cédric** (the data-driven decision-maker focused on cost-effectiveness),
- » **Burdened Barbara** (the hesitant homeowner requiring emotional support and guidance), and
- » **Gripped Gita** (the eco-conscious, budget-conscious renovator taking a phased approach).

The implementation of these personas allows Energent to strategically **anticipate customer expectations**, communicate in a language suited to each audience, and **align internal processes** to maintain consistency.

The guide is also a valuable tool for brainstorming new ideas, testing services, and evaluating marketing campaigns to enhance citizen engagement in renovation efforts. Ultimately, it supports a **customer-centric approach** to sustainable renovation, **fostering deeper trust**.



◀ This spread from the persona guide outlines the key phases of Wealthy William's customer journey. It features a two-column communication needs journey, offering both energy advisors and the communication team a clear overview of the key focus areas at each stage.

Energent

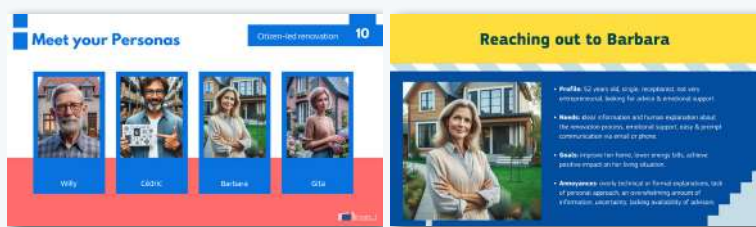


▲ During a workshop where Think E co-created the personas with the Energent's energy advisors, customer journey were mapped out for each personas. The advisors had to present and discuss it.

▲ During an interactive workshop on persona communication styles, energy advisors dived into practical strategies for recognizing and responding to the unique ways each persona communicates.

A few slides from the targeted outreach workshop. ▶

[Find the entire slide deck here](#)



Targeted outreach workshop

This workshop focused on using Canva for effective persona-based communication. It was developed to improve Energent's **engagement with different community segments**. The PowerPoint slides are available and contain brainstorm exercises as well as graphical visual thinking exercises. Participants are challenged to think through the needs of the personas when communicating through different channels. The workshop consists of two sessions:

- » **The first session** aims at providing the participants with the tools needed to design materials targeted at their specific personas. It started by sharing general design dos and don'ts along with an overview of Canva's capabilities.
- » **The second session** dived further into specific exercises and brainstorms on what an image targeted at each persona could look like. Participants then had the chance to develop their own design, each on their own, in interactive parts of the workshop. Afterwards, good and bad features of each design were discussed to achieve a deeper understanding of the process and concepts that were taught.

The workshop played a crucial role in enhancing Energent's outreach efforts by ensuring that the communication efforts are **refined, visually engaging, and accessible to a diverse audience**.

How-to Guide

The How-to Guide is a **practical roadmap** designed to support communities in initiating and managing citizen-led renovation projects. Developed as part of the IZGREI pilot, the guide compiles key lessons learned, best practices, and step-by-step instructions to help citizens navigate the **complex process of building renovation**.

The guide covers essential topics such as:

- € **Financing options**, including available subsidies, cooperative funding mechanisms, and strategies for reducing upfront costs.
- 🧐 **Legal guidance**, helping communities understand regulations, property rights, and liability concerns. A significant part of the guide is dedicated to **technical aspects**, offering insights on energy efficiency upgrades, insulation techniques, and best practices for selecting materials and contractors.
- 🏠 **Real-life case studies**, illustrating successful CLR projects and demonstrating the impact of collective citizen action. By equipping communities with clear, actionable steps, the IZGREI How-to Guide aims to **empower residents to take control of their building renovations**, fostering a culture of sustainability and energy efficiency across Bulgaria.



◀ A spread of the How-to Guide with an additional postcard on top.

▶ A presentation delivered at the closing event of the Bulgarian pilot IZGREI during the Citizen-led renovation project Phase I.



Citizen-led renovation

How to Citizen-led renovation

You wonder what is Citizen-led renovation? You ask yourself why should get involved in energy renovations, and how you can do it? Then this guide is for you. The guide focuses on renovations of multi-family dwellings with multiple homeowners. The insights are based on learnings from the Citizen-led renovation initiative and conversations with experts and homeowners in Bulgaria.

What is Citizen-led renovation?

The overall idea behind Citizen-led renovation is to position citizens, like you, not just as passive consumers, but as active participants in shaping the course of Europe's energy future. Citizen-led renovation refers to voluntary activities led by energy community initiatives that empower citizens to engage in energy renovations and implement on-site renewable energy installations. This will enable you to take charge of your own energy needs.

Why should I care about renovation?

Renovation activities can provide you with multiple benefits:

- More comfort at home: improved insulation and energy-efficient windows help maintain a consistent indoor temperature, reducing the need for excessive heating in winter and cooling in summer.¹
- Better indoor air quality: Energy-efficient renovations can lead to healthier living conditions by reducing dampness and mold growth, common in poorly insulated and ventilated homes.²
- Lower heating and cooling bills: By enhancing your home's energy efficiency, renovations can lead to substantial savings on utility bills, potentially reducing your energy consumption by up to 50%.³
- Protection against heat waves: Energy-efficient buildings are better equipped to withstand extreme weather conditions, including heat and cold waves, providing a safer and more comfortable environment.⁴

¹ Renovation of more 50% of existing buildings should be accompanied by 20% in additional hot water supply. Austria - ICA

² Energy Efficiency: Ventilation, Gas Cut, Mold, and Ventilation in Hot Flue. I. Green Tech solutions from ICA and

³ European Energy Efficiency Action Plan

⁴ Research Task 3: Building Envelopes for Enhanced Energy Efficiency and Resilience Against Heat-related Climate Events - Research Framework for Implementation in Europe

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How to set up Citizen-led renovation

Step 1: Define the building(s) to be renovated

Step 2: Engage with other homeowners and address concerns. It might be useful to engage renovation experts or one-stop shops in the debate to have someone answer questions by the main body responsible for decision-making throughout the renovation process. The HOA can also serve as a point of contact for all homeowners, making communication more streamlined.

Step 3: Create a homeowner's association (HOA). If it does not already exist, this will be the main body responsible for decision-making throughout the renovation process. The HOA can also serve as a point of contact for all homeowners, making communication more streamlined.

Step 4: Hire a company to perform an energy audit. An energy audit will assess the current state of the building and identify the most impactful renovation measures. Consider obtaining a technical building passport, which provides detailed information about the building's structure, energy use, and renovation history.

Step 5: Identify renovation scenarios with concrete renovation measures. You can make use of other examples to show the differences before and after. If possible, you can also visit a renovation building with other homeowners to experience the differences at hand.

Measures can include:

- Thermal insulation of external walls, roof, basement;
- Replacement of windows;
- Solar thermal or solar PV installations.

Photo 2: Solar panels belonging to citizens of the energy community in Bulgaria

Citizen-led renovation

Step 6: Make an investment plan and agree on renovation measures. This should include cost estimates, benefits, and funding sources. Ensure that the plan is feasible enough to accommodate any unexpected expenses or changes in scope.

Step 7: Secure the financing: funding opportunities, crowd-funding, self-financing. Please note that collective projects often have better access to public funding and subsidies, so take advantage of any available grants or incentives aimed at energy-efficient renovations.

Step 8: Find the right installer/ renovation company

Step 9: Observe the renovation. Monitor the renovation process closely to ensure that the work is completed on time and within budget. Regular updates from the contractor and site visits can help keep the project on track. The HOA should take an active role in managing the day-to-day progress.

Step 10: Reflect on the renovation process and plan further steps

Good practice renovation examples

The adoption of certain beneficial practices during the renovation phase, will allow you to render your community's dwellings energy efficient, and potentially produce energy for its daily needs. These practices entail interventions, both on the buildings' shell, and on the surroundings. The implementation methods for the required transformations and installations must follow certain principles, in order to secure the sustainable character of your project, as well as to benefit the local economy and community.

1. Interventions and installations on the building's shell.

The renovation requires a number of installers and interventions on the shell of the building. Such examples include:

- Replacement of old windows with energy efficient ones.

Photo 3: Window profiles with energy-efficient technology from ICA and ICA

Citizen-led renovation

- Photovoltaic (PV) panel installations for the production of electric power.

Photo 3: Installation of PV panels on the rooftop of a house in Malakovo, Bulgaria (source: ICA)

- Solar thermal installations for water heating.

Photo 4: Installation of solar thermal panels on the rooftop in Italy (source: ICA)

Citizen-led renovation

- Prefabricated facade elements for thermal insulation.

Photo 5: Installation of prefabricated facade elements in apartment buildings (source: ICA)

- Installation of roof with prefabricated panels.

Photo 6: Installation of prefabricated panels on an apartment building roof in Estonia (source: ICA)

- Installation of green roofs for thermal improvement and energy saving.

Citizen-led renovation

2. Optimal implementation methods.

The transformation practices employed during your dwellings' renovations can follow certain sustainable paths that can secure eco-friendly outcomes and enhance simultaneously the prosperity of your region in multiple ways.

- Employ technical workforce from your area, or even your own community:
 - In this way you empower the region's economy, while strengthening the bonds of your community with the locals.
 - Through your project, the local workforce can expand their knowledge and skills on similar projects, rendering your project an "educative process", and an example for similar initiatives in the future.
- Choose materials and products from regional producers and suppliers:
 - Choosing local services will allow you to reduce expenses on logistics or importing.
 - Once more, your community's project adds to the regional economy.
- Regarding the choice of materials:
 - Choose eco-friendly materials and avoid products based on raw resources.
 - Reduce waste during construction as much as possible with a good initial planning of the interventions.
 - Reuse materials, and old parts of the renovated houses in auxiliary constructions.

Photo 7: Green roof on apartment in Vienna, Austria (source: ICA)

Some pages from the How-to Guide. It outlines valuable information, supported by images that help clarify key concepts and make the instructions easier to follow.

Connecting Cabra

The Connecting Cabra Renovation Handbook has been prepared by Th!nk E and Th!nk Europe, providing an invaluable resource for the **sustainable renovation of mid-terraced houses within the Cabra community** of Dublin. This document stands as a testament to their dedication to offering **comprehensive technical support and financial feasibility assessments** for a range of energy-efficient renovation scenarios. The Cabra energy community finds within these pages a knowledge and direction necessary to undertake renovations that not only enhance the quality of residential living but also contribute to environmental sustainability.

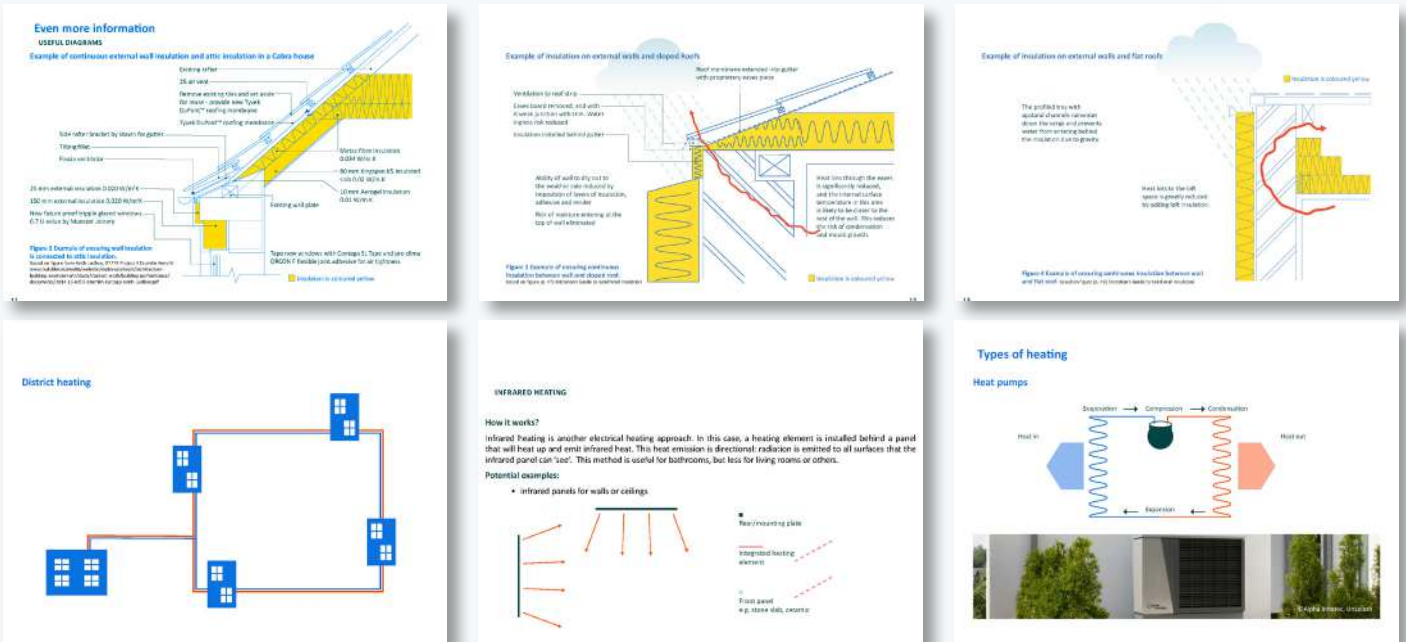
The document outlines a comprehensive approach to retrofitting and renovating a mid-20th-century terraced house in Cabra, Dublin. A specific set of guidelines or plan are very carefully developed with a focus on two key areas:

- » **Technical aspects of renovations:** This involves detailed advice on how to carry out renovations in a way that improves the building's energy efficiency. It might include which technologies to use, materials that are more energy-efficient, and construction methods that help in reducing energy consumption.
- » **Financial aspects of renovations:** This pertains to guidance on managing the costs associated with these renovations. It could involve information on budgeting, funding options like loans, grants, etc. cost-benefit analyses, return on investment calculations, and potential savings from reduced energy consumption.



◀ The retrofitting guides are available online, allowing users to download the guides. [Download the Retrofitting Guides via this link](#)

Triple SEC



Some pages from the Retrofitting Guides. [▲]

Retrofitting Guides

Specialized guides have been developed for homeowners in the Dublin area, addressing key insulation **challenges faced in older homes**. It provides clear recommendations on how to tackle heat loss through attics, walls, and windows, while also addressing common **misconceptions about insulation and retrofitting**. The guide emphasizes the importance of **breathable materials** to maintain healthy indoor air quality and provides visual diagrams demonstrating best practices for insulation continuity. It also includes **practical case studies** illustrating how small-scale insulation improvements can significantly enhance **thermal comfort and energy efficiency**.

The guide is aimed at homeowners in Cabra, Phibsboro, and Stoneybatter, especially those living in former Corporation houses. These homes are notorious for poor energy efficiency, with significant heat loss through both the roof and walls. The guide provides key information on cost-effective insulation and retrofitting measures that can make these homes warmer and cheaper to heat.

This guide covers the following key points:

- » **Heat loss:** Irish homes typically lose 30% of heat through the roof and another 30% through the walls. Attic insulation should be prioritized, followed by External Wall Insulation (EWI).
- » **Unique challenges:** Retrofitting Cabra, Phibsboro, and Stoneybatter houses poses unique challenges, such as ensuring breathable insulation materials are used to prevent moisture and mold.
- » **Common myths:** The guide dispels myths surrounding retrofitting, such as the belief that it is too disruptive or ineffective unless done all at once.

When starting from scratch

Step by step

1 Identify Key Stakeholders

- » **Map out** relevant local associations, community leaders, and champions who can support and advocate for the initiative.
- » **Engage** with municipalities, housing cooperatives, and financial institutions early on to secure long-term backing.

2 Secure Financial Foundations

- » **Compile** an overview of available funding opportunities for community-led projects, including grants, subsidies, and crowd-funding options.
- » **Explore** innovative financing models such as community bonds to enhance financial resilience.

3 Navigate Legal Considerations

- » **Seek** legal advice early, particularly if fast-tracked funding imposes strict timelines or regulatory constraints.
- » **Clarify** ownership structures, energy-sharing agreements, and liability issues to ensure smooth implementation.

4 Define Clear Project Goals and KPIs

- » **Establish** well-defined objectives and measurable Key Performance Indicators (KPIs) to track progress.
- » **Align** project ambitions with realistic timelines and budget constraints, considering external factors such as inflation and energy market fluctuations.

5 Build Trust Through Transparency

- » **Conduct** realistic cost evaluations to ensure credibility and community buy-in.
- » **Foster** open dialogue with residents to address concerns about affordability, benefits, and long-term impact.

6 Engage Decision-Makers Early

- » **Involve** local policymakers, municipal representatives, and funding bodies from the beginning to secure institutional support.
- » **Frame** the initiative in a way that aligns with broader policy goals, such as climate targets or housing improvements.

7 Establish a Communication Strategy

- » **Develop** clear, consistent messaging to ensure all stakeholders understand the project's scope and benefits.
- » **Use** multiple communication channels (social media, community meetings, local newsletters) to reach diverse audiences.

8 Learn from Others

- » **Leverage** the experience of mature CLR initiatives to avoid common pitfalls and adopt best practices.
- » **Prioritise** community-driven approaches that ensure long-term engagement and inclusivity.

Financial support and resource constraints

New CLR initiatives benefit from external guidance and structured support. These resources and tools can help accelerate progress:



Communication and outreach

- » Develop **customisable templates** for community meetings, local events, and digital outreach campaigns.
- » Craft **simple, relatable messaging** to engage a broad audience and make renovation benefits clear.



Learning from other communities

- » Gain **insights into successful strategies** from experienced energy communities.
- » Organise **peer-learning exchanges** and study visits to observe best practices in action.



Legal and technical guidance

- » Seek **legal and technical support** to streamline processes and **resolve regulatory complexities**.
- » Work with **specialists in energy law and finance** to ensure compliance and financial viability.



Capacity-building and institutional support

- » Develop **training materials** for community members to enhance their technical and financial literacy.
- » Consider forming a **regional agency** to coordinate CLR efforts and prioritise energy-related developments at a larger scale.

Conditions for success

Certain factors are critical in ensuring that CLR initiatives thrive over time. Focus on these core principles:



Strengthen local capacity

- » Implement **capacity-building workshops** for community members, volunteers, and project coordinators.
- » Facilitate partnerships with **technical experts, legal advisors, and financial institutions**.



Build trust and cooperation

- » Promote **collaboration with municipalities and legal entities** to improve credibility and streamline processes.
- » Foster **transparent, two-way communication** to ensure all stakeholders feel heard and involved.



Maintain public confidence

- » Ensure **consistent access to information** so that community members can make informed decisions.
- » Demonstrate reliability by delivering **measurable results and regular progress updates**.



Avoid overconfidence and strengthen internal support

- » Acknowledge that **no single group can manage CLR efforts alone** - build a **strong internal team** with diverse expertise.
- » Stay adaptable to challenges and **seek external support when needed** to maintain project

Upcoming Trends and Opportunities

Emerging developments in the energy and renovation sectors present new opportunities for CLR initiatives. Stay informed and ready to adapt by considering the following:



Financing innovations

- » Explore **community bonds and collective investment models** as solutions to human resource and financing challenges.
- » Look for **new grant opportunities** and evolving funding mechanisms that support community-led initiatives.



Policy and legal frameworks

- » Monitor **upcoming regulatory changes** that may create new advantages for Citizen-led renovations.
- » Advocate for **policy improvements** that facilitate easier access to funding and technical assistance.



Leveraging professional expertise

- » Recognise the **flexibility of branding and marketing agencies** in helping community initiatives expand their reach.
- » Use **data-driven communication strategies** to engage more stakeholders effectively.



Energy costs and climate regulations

- » Factor in **rising energy prices and stricter climate policies** as key drivers that could encourage participation.
- » Align CLR initiatives with **policy obligations**, as compliance requirements may increase engagement from homeowners and businesses alike.



Effective community engagement

- » Prioritise **simple, clear messaging** that makes the benefits of CLR accessible to all audiences.
- » Highlight **tangible outcomes** such as cost savings, increased comfort, and energy independence to attract more interest.



Conclusions

Last but not least

The insights gained from Citizen-led renovation Phase I reinforce the fundamental principles of **long-term community engagement, structured support mechanisms, and well-defined financial and legal frameworks**. The pilots demonstrated that while CLR is a powerful tool for driving energy-efficient building improvements, sustained success requires ongoing support, clear governance structures, and strong stakeholder collaboration.

This handbook provides practical guidance, tools, and step-by-step recommendations to help communities, policymakers, and support services effectively implement CLR initiatives. By drawing on real-world experiences from the pilot projects, it offers a structured approach to overcoming common challenges and scaling up community-led renovations in diverse contexts.

To support communities in implementing CLR, a range of tailored tools were co-created with the pilot projects. These include:

- » **Communication and outreach materials** to engage diverse community segments, such as persona-based strategies and digital toolkits.
- » **Step-by-step renovation guides** providing technical and financial guidance for home upgrades, such as the Connecting Cabra Renovation Handbook.
- » **Legal and financial advisory resources** to help communities navigate complex regulations, secure funding, and establish sustainable renovation models.
- » **Collaboration and networking platforms** designed to connect stakeholders, share knowledge, and facilitate peer learning between CLR initiatives.

These tools were developed in response to **real challenges** faced by the pilots, ensuring that they are practical, adaptable, and effective in supporting community-led renovation efforts.

By applying the practical steps, co-created tools, and proven strategies outlined in this document, CLR initiatives can empower citizens, and contribute meaningfully to Europe's broader climate and energy goals.

