People not buildings: Trust, empowerment and resident participation in urban retrofit and adaptation

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the CHURCHILL fellowship

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Background

Two and a half years ago, in summer 2023, I became an accidental retrofit campaigner. It started when my own flat, along with another 1273 in my neighbourhood, was earmarked for retrofit works by our local authority. No one asked us if we wanted or whether we could afford this. Letters arrived thick with technical language and thin on clarity, followed by surveys and cost estimates running into tens of thousands of pounds per flat, even after government grants. Flats located in Lochend, one of Edinburgh's poorest neighbourhoods.

What was presented as a programme to improve homes and tackle fuel poverty quickly became a source of fear: neighbours forced into debt, private tenants evicted so landlords could sell quickly, and people living through months of disruption and damage. The stress is constant, the communication poor (sometimes non-existent), and the sense of powerlessness overwhelming. As I write this at the end of 2025, there is no end in sight.

About me

Originally from Peru, in 2005 I moved to Lochend, Edinburgh and in 2018 bought a small ex-council flat there. I am a housing campaigner, service designer and researcher, passionate about creating sustainable, people-focused solutions in the built environment. I spent 11 years working in the Scottish social housing sector, before moving onto energy efficiency and more recently, sustainable construction.

About Lochend

Lochend, located in North East Edinburgh, is an area of mixed tenure, high fuel poverty and long-neglected housing stock. It scores high in the Scottish Index of Multiple Deprivation, a tool used to identify the places where people are experiencing disadvantage across different aspects of their lives, including income, employment, education, health and housing.

My own flat, like many in the area, was built between the wars, in 1919. The estate is an interwar example of social housing built at scale.

Today, the area features a diverse mix of tenures, residents, and building types:

- 2-3 storey blocks of flats
- Renters and owners live in the buildings
- Ownership is shared with the local authority
- High proportion of private renters

- Local authority only deals with reactive repairs
- No maintenance plans in place
- Significant mix of nationalities and cultures
- High proportion of shared ownership
- Buildings of different construction types
- No owners' associations in place

A very short tale of Right to Buy (RTB)

In his book Homesick, journalist Peter Apps writes the tragic tale of social housing in Britain, from its "golden age" when the sector was stable and plentiful, to the present chronic shortfall of social homes, long waiting lists, and rising homelessness.

Today there is broad agreement among experts and researchers that RTB significantly weakened the social housing sector in Britain. While not the sole factor, this policy undoubtedly set the tone for decades of underinvestment and the unavoidable results we see today.

As was the case in the rest of the country, RTB saw a significant transfer of ownership of properties originally built as social housing in my neighbourhood. Today, the Lochend retrofit area comprises 51% council-owned and 49% privately owned properties, predominantly occupied by working-class residents.

In Scotland, RTB was abolished in 2016.

National implications

As I moved through 2023 looking for answers from the local authority about the future of my home, I found others in the same situation. As part of Living Rent Lochend, I helped organise resistance, research, and storytelling, pushing for fairer financing, better communication, protections from eviction, and genuine community oversight. Through our *Insulate Lochend Fairly* campaign, we began to show that retrofit is not just a technical challenge, but a justice issue.

This retrofit scheme isn't unique to Lochend. In its latest strategy document, our local authority proposes to retrofit nearly 15,000 mixed tenure properties in low income communities in similar ways, and other councils across Scotland are exploring comparable approaches through their Local Heat and Energy Efficiency Strategies. As new energy efficiency standards become law in the coming years, retrofit will touch everyone up and down the country, whether you're an owner occupier, private tenant, landlord or social tenant. Yet despite the scale of these plans, residents' voices are rarely part of the conversation and decision making. The people who live in these

homes are left out of the design and governance decisions that will shape their daily lives.

Retrofitting the UK's 27 million homes is a colossal task, yet there are still remarkably few spaces where the people most affected have any real say. The current system caters either to fully grant-funded social housing retrofit, where residents are expected to accept (but never question) whatever they are given, or to wealthy homeowners with access to consultants, technologies and financial products aplenty. Those in the middle, often low-income owner-occupiers in mixed-tenure buildings, are left unheard and unsupported.

Drawing on 11 years working in social housing, my current role in construction, and grounded research in my own community and beyond, **my fellowship asks a simple but seemingly radical question: what would retrofit look like if it were designed with communities, not done to them?**

Looking abroad

At the start of 2024 I could see the tragedy and the missed opportunity unfolding at the same time in my community: Retrofitting should have been a moment to improve housing conditions for everyone: social tenants, private renters and owner-occupiers alike. Instead, the council chose to press ahead with a one-size-fits-all programme that ignored the realities of our community. And so I set out to look at examples of best practice, where today's technical solutions combined with resident agency, and sensible financing to address the retrofit of apartment buildings.

However despite finding small isolated cases, it was really difficult to come across examples of this in the UK.

Looking for answers in Europe

My chosen research countries were Denmark and Spain. From the outset, I was clear that I wanted to examine examples from both a northern and a southern European context. This felt particularly important because, while the UK's retrofit conversation has traditionally focused on keeping people warm in winter, our summers are becoming increasingly hot. Overheating at home is a growing risk in the UK today, making it essential to learn from places that have long had to design for heat as well as cold.

Secondly, I was also interested in expanding my understanding of fuel poverty by drawing on the EU concept of *energy* poverty. This broader framing goes beyond the ability to afford heating alone and considers whether households can access the energy services they need to live safely and with dignity, including cooling, lighting, and power for everyday life. I wanted to understand fuel poverty not just as a winter problem, but as a year-round issue shaped by housing quality, income, health, and climate.

In Denmark, many apartment buildings share similarities with Scottish post-war urban flats, with a focus on solid construction, shared stairwells, and communal responsibilities, yet they often benefit from higher thermal performance and proactive maintenance. In Spain, where apartment living is far more common than in the UK, it was evident that energy performance and retrofit have been a long-standing concern and thoughtful approaches to retrofit and energy performance have been developed.

And, having worked in social housing for many years I was intrigued and compelled by the Danish concepts of *non-profit housing* and *tenant democracy* in the context of retrofit.

Comparing these northern and southern contexts highlighted how building traditions, climate, and occupancy patterns shape both the challenges and the solutions for upgrading homes.

A note about the word *retrofit*: in the industry we all take its meaning for granted, but most people have no idea what it actually means. As a linguaphile, I am drawn to the word *renovation*, *renovación* in Spanish, *renovering* in Danish, which carries warmth, care, and the sense of making a home truly better to live in. Unlike the technical ring of *retrofit*, for me, *renovation* reminds us that upgrading a building is ultimately about people. In this report I use the terms *retrofit* and *renovation* interchangeably. The term *rehabilitación* is also occasionally used to convey the same meaning.

This report combines participant observation, document reviews, and qualitative interviews with practitioners and residents.

EU framework

Denmark and Spain are members of the European Union. As such, they are governed by EU legislation affecting the renovation of buildings. They are also beneficiaries of EU funding, programmes and initiatives.

These are the key European policies shaping renovation initiatives and funding pilots that I will reference:

Directive	Energy Performance of Buildings Directive	The EPBD is key legislation to decarbonise Europe's building stock, aiming for zero-emission buildings by 2050. The revised EPBD entered into force on 28 May 2024 and will need to be transposed into national laws by 29 May 2026. It focuses on increasing the rate of renovation in the EU, particularly for the worst performing buildings in each country, and covers: renovation, decarbonisation, modernisation and digitalisation, and financing and technical assistance.
Planning instrument	National Renovation Plans	A key requirement of the EPBD. All EU countries must create plans to improve their building stock's energy efficiency. Drafts were due by the end of 2025 with the final plans submitted by the end of 2026.
Directive	Renewable Energy Directive	Establishes targets for the share of energy from renewables. It sets an indicative 49 % target for buildings in 2030.
Policy initiative	Renovation Wave	The Renovation Wave aims to renovate 35 million EU buildings by 2030.
Recovery instrument	NextGenerationEU and the Recovery and Resilience Facility (RRF)	The largest ever stimulus package undertaken in the EU, it provides loans and grants to Member States through the RRF. One of its critical areas of investment is the green transition.
Technical assistance facility	ELENA – European Local ENergy Assistance	The ELENA facility offers technical assistance grants to support the planning and implementation of energy efficiency measures, building-integrated renewable energy projects, and innovative urban transport initiatives.

Funding programme	LIFE	EU's funding instrument for the environment and climate action.
Research and innovation funding programme	Horizon 2020/Horizon Europe	Horizon is the EU's main €95.5 billion programme to fund research and innovation.
Policy initiative	New European Bauhaus/NEB Facility	A policy initiative connecting sustainability, design and inclusion. It has a dedicated funding facility to support NEB objectives.
Funding programme	Urban Innovative Actions- UIA, (now: European Urban Initiative-EUI)	The UIA was an EU initiative that funded cities to pilot bold, new, and risky solutions for complex urban challenges. It has now transitioned into the EUI, an initiative to support cities with innovative actions, capacity and knowledge building, policy development and communication on sustainable urban development.

Denmark

In summer 2025, I travelled to Denmark to meet a range of non-profit housing organisations, academics, planners, residents, innovation agencies, and municipalities. I conducted interviews, visited sites, and reviewed relevant papers, noting every renovation project I came across in the cities I stayed in. Across my interviews, one topic kept coming up, unprompted, from nearly everyone I spoke with: **the 1973 oil crisis**. It was almost as if Denmark's current approach to housing and energy couldn't be understood without it.

The oil crisis was a turning point for Denmark and its construction sector, shaping energy policy, building design, and the rise of sustainable practices. When global oil prices quadrupled, Denmark, heavily dependent on imported oil for heating, electricity, and industry, found itself exposed to energy vulnerability. The crisis forced a national rethink of energy dependence, affecting policy, urban planning, and construction. For the building sector, it marked a shift from cheap, oil-dependent construction toward energy-conscious, efficiency-driven practices. The changes set the stage for modern Danish standards in retrofitting, low-energy housing, and climate-focused urban planning, which continue to influence the country's approach to sustainable housing today.

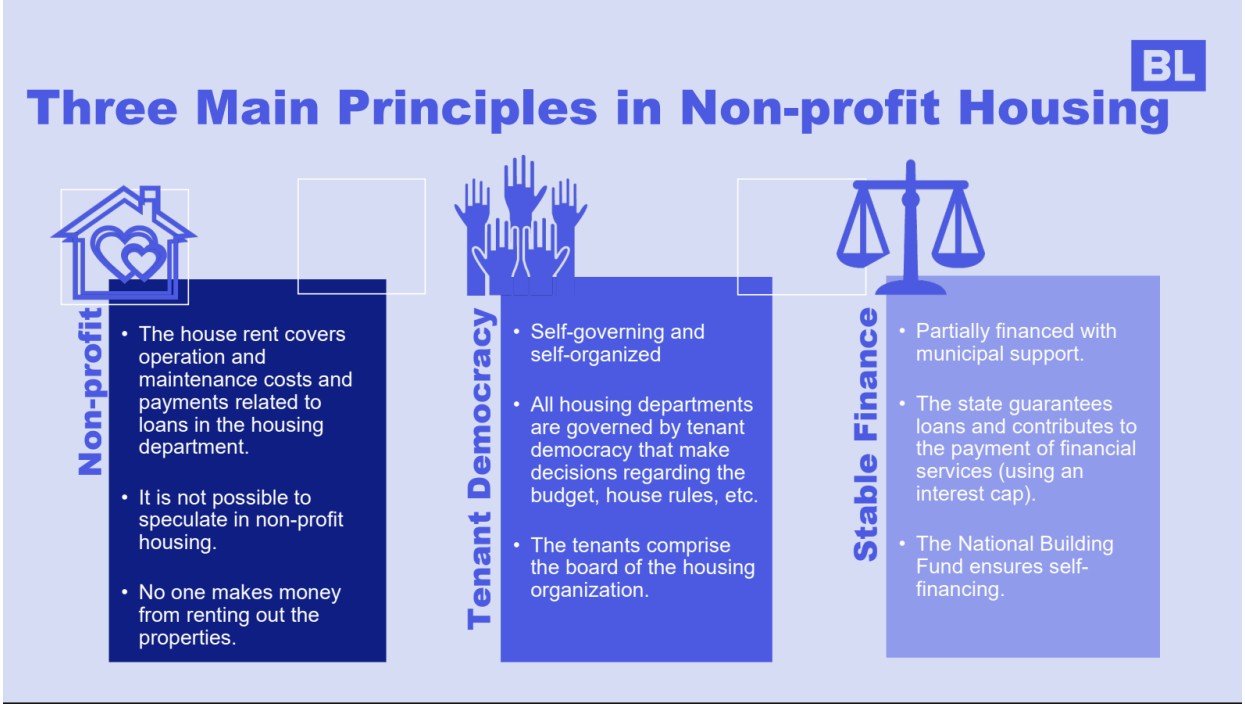
The non-profit housing sector in Denmark

According to BL, the Danish federation of non-profit housing providers, there are nearly 600,000 non-profit housing units in the country, with approximately 1 million Danes living in them. In the major cities of Copenhagen, Aarhus, Odense, and Aalborg every fourth or every fifth housing unit is non-profit.

Across the sector 149,980 homes are currently being renovated, with 200,000 residents in 50 neighbourhoods affected by social development plans supported by The National Building Fund.

Why non-profit?

In Denmark, non-profit status is legally codified. *Almene Boligorganisationer*, non-profit housing associations, are governed by the Danish Housing Act, the principal legislation for the country's non-profit housing sector. The law not only defines the obligations and limits of non-profit operation but also enshrines residents' right to participate in decision-making and governance.



The principles of non-profit housing. Image source and copyright: BL

Access to non-profit housing is open to all regardless of income, but households with low income may be eligible for rent subsidies. Local governments have the right to use up to a quarter of all vacancies for citizens in need.

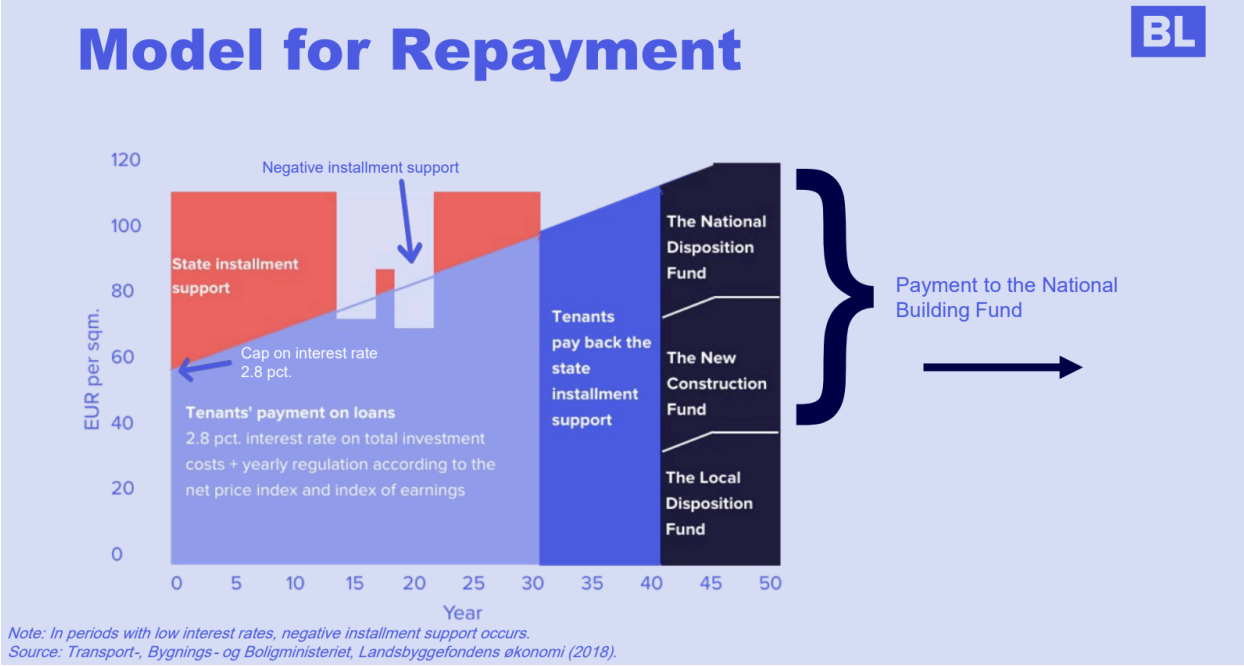
Tenants in non-profit housing pay cost-based rents, which are set according to the cost of managing their home. Each estate is a financially independent unit, so a deficit or surplus cannot be transferred from one estate to another.

Funding

Landsbyggefonden (The National Building Fund) is an independent fund providing support for renovations, new construction, and transformation of non-profit housing estates. Its funding criteria prioritise renovations that improve habitability, comfort, and accessibility. The fund was established in 1967.

National Building Fund. Image source and copyright: BL

The Housing Agreement of 1966 was a major political agreement to reform the housing market. As part of this, the National Building Fund was created as a mechanism through which rent contributions could be pooled and reused for sector-wide needs. This established a self-sustaining fund for Denmark's non-profit housing sector to finance building and renovation.



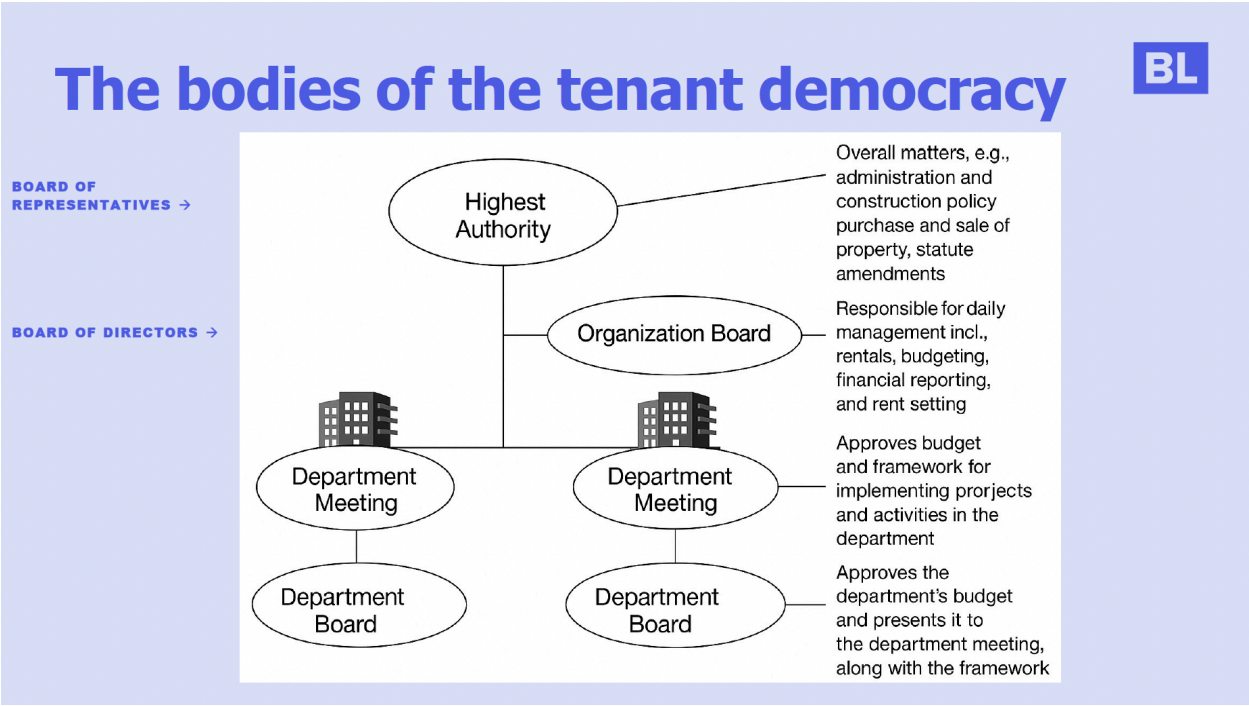
Model for repayment. Image source and copyright: BL

Since 2020, the National Building Fund has allocated DKK 30 billion (4 billion €) for green renovations in the non-profit housing sector.

Tenant democracy

Non profit housing providers are self-governing and self-organised, and governed by tenant democracy. This high degree of tenant involvement is also codified in law. Tenants' democracy includes elected association boards as well as local estate boards and general assemblies for each estate. Association boards (which are majority tenant-led) control maintenance, budgets, and local community life.

Local boards are made up entirely of tenants, elected at general assemblies where every resident has the right to stand for election and to vote. These boards oversee the development of their estates, shaping everything from services to budgets in line with tenants' priorities, including service provision and budgeting decisions that affect the specific estate. Few, if any, social housing systems in Europe grant residents the same level of collective ownership and formal decision-making power over their estates as the Danish non-profit housing sector.



The bodies of tenant democracy. Image source and copyright: BL

The Parallel Societies Act

In 2018 Denmark introduced the Parallel Societies Act, following years of political debate on immigration and segregation. The Act targets non-profit housing estates

identified through indicators such as income, employment, crime rates, and the share of residents of non-Western background. It requires these areas to reduce the proportion of non-profit housing to a maximum of 40% by 2030, through demolition, sale, tenure conversion, and private new-build housing.

The Act gives municipalities the power to enforce transformation plans without the consent of housing associations, an unprecedented move by the state into a sector historically managed by tenants and housing associations. The policy has been widely criticised for its racialised framing.

Under the current framework, areas are categorised as *udsatte boligområder* (vulnerable residential areas), *særligt udsatte boligområder* (particularly vulnerable residential areas), and *forebyggelsesområder* (preventive areas).

In 2020, a group of residents under threat of eviction from their homes in Mjølnerparken, Copenhagen filed a lawsuit against the Danish government challenging the state-approved plan to evict them from housing under the Parallel Societies Act. In 2025 the European Court of Justice ruled that parts of the Act may be unlawful under EU discrimination law. The case is now before Danish courts to make a final judgment in 2026.

Selective demolition

On 1 July 2025 Denmark introduced new rules on selective demolition for buildings over 250 m², requiring materials to be carefully mapped, separated and recycled, and hazardous substances like asbestos and PFAS safely removed. Building owners must prepare a demolition plan, appoint an authorised coordinator, and ensure contractors are trained and certified. These rules align with the EU Waste Framework Directive, aiming to boost circularity in construction and reduce waste, with penalties for non-compliance.

The new selective demolition rules reflect Denmark’s broader movement toward circular construction and sustainable building practices, encouraging greater reuse and recycling of materials as part of long-term efforts to reduce waste and environmental impact.

Case study: Frederikshavn Boligforening, 6 - Koktved

When I visited in August 2025, unusually good weather ensured the new solar panels were producing at maximum efficiency. Image source and copyright: Frederikshavn Boligforening

Frederikshavn is a city in northern Denmark, located in the North Jutland region. Its exposed coastal climate, with strong winds and cold winters, makes energy efficiency and resilient housing especially important. Frederikshavn Boligforening manages a significant share of the city's non-profit housing and works closely with residents to improve homes and support communities.

Koktved is a non-profit housing estate in Frederikshavn comprising 102 flats. It has recently undergone a major renovation aimed at upgrading its accessibility and sustainability. The renovation (2023–2025) includes new kitchens and bathrooms, replacement of windows and balconies, new flooring, façade and roof improvements. 30 flats have been turned into accessible units with the addition of lifts.

Renovation to the flats also included modifications to the internal layouts, incorporating individual plant rooms in each unit as well as meters for electricity, heating, water, and ventilation.

Exterior views of the renovated flats at Koktved. Image source and copyright: Mel Esquerre

Interior views of the renovated flats at Koktved. Image source and copyright: Mel Esquerre

Partly funded by Realdania's *Sammen om bæredygtigt byggeri* (Together on sustainable building), the project included the installation of solar panels and a 14-ton flow battery system with about 200 kWh storage capacity. This will make the block's electricity use carbon neutral and give residents tools to monitor their energy consumption.

Danish-produced batteries from VisBlue in Aarhus. This is a vanadium redox flow battery, with significantly lower environmental impact than other battery types and a lifespan of at least 20 years. Flow batteries are also safer as they cannot burn or explode, and can simply be placed in a basement or similar space. Image source and copyright: Mel Esquerre

Common areas such as meeting rooms, playgrounds, and outdoor spaces have also been upgraded to strengthen community life as part of a holistic approach to sustainable housing.

Participative budgeting

Koktved is an example of participative budgeting in action with renovation and upgrade decisions made through direct involvement of tenant representatives in the estate board. Residents, via their elected board, reviewed proposals for improvements, weighed options for major investments, and approved the allocation of funds for different components of the project. This meant that budgetary decisions were not made

solely by the housing association or external contractors, but reflect the priorities and preferences of the people living in the estate. By embedding financial decision-making in tenant governance, Koktved illustrates how participative budgeting ensures that resources are directed toward improvements that matter most to residents, while also increasing transparency, accountability, and community ownership of the outcomes.

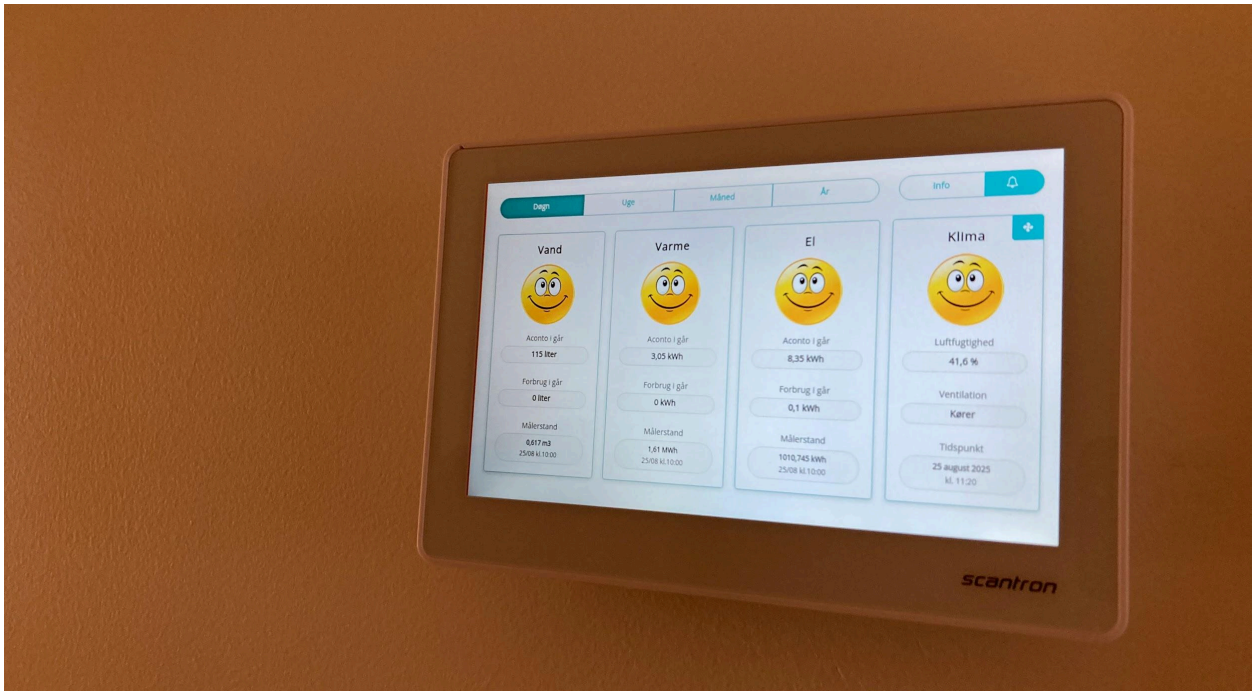
Living with new technology

A key element of the renovation was the installation of individual plant rooms in every apartment, alongside consumption meters for electricity, heating, water, and ventilation. The internal layouts were reconfigured to accommodate these systems, ensuring that each flat could monitor and manage its own energy and utility use.

As kitchens have been reconfigured, new plant rooms have been added. Image source and copyright: Mel Esquerre

Central to the approach was the active involvement of residents in understanding and managing energy use: digital platforms and monitoring dashboards are provided so tenants can track consumption in real time, identify patterns, and adjust behaviour to reduce waste and costs. By combining high-quality renovation with tools for energy literacy, the project not only improved living standards but also fostered tenant

empowerment. This also reinforces the Danish model of participative governance where residents have a direct stake in both the design and ongoing operation of their homes.

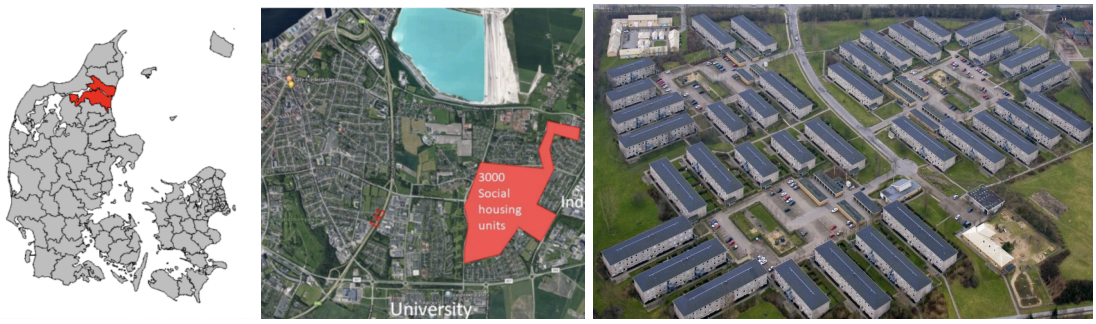


These tools allow tenants to see exactly how and when energy is consumed, compare usage with household goals, and make informed decisions to reduce waste and lower costs. Image source and copyright: Mel Esquerre

Beyond technical data, the platforms encourage engagement and learning: residents can track trends over time and experiment with adjustments that improve efficiency. By giving tenants transparent, actionable insight into their energy consumption, the project transforms energy management from a background utility into a shared, participatory activity, strengthening both sustainability and agency.

➡️ https://frederikshavnboligforening.dk/

Case study: Aalborg Øst



Aalborg Øst location. Image source and copyright: Himmerland Boligforening

Aalborg East was developed from greenfield in the 1970s. It has a large concentration of non-profit housing and has historically been one of the most socially vulnerable districts in the northern city of Aalborg, dealing with social, economic and infrastructure problems. The regeneration of the area, led by Himmerland Boligforening between 2011 and 2021, combined comprehensive physical upgrades to the housing stock with broader social, economic, and community development initiatives, creating a more sustainable and livable neighbourhood.

During my visit in August 2025, I saw first-hand the physical transformation of the estate. The 1970s-era concrete buildings, typical of their time, had undergone deep renovation, including reconfiguration. The work was carried out in a consecutive, comprehensive manner, transforming the old flats into appealing, modern homes.

As well as the individual home upgrades, the programme had a broader community vision, with enhancements to common areas and social infrastructure. These include a new state-of-the-art health centre, pharmacy, supportive housing for the elderly, a nursery, and several community buildings such as cafés, a library, training facilities and meeting spaces, as well as improved transport links with the rest of the city. Environmental considerations are also integrated, with climate-adaptive features in the green spaces, including local rainwater management and treatment systems.

Accessibility is also improved. Previously, none of the homes were accessible. Today, up to 60% of the flats and terraced houses have been adapted to meet the needs of seniors and people with disabilities, while still remaining suitable for residents of all ages and household types.

Beyond the original estate boundaries, land has been developed in partnership with the private sector, resulting in new private housing and the addition of commercial premises.




The properties have been transformed internally and externally. The recess where the bench sits shows the original preserved concrete wall and the thickness of added insulation. Image source and copyright: Mel Esquerre

The renovation works have been extensive and carefully designed. The original load-bearing concrete structures were preserved, while concrete façades were replaced, creating higher-quality homes and a more appealing architectural character. Additional insulation and new windows were installed, and the green areas around the blocks were enhanced. The renovation also reconfigured the apartments, expanding the range of dwelling types from 3 to 30, so that, for example, a three-bedroom apartment can now range from 65 m² to 110 m² over two levels with a roof terrace. Diverse, durable materials have been used throughout the building envelope to give the neighbourhood a refreshed visual identity, while the variety of dwelling sizes and layouts ensures that the homes meet the needs of a wide range of residents, from single occupants to families and elderly households. Internally, all apartments have been upgraded with new surfaces, kitchens and bathrooms.

Beyond the buildings themselves, city-owned district heating pipes were renovated and radiators replaced with larger, more efficient units. Waste grinders were installed in kitchens to convert organic waste into biomass for urban treatment plants, and rainwater is now collected from roofs and streets in open basins to infiltrate underground, integrating sustainable infrastructure into the neighbourhood's regeneration.

According to Himmerland Boligforening the main challenge this project has faced and successfully overcome has been turning the narrative of Aalborg East around and changing the image that the local population and the media had of the neighbourhood.

The project won the New European Bauhaus Prize 2023 in the "Prioritising the places and people that need it the most" category.

Rain garden. Image source and copyright: Mel Esquerre


Zonen
Midlertidigt
FORSØG I
Zonen


Velkommen i
Sundheds- og Kvartershuset
1. SAL
STUEN
HUSK
P-skiven!


Lokale 4-5
café
-og
gårdhave

New social infrastructure includes a health centre, community libraries and cafes, and supportive housing for the elderly. Image source and copyright: Mel Esquerre

The Aalborg Model

The Aalborg Model is a collaborative, long-term approach to large-scale renovation in socially vulnerable areas. Based on co-creation, its core principle is that all actors contribute. It treats existing tenants as active co-creators and active city planners.

Tenant voting on redevelopment

Ahead of the neighbourhood redevelopment, a democratic process ensured that all tenants could participate and contribute. Before work formally began, tenants were presented with project plans, proposed rent changes, and design options. A formal vote showed that an overwhelming majority supported the redevelopment, legitimising the project and embedding tenants' voices in decision-making from the outset.

Tenant role in co-creation and planning

Aalborg East explicitly used a co-creation model, involving tenants, local businesses, civic associations, and municipal partners in shared planning forums. Tenants were not just consulted, but were part of a steering committee and involved in strategic discussions alongside other stakeholders. This ensured their perspectives shaped outcomes at every stage.

Building committees and decision power

Throughout the renovation, building committees composed of tenants were established, giving residents a say in every major decision, from housing design and rehousing logistics to community facilities. Tenants participated on an equal footing with the housing association, architects, entrepreneurs, and advisors, influencing key choices such as the redesign of streets and building appearances.

Rehousing

The scale of the project meant that residents needed temporary rehousing during the renovation. Himmerland Boligforening is clear that maintaining close dialogue, transparency, and empathy was essential: Tenants were offered alternative options without forced displacement, and their feedback shaped how these solutions were planned and implemented. Everyone had personal rehousing talks in which they received a minimum of 3 offers for either temporary or permanent rehousing. In practice this has meant tenants either returned to their newly renovated flat or moved to a new one that better suited their circumstances.

Job creation

The programme also had a strong emphasis on job creation. For example, the business partners facilitated job matching. Companies experiencing labor shortages were identified and residents introduced to potential employers, resulting in successful job placements.

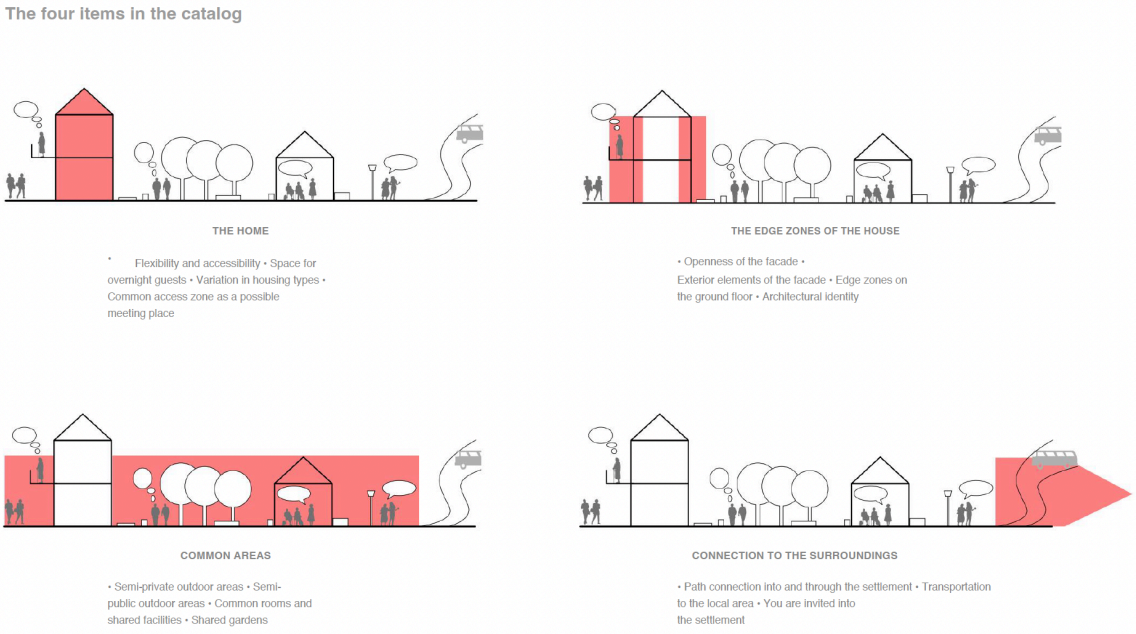
➡️ https://www.abhim.dk

Case study: Almenet, Copenhagen

Almenet is a Danish knowledge-sharing and membership network for the non-profit housing sector. It exists to support non-profit housing organisations by providing expertise, guidance, and practical tools to plan, manage, and implement renovations, new construction, and community development projects. Since 2025 it also provides small project grants (up to DKK 100,000) for members, as seed funding for local innovation. I visited in August 2025.

Through guidance, case studies, tools and forums, Almenet helps housing organisations implement renovations that meet both technical standards and residents' needs, fostering tenant involvement and long-term community benefits. Tools on renovation practice include: renovation project management, tenant engagement in renovations (for non-profit landlords), tenant engagement (for tenants), social impact of renovations, sustainable renovations, decanting and more.

A key resource I came across is Almenet's "social renovations" project, which brings together key insights on preventing loneliness and creating opportunities to strengthen communities. The tool showcases examples of good practice where social life is considered alongside physical renovation, using the renovation process itself as a way to reinforce the community it serves.



Excerpt from "How do we create social renovations that prevent loneliness?" highlighting the various elements in the home and outdoor areas that support social interaction. Image source and copyright: Almenet

In 2025, it is leading the project "New paths in departmental democracy", a three-year project that will explore the association structure in the resident democracy of non-profit housing by developing and testing new forms of democratic participation. The project will run until September 2028.

➡️ https://www.almennet.dk/

Case study: Gadehavegård, Høje-Taastrup

A block of flats in Gadehavegaard. Image source and copyright: Mel Esquerre

Gadehavegård is a large non-profit housing neighbourhood in Høje-Taastrup, about 20 km west of Copenhagen. Built in the 1970s, it comprises around 986 apartments and has long struggled with social, physical, and planning challenges typical of large post-war estates. It is set to be redeveloped by 2030 and I visited in summer 2025.

Currently designated *Forebyggelsesområde* (“preventive area”, meaning it does not meet the criteria for vulnerable status but is considered at risk of becoming one) under the Parallel Societies Act. A major transformation plan to diversify the area and improve

living conditions is currently underway. The masterplan involves selective demolition and material reuse: 250 homes will be demolished, 80 will be merged, 105 converted into youth housing, 94 sold, and 123 new townhouses built. Meanwhile, the remaining homes will undergo extensive renovation.

Gadehavegård's regeneration plans combine extensive physical upgrades with strong tenant participation, ensuring residents have a voice in planning, green space design, and community facilities. Social and economic programmes will support cohesion, job opportunities, and skills development, while environmental initiatives will engage residents in sustainability and climate adaptation.

Gadehavegård's is a demonstrator site for the Desire programme, funded by the European Union under the New European Bauhaus initiative.

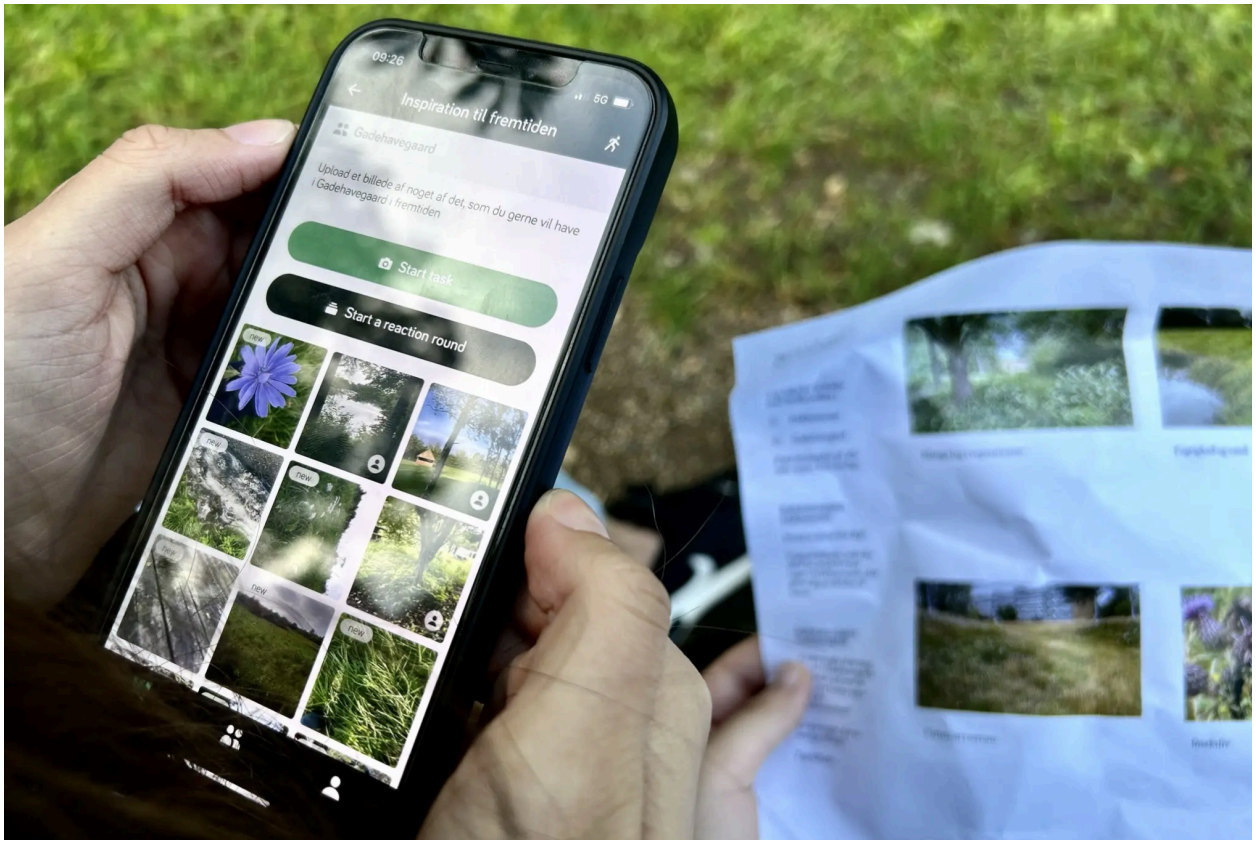
Desire

As part of the Desire programme, the Gadehavegård demonstrator tackles two key challenges: the physical renovation of the area and the empowerment of residents in the decisions that shape it. The project is centred around the principles of biodiversity and circularity, using them as starting points in the development of the activities.

Designing with young people

The project works closely with local schools to explore the area's future through the eyes of young people. It also equips students with practical skills and knowledge in biodiversity, circularity, and inclusive participation, giving them both a voice in shaping their community and the tools to make a meaningful impact. Young people's voices, often overlooked in urban planning, are in this way helping to shape a long-term vision for Gadehavegård that reflects their perspectives.

Tools used including theme weeks at the local schools, the use of an app to map the biodiversity of the area and a student-led exhibition on their ideas for a biodiverse and circular park in the estate.



The Desire project uses the Our Walk App to engage citizens, particularly young people, in shaping urban spaces by collecting soft data on their perceptions and experiences. Schoolchildren in Gadehavegård use the app to document biodiversity and reflect on how nature makes them feel, while their photos and comments are geo-tagged and visualised in an interactive datascape. Image source and copyright: Desire

An additional outcome of the project so far has been a rethink of how tendering usually works. Local young people's ideas and needs have been turned into clear local design principles that can actually guide future projects. Architects are able to test these principles before any tendering even starts, adding a spatial quality check alongside the usual cost considerations. With these guidelines in place, multidisciplinary teams are invited to work with residents throughout the design process, making the approach more inclusive and less biased.

So far, the demonstrator has highlighted the value of rethinking tendering processes by embedding participatory design from the outset, grounded in local needs. Instead of starting with tenders and budgets, it begins with the everyday lives of local residents, especially young people, and invites them into the design process early on. The project also shows how attention to circularity and accessible green spaces can support well-being, involving young people in co-design and helping rebalance power and build a stronger sense of ownership in non-profit housing transformations.

➡️ https://www.irresistiblecircularsociety.eu/gadehavegaard-høje-taastrup-denmark

Case study: Gellerup/Toveshøj district

The Gellerup/Toveshøj neighbourhood, west of Aarhus, was built between 1967 and 1972, and is regarded as the largest non-profit housing project in Denmark. The district has been characterised by low income and educational levels, high unemployment rates and a large immigrant population. Gellerup/Toveshøj is a designated *udsatte boligområder* (vulnerable residential area). I visited in August 2025.

Regeneration in the area has been underway for more than a decade, led by Brabrand Boligforening (non-profit housing association) in partnership with Aarhus Municipality. The original estate was deliberately designed as a self-contained satellite city, physically and socially detached from its surroundings; the regeneration plan reverses this, opening the area up and integrating it more fully into Aarhus. A key element of the programme is a deliberate shift in tenure mix, reducing non-profit housing and increasing private tenures. Over the next four years, 600 existing flats will be renovated and reconfigured into 750 homes, providing a broader range of housing types and sizes.

Parallel societies

The regeneration of Gellerup is shaped by the Parallel Societies Act, which requires non-profit housing to make up no more than 40% of the total stock. Brabrand Boligforening is achieving this through selective demolition, tenure change, and redevelopment, alongside renovations in 600 flats.

Observing the Gellerup regeneration, it is clear that the social dimensions of the project are as complex as the physical transformation. During my visit on one side of Gellerup Park construction was underway on new terraced houses, delivered to high sustainability standards. On the other side, two non-profit housing blocks had become focal points of resistance, with residents refusing to relocate or accept the proposed demolition. These refusals have slowed the regeneration programme and affected other planned improvements. This starkly illustrates the tension between statutory requirements and residents' rights to remain in their homes. Progress on these blocks is currently paused, pending the outcome of proceedings in the Danish courts.

Aarhus municipality stresses the need to look at the regeneration plans from both a physical and social lens as the two are deeply interconnected - one is not able to lift the area without the other. Gellerup illustrates that even well-resourced regeneration programmes face limits when social dynamics and resident agency are underestimated.

➡️ https://www.brabrand-boligforening.dk/

Innovation in renovation/participation - EU funded examples

Green Deal ARV – Sønderborg Demonstration (Horizon 2020)

Green Deal ARV is an EU-funded project aiming at creating climate positive circular communities in Europe and increasing the building renovation rate. As part of this project, Sønderborg Andelsboligforening (SAB) is retrofitting apartment blocks with solar panels, battery systems, and smart energy controls.

What sets this apart is the central role of tenants: residents are involved from the start in planning energy-saving measures, deciding on which technologies to prioritize, and learning how to use them effectively. Tenants participate in workshops and decision-making forums, making energy efficiency a shared, community-driven goal.

➡️ This approach ensures that retrofits are not only technically efficient but also aligned with everyday living patterns, increasing adoption and satisfaction.

https://www.housingeurope.eu/sonderborg-where-innovative-energy-efficiency-meets-affordable-housing-and-social-inclusion/

HAPPI – Energy Efficiency Planning (Horizon 2020)

HAPPI (2018-2022) focused on strategic energy retrofit planning across multiple housing associations in Denmark. Resident engagement was built into the project by:

- Surveys and interviews to understand tenants' energy use and comfort priorities.
- Involving residents in co-developing renovation schedules to minimise disruption.
- Using feedback loops to adjust renovation plans to residents' preferences and daily routines.

➡️ This approach demonstrates that effective energy renovations in non-profit housing depend on understanding residents' needs, and not just technical performance.

https://go-happi.dk/

SUPER-i / SUPERSHINE – Tools for Non-profit Housing Retrofit (Horizon 2020/Horizon Europe)

The projects provide frameworks and tools for engaging tenants in energy renovations. The Danish pilot is taking place in non-profit housing in Herning.

- Facilitates tenant workshops and co-creation sessions, giving residents a voice in how renovations are planned and executed.

- Provides educational resources and monitoring tools, allowing tenants to see energy savings and adopt sustainable habits.
- Focuses on social cohesion, ensuring retrofits improve not only building performance but also quality of life.

➡️ Through a bottom-up approach tenants are empowered to shape energy renovations through workshops and co-creation, and given tools to track savings and adopt sustainable habits.

https://super-i-supershine.eu/supershine/about/

Spain

I visited Spain in September and December 2025, focusing my research on two autonomous communities: Catalonia and Euskadi (the Basque Country). One is Mediterranean and increasingly exposed to rising temperatures, while the other benefits from a milder and wetter Atlantic climate. Visiting the two allowed me to explore how different climate and social contexts shape approaches to apartment renovation. I was also interested in learning how their programmes intersect with EU policy and funding, as well as with Spain's national legislative framework on housing and energy renovation.

Oficinas de rehabilitación

Rehabilitation offices have a long tradition in Spain, dating back to 1983 when the *Sociedades Urbanísticas de Rehabilitación* were first created in the Basque Country to revitalise neglected urban areas. Over the years, similar offices have emerged across the country, such as ORVES (*Oficinas de Rehabilitación de Viviendas y Edificios*) in Navarra and ARRU (*Área de Regeneración y Renovación Urbana*) in Galicia, each supporting decades of local renovation and regeneration efforts.

These offices are typically established by autonomous communities, municipal governments, or city councils, and in some cases by professional bodies such as Architects' Colleges. Many rehabilitation offices operate regionally, while others are created as part of EU-funded initiatives targeting specific neighbourhoods, such as the Opengela project in the Basque Country.

Article 18 (1) of the Energy Performance of Buildings Directive (EPBD, Directive (EU) 2024/1275) states that *"Member States shall, in cooperation with competent authorities, and, where appropriate, private stakeholders, ensure the establishment and the operation of technical assistance facilities, including through inclusive one-stop shops for the energy performance of buildings, targeting all actors involved in building renovations, inter alia, home owners and administrative, financial and economic actors, such as SMEs, including microenterprises."*

Article 18(2–3) continues: *"The technical assistance facilities… shall: (a) provide streamlined information on technical and financial possibilities and solutions… (b) provide holistic support to all households, with a particular focus on households affected by energy poverty and on worst-performing buildings…"*

"One-stop shops established pursuant to paragraph 1 shall: (a) provide independent advice on the energy performance of buildings… (b) offer dedicated

services for vulnerable households, people affected by energy poverty and people in low-income households."

These provisions make one-stop shops essential tools to support energy renovations under the EPBD. Under the revised directive, member states are required to establish and operate such technical assistance facilities to help citizens navigate energy renovation processes, with explicit requirements on where they must be located and what technical, financial and holistic support they should offer. These one-stop-shop services guide building owners through technical, financial, and administrative aspects of energy renovation, reducing barriers and improving uptake. They provide tailored advice, facilitate access to funding, coordinate with local authorities, and monitor energy performance, ensuring that renovations not only meet regulatory standards but also deliver long-term energy savings and improved comfort for occupants.

In Spain, rehabilitation offices are positioned not just as a nice-to-have service but as integral to implementing the EPBD's goals of increasing renovation rates, improving energy performance and supporting decarbonisation of the building stock by 2050.

Programa de Rehabilitación Energética de Edificios

European assistance for rehabilitation of buildings and homes. Spanish Government website. Image source and copyright: Spanish Government

The PREE (Programa de Rehabilitación Energética de Edificios) is Spain's flagship national programme for supporting energy-efficient renovations of residential and public

buildings. PREE forms a central part of the country's PRTR (Plan de Recuperación, Transformación y Resiliencia) strategy using Next Generation EU funds.

The programme targets both single-family homes and multi-unit buildings, although in practice most subsidies are accessed through owners' associations since funding is granted at building level. PREE provides grants covering a significant share of renovation costs, depending on the baseline energy efficiency of the building and the scope of the works.

Building owners access the PREE via local rehabilitation offices.

Citizen Assistance Programmes: Chart detailing the five assistance programmes under the Recovery, Transformation, and Resilience Plan, in the area of Residential Rehabilitation. Spanish Government website. Image source and copyright: Spanish Government

Ley de Propiedad Horizontal

The Ley de Propiedad Horizontal (LPH) is the law that regulates the rights and obligations of the owners of the units within a single community or building where private spaces coexist with common elements (entrances, staircases, lifts, courtyards, etc.).

The law establishes the legal framework that automatically creates and binds all owners as a comunidad de propietarios, an owners' association. This makes it legally possible to manage multi-unit buildings collectively, which is essential for decisions like building renovations.

Catalonia

On a Monday evening in September, like every Monday evening, the PAH, *Plataforma de Afectados por la Hipoteca* holds a meeting in central Barcelona. I sat in the crowded room listening as people shared their stories of eviction threats, mounting debt, and the anxiety of housing insecurity. Maybe it's because Spanish is my native tongue or because I too fear losing my home soon that their stories resonated deeply.

At the same time, the meeting highlighted the potential of citizen organising: residents and volunteers working together to share information, coordinate advocacy, and seek solutions collectively. People spoke confidently, answering questions, explaining relevant legislation, and guiding others through the system. It was a clear example of how community-led action can make a real difference.

The PAH is a grassroots organisation supporting people facing housing insecurity. Founded in 2009 in response to Spain's housing crisis, PAH combines direct assistance, legal advice, and community organising to advocate for housing rights and policy change. Ada Colau, who co-founded PAH, played a key role in shaping its mission and approach before later becoming Barcelona's mayor, bringing the organisation's ethos of citizen-led action and housing justice into municipal politics. PAH meets weekly, providing a space for residents to share experiences, access resources, and organise collectively.

Entrance to PAH Barcelona meeting. Image source and copyright: Mel Esquerre

PAH members meet regularly in open assemblies where each person shares their housing struggles, legal questions, and experiences publicly. Through these interactions, participants quickly become highly knowledgeable about housing law, financing options, rights, and policy, effectively transforming ordinary residents into experts. Importantly, this expertise is shared openly across the assemblies, with resources, advice, and strategies circulating freely to support others facing similar challenges. This model creates a powerful grassroots tool for housing justice, as it combines collective learning, peer-to-peer empowerment, and practical advocacy, enabling communities not only to defend their own homes but also to influence broader housing policies and resist systemic inequalities.

A city in crisis

Airbnb is causing us more pain than pain. Mural in central Barcelona. Image source and copyright: Mel Esquerre

The Barcelona metropolitan area, spanning 636 km² and 36 municipalities, faces a deepening housing crisis. A combination of speculative investment, tourism, and a chronic shortage of affordable housing has fueled a rise in rents and resident debt.

Following the 2008 financial crisis, the resulting spike in evictions and repossessions sparked a wave of grassroots activism to fill the gap left by public institutions.

Many campaigning organisations already active in the city built on this context, mobilising collective support, legal knowledge, and direct action to defend the right to housing and to challenge the structural causes of exclusion. Alongside the *PAH*, the *Sindicat de Llogaters* fights for tenants' rights and rent protections, the *Federació d'Associacions Veïnals de Barcelona (FAVB)* campaigns on housing conditions and urban injustice, and the *Observatori DESCA* monitors housing as a human right and informs policy. Neighbourhood associations such as the *Assemblea de Barris per un Turisme Sostenible* also mobilise residents to defend long-term housing against the pressures of tourism. Together, these organisations enable residents to organise, make decisions collectively, and influence urban policy, transforming housing activism into a broader force for community engagement and empowerment.

In Barcelona, I was interested in looking at renovations from a neighbourhood movement perspective. Grassroots movements in the city are increasingly linking housing rights to urban planning and climate justice, ensuring climate-friendly renovations and sustainability initiatives do not become tools of displacement. A landmark victory was the introduction of the 30 % affordable housing rule, forcing new developments and large renovations to reserve a portion of homes as *habitatge protegit* (socially affordable housing). This policy has been adopted into the city's planning rules after coordinated advocacy and municipal pressure.

Climate adaptation = gentrification?

A study published in Nature Medicine in 2025 identifies Barcelona as the European city projected to have the highest number of heat-related deaths by the end of the century if no significant climate action is taken, highlighting the urgency of adaptation. And while housing and neighbourhood level interventions are underway, assessment of unintended effects like gentrification is still limited.

In its 2025 *Vulnerabilitat a la Gentrificació Climàtica. Un mapeig participatiu a escala metropolitana report* (Vulnerability to Climate Gentrification: A Participatory Mapping at a Metropolitan Scale), the Barcelona Lab for Urban Environmental Justice and Sustainability refers to climate gentrification as "the displacement of vulnerable residents driven both by climate impacts and by adaptation measures that increase the attractiveness and cost of cooler, more resilient neighbourhoods, drawing wealthier residents and real estate investment."

In Barcelona, climate adaptation strategies increasingly risk deepening existing housing inequalities through climate gentrification. Local organisations and academic studies

have identified key issues affecting housing access and security at both building and neighbourhood levels:

Heat gentrification: A subset of climate gentrification, heat gentrification happens when marginalised residents are displaced due to heat-related climate impacts and the adaptation strategies and policy measures that make cooler homes and neighbourhoods more desirable and expensive.

Privatised resilience: Higher-income groups are often the only ones able to retrofit their homes to withstand heat, with only wealthier residents able to afford homes with superior insulation or live in neighbourhoods naturally protected from heat.

Barcelona's green axis/Eix Verd is a major initiative to transform city streets into greener, pedestrian-friendly corridors with reduced traffic. The aim is to improve air quality, reduce noise, and promote more sustainable urban living. However, these greener areas, offering better access to heat relief amid rising temperatures, have also become more attractive to higher-income residents, driving up housing prices. A 2025 study found that monthly rents for flats within 50 meters of the Eix Verd de Consell de Cent have increased by 15.14%.

The price of noise: Traffic calming and active travel measures reduce urban noise, but this can unintentionally contribute to gentrification. In Barcelona, flats in noisier areas have devalued by 3.4% for sale and 2% for rent, while quieter areas become more desirable and expensive, according to a 2025 report.

Renoviction: Renovation projects, even when publicly funded, risk excluding lower-income residents by increasing rents or property prices. Consequently, only new tenants with higher incomes can afford these upgraded homes, leading to displacement.

Lack of access to renovation funding: Housing organisations highlight persistent knowledge and technical gaps regarding renovation financing mechanisms, especially in working-class neighbourhoods. Despite significant EU resources, such as the NextGeneration funds aimed at renovating private and social housing and improving energy efficiency, many intended beneficiaries still struggle to access them.

Case study: Sant Ildefons de Cornellà, Cornellà de Llobregat

Sant Ildefons is a dense residential neighbourhood in Cornellà de Llobregat, south west of Barcelona. Developed in the 1960s and 1970s to house waves of internal migrants arriving in the metropolitan area; today it is home to thousands of foreign migrants. Built quickly and at scale, it is characterised by compact apartment blocks and a strong tradition of working-class solidarity.

In 2021, the Consorci Metropolità de l'Habitatge's (Housing Consortium of the Metropolitan Area of Barcelona) designated Sant Ildefons as a Conservation and Rehabilitation Area (ACR), a mechanism that allows the rehabilitation of residential buildings in neighbourhoods with a situation of greater vulnerability.

Sant Ildefons buildings undergoing renovations. Image source and copyright: Ayuntamiento de Cornellà

Estimada Casa, Querido Barrio (Dear home, beloved neighbourhood)

Dear home, beloved neighbourhood is a project by the Metropolitan Housing Consortium and the Barcelona City Council to help homeowners' associations to renovate their buildings.

The Sant Ildefons renovation project addresses multiple aspects: repairing structural deficiencies, improving energy efficiency through façade and roof insulation and window replacement, enhancing accessibility with new or upgraded lifts, and improving habitability with new balconies. These improvements are complemented by broader neighbourhood initiatives, including public spaces, community facilities, and infrastructure upgrades.

Financial support covers both rehabilitation works and technical fees, with grants linked to energy performance improvements. Subsidies are available to cover part of the cost, interest-free installments of up to 15 years can be applied for, and for those unable to pay, the Consortium can advance funds to be repaid later. The programme combines community decision-making, professional management, and inclusive financing to upgrade buildings while minimising conflict and cost.

Neighbourhood transformation

Sant Ildefons has been divided into different sectors to phase the renovation works, which are initially focusing on the oldest buildings. One example is 4 Àlber Street, one of the neighbourhood's oldest blocks. Here, the renovation includes building conservation and energy efficiency upgrades, the addition of balconies, and the modernisation of the lift, which currently stops between floors and forces residents to climb stairs. Delivering these improvements will require the complete replacement of the staircase.

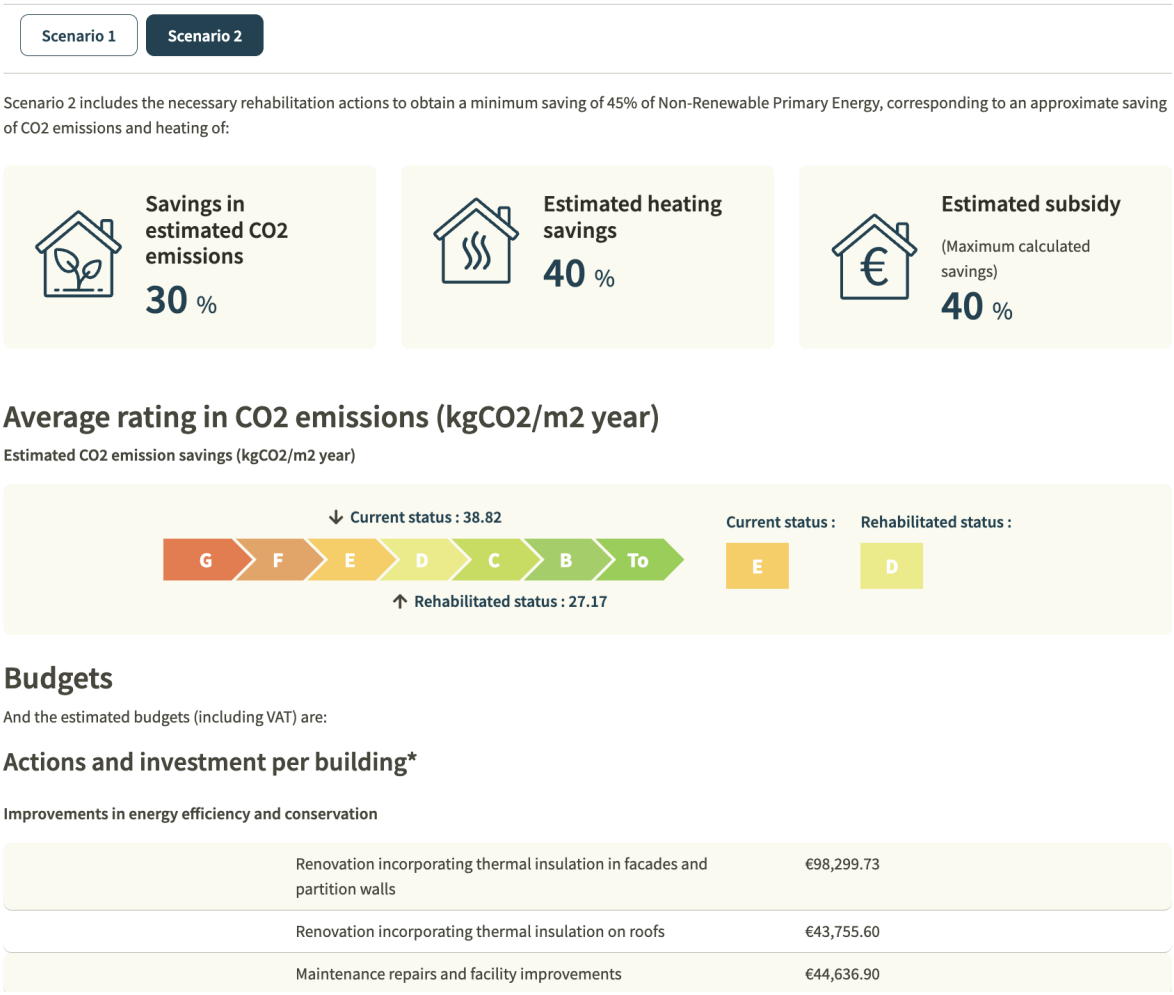
This is the most ambitious type of intervention, but each building comes with its own constraints, so communities are able to choose from several options: Out of the 49 communities that joined the programme, 29 opted for the most comprehensive renovation package, four chose basic renovation plus a balcony, eleven selected basic renovation plus a lift, and five went for basic renovation only. The programme empowers residents to decide on the scope of works that best suits them.

Beyond the buildings themselves, the works also extend into the public realm. Renovating the older blocks sometimes requires relocating basic services, such as water infrastructure. The City Council is using this opportunity to renew pavements, street planters, and other public elements, improving the quality of the streets surrounding the renovated buildings.

Owners decide

For residents of Sant Ildefons, understanding the condition of their buildings only takes a few clicks. Through the Consortium's website, they can access a rehabilitation simulator, an online tool designed to help owners and property managers explore

different renovation options. The simulator compiles data from municipal records, the property register, the Catalan Institute of Energy, and the Catalan Housing Agency to provide indicative estimates of renovation costs and potential public subsidies, based on factors such as building age, size, and energy performance. It serves as an early-stage planning tool, allowing communities to compare different scenarios and understand what financial support might be available before committing to works or submitting formal applications.



Example showing renovation scenarios and likely costs. Image source and copyright: Consorci Metropolità de l'Habitatge

Owners' associations come together in assemblies to decide the level of intervention they want for their building. In some cases, mediators are brought in to help ensure decisions are reached collaboratively and fairly. Each building has its own project and budget, and owners approve the renovation programme, participate in a monthly monitoring committee to track progress, and benefit from preliminary inspections of the building and planned works provided at no cost. Community presidents are involved throughout the process of contractor selection.

Some upgrades, like energy efficiency and accessibility improvements, can be approved by a simple majority, while others, such as adding balconies, require qualified majorities. Because subsidies don't fully cover the cost of these additions, residents' contributions can increase significantly. Recognising that every household's situation is different, the programme provides tailored solutions and flexible payment options, making it possible for all residents to participate with confidence and peace of mind.

'Climate Itineraries' of Cornellà

Barcelona's public administration has mapped heat risk across all 36 municipalities of the metropolitan area, identifying Sant Ildefons as one of the five most vulnerable neighbourhoods.

The Climate Itineraries project aims to make streets cooler, greener and easier to navigate in the Sant Ildefons district, where heat and lack of green space limit people's movement and access to services. Climate itineraries are co-designed through a resident-centred process that starts by mapping key neighbourhood services (including the community centre, the health centre and the library, which already function as air-conditioned "climate shelters" in the summer) and identifying walkable routes that connect them into a 1.5 km loop with additional branches to improve access.

These routes are then tested and refined through close engagement with local stakeholders and a participatory workshop where residents walk the itinerary, share how they use it, and identify priority locations for interventions like trees, shade, fountains and seating. Only once this local knowledge is gathered are nature-based solutions and shading measures designed and implemented. The final step is to monitor how the adapted routes are used, ensuring they genuinely improve comfort, accessibility and quality of life for Sant Ildefons residents.

Climate shelters

In Barcelona, climate shelters ("refugios climáticos") are public spaces, such as libraries, community centres, or health centres, equipped with air conditioning and cooling facilities to provide relief during heatwaves. The concept also includes outdoor climate-adapted areas, such as shaded plazas, tree-lined parks, and streets with water features, pergolas, or misting systems. These outdoor spaces provide cooling and comfort in the open air, allowing residents to safely circulate, rest, and access public services even during extreme heat, complementing the indoor shelters.

Climate shelter sign in Poblenou park, Barcelona. Image source and copyright: Mel Esquerre

Climate shelters are part of the city's broader climate adaptation strategy, offering residents, especially vulnerable populations, safe and accessible places to escape extreme heat, while also serving as hubs for information, community support, and local resilience initiatives.

➡️ https://www.cmh.cat/es/web/cmh/actualitat/estimada-casa-querido-barrio

Euskadi

Euskadi/the Basque Country has one of the oldest housing stocks in southern Europe, with buildings whose average age exceeds 60 years. Many blocks of flats were built during periods of rapid urban growth in the mid-20th century, resulting in an ageing building stock that is often energy-inefficient and poorly adapted to current accessibility and comfort standards. At the same time, a significant share of these buildings is home to low- and middle-income households, many of them older residents, who lack the financial capacity to undertake major renovation works on their own.

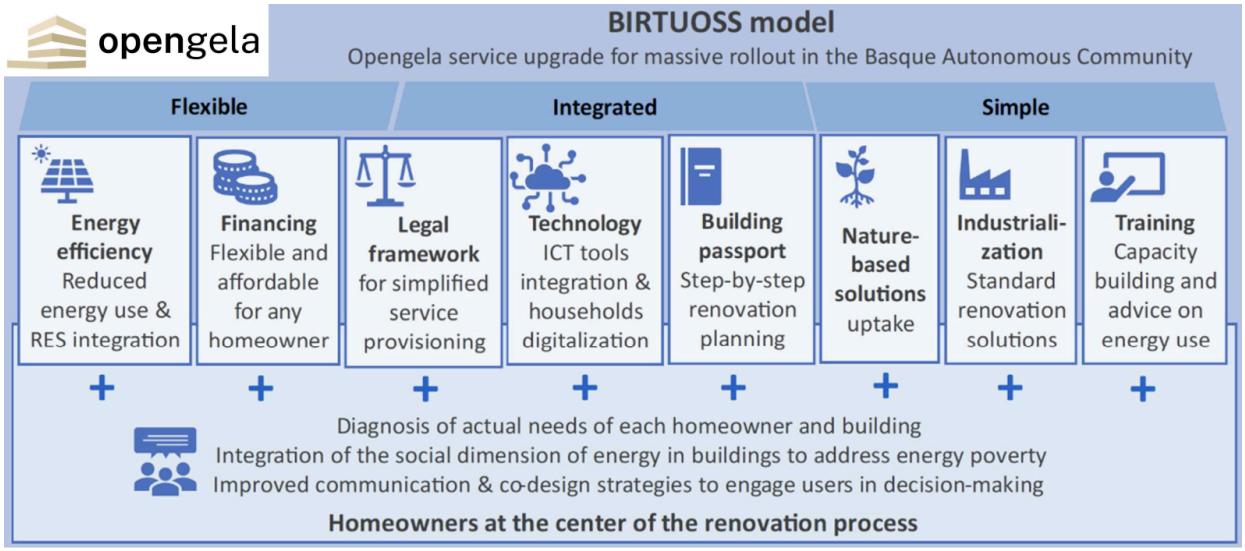
The combination of ageing buildings and limited household budgets has made the Basque housing sector a priority for public intervention. Regional authorities and housing organisations are increasingly implementing large-scale retrofit programmes that improve energy performance, reduce emissions, and enhance accessibility and comfort for residents. The Basque approach shows how technical upgrades and social equity can be advanced hand in hand, offering lessons for sustainable, people-centred renovation.

Opengela

Opengela (“gela” is the Basque word for office) is a project led by the Basque Government that began in 2019. The objective is to develop a replicable model of local offices that support neighbourhoods throughout urban regeneration, with a particular focus on building renovation. There are currently 25 local Opengela offices spread across 21 municipalities in the Basque country.

The model was first tested in Otxarkoaga (Bilbao) and Txonta (Eibar), two districts categorised as “very vulnerable” by the Basque Government, to support large-scale residential renovation through a people-centred approach. Initially funded by the EU Horizon 2020 programme, Opengela established local, physical one-stop-shop (OSS) neighbourhood offices that bring technical, financial, and social support together in one place, helping residents navigate complex renovation processes and funding schemes.

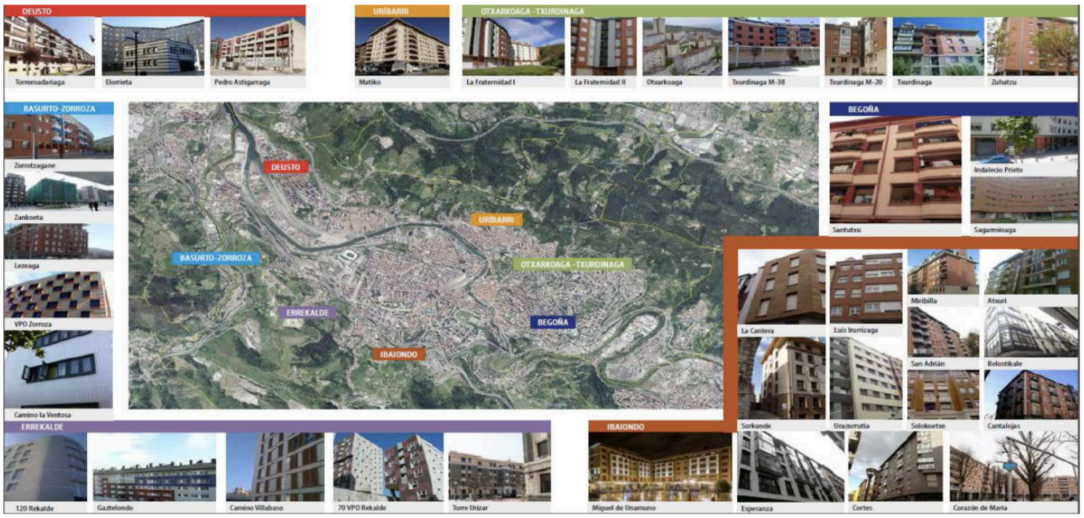
Building on the success of the pilot, Opengela has since been scaled up and embedded into regional policy, with further support through programmes such as LIFE, positioning it as a long-term public service rather than a time-limited project and reinforcing its role in driving inclusive, energy-efficient urban regeneration. I visited in September and December 2025.



Services available under the Basque OSS model. Image source and copyright: Opengela

Case study: Bilbao Viviendas X Opengela

In Bilbao, the Opengela model has been applied across several neighbourhoods in the city, guiding residents through renovation and community transformation. These local Opengela offices coordinate technical, financial and administrative support, serving as accessible hubs where neighbours can get advice, navigate public grants and financing options, and collectively organise renovation works in their multi-family buildings. Bilbao Viviendas, the municipal public housing company of Bilbao, owns a significant share of the residential stock targeted for Opengela interventions in the city.



Distribution of Opengela's Bilbao projects. Image source and copyright: Opengela

Otxarkoaga Opengela office. Image source and copyright: Mel Esquerre.

The headache of mixed tenure blocks

One of the key challenges in Bilbao's Opengela projects is coordinating works in mixed-tenure buildings, where social housing and privately owned flats must be upgraded simultaneously. As a co-owner, Bilbao Viviendas, the municipal housing company of the City of Bilbao, plays a key role.

The true value of Opengela offices becomes clear in these mixed-tenure contexts, where they act as essential bridges between co-owners. Reaching consensus to move forward with renovation works is a major achievement, especially given that the Horizontal Property Law grants one vote per owner, no matter how many units they hold in a building stair.

And then there is the issue of money. While Bilbao Viviendas is able to access funds to pay for their share of the works to social housing flats, what about the rest of the owners? Opengela's own evaluation and experience make it clear that current financial markets leave many households behind when it comes to extensive renovation projects. As part of the programme, each community's financial situation is assessed individually, allowing for highly personalised support that accounts for the specific needs and circumstances of residents. Without this tailored approach, vulnerable households would often be excluded from renovation projects due to the limitations of standard financial markets.

To address this, Opengela developed MAS OPENGELA, a social support fund combining public and private resources to provide accessible, long-term loans. These loans cover the full cost of renovation, with streamlined eligibility, no life insurance requirement, no cancellation fees, extended age limits and terms of up to 15 years. MAS OPENGELA is also able to offer very low monthly repayment amounts to owners with limited disposable income.

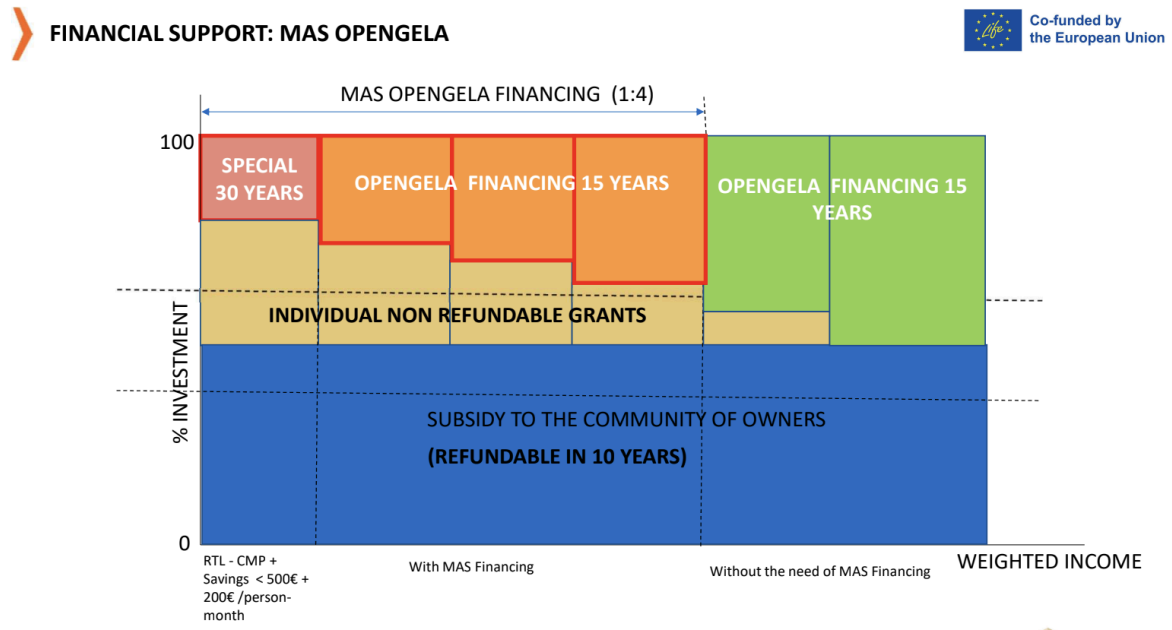


Illustration of MAS OPENGELA model. Image source and copyright: Opengela

When discussing access to finance, Bilbao Viviendas points out the value of the *Mancomunidad*. A Mancomunidad is a group of owners' associations that come together to manage a shared building, often where multiple blocks are attached to each other. By constituting this formal entity, the owners can organise renovation or maintenance works collectively. In mixed tenure situations, Bilbao Viviendas joins these Mancomunidades as a co-owner. Its presence as a recognised institution gives the group leverage that individual owners would not have on their own. This makes a big difference when seeking financing: banks and lenders see the risk reduced because Bilbao Viviendas shares responsibility. In practice, being able to apply for loans alongside Bilbao Viviendas can transform a project from difficult or impossible into entirely feasible.

Mixed tenure in blocks of flats exacerbate the financial and organisational challenges of communities. Opengela's people-first approach helps co-owners navigate complexity and, in most cases, reach agreement to opt-in to the renovation programme.This is made possible by Opengela's core mission of *acompañamiento.*

Acompañamiento

Opengela offices are *oficinas de proximidad y acompañamiento*. Proximity because the physical offices are located in the heart of the community. The meaning of *acompañamiento* in this context is a little harder to translate. While it is often rendered as support, its meaning is broader and more relational. A more accurate explanation is “walking alongside people throughout a process”, offering guidance, care and shared responsibility at each step, rather than providing one-off advice or distant assistance.

In the context of Opengela, acompañamiento describes the way the office works closely with all neighbours throughout the renovation process. This approach goes beyond simply providing information or advice; staff actively guide residents through each stage, from understanding the technical possibilities for their buildings and navigating administrative procedures, to accessing tailored financial support and coordinating with contractors. This approach ensures that residents remain informed, involved, and empowered, fostering trust and collaboration and reducing stress and uncertainty. By walking alongside neighbours every step of the way, Opengela transforms renovation from a complex, impersonal procedure into a more participatory and community-centered experience.

Torre Urizar Open Lab

Torre Urizar was designed in 1919 as a pioneering social housing estate in the Irala district of Bilbao. Bilbao Viviendas owns 68% of the building, comprising 180 homes and 9 commercial units. In practice, this means the rehabilitation and Opengela support at Torre Urizar has involved navigating a mixed-tenure context.

The renovation happening at Torre Urizar is substantial: Façades are being insulated to improve thermal performance, solar panels added, and accessibility improvements like lifts and ramps installed across the 25 blocks in the complex.



Works taking place at Torre Urizar. Image source and copyright: Opengela

The Opengela office at Torre Urizar doesn't just provide technical and administrative support to residents. It has also been designed as a living lab for piloting new approaches to integrated urban transformation with a participatory approach at its heart. Through workshops and collaborative meetings, neighbours are playing a crucial role in identifying and shaping changes. For example, residents are involved in defining how the public spaces can incorporate green infrastructure to address issues such as heatwaves, flooding, and biodiversity loss.

Torre Urizar residents attend a biodiversity workshop. Image source and copyright: Naider

Training opportunities

As part of the Torre Urizar project, Opengela has partnered with Lanbide, Bilbao Ekintza, and Next Generation EU funds to deliver training programmes for long-term unemployed residents. Participants gain digital skills and knowledge of energy efficiency, preparing them to support their neighbours in navigating digital government services, managing energy use, and accessing renovation programmes. Similar employment and training initiatives are being implemented across other Bilbao neighbourhoods where Opengela operates.

➡️ https://opengela.eus/

Case Study: Zaramaga X Opengela

Zaramaga is a traditionally working-class neighbourhood in Vitoria-Gasteiz, largely built during the 1960s. It is currently undergoing major regeneration to its housing stock and public spaces. The project has 332 homes signed up so far, distributed over 22 buildings to undergo renovations. I visited in December 2025.

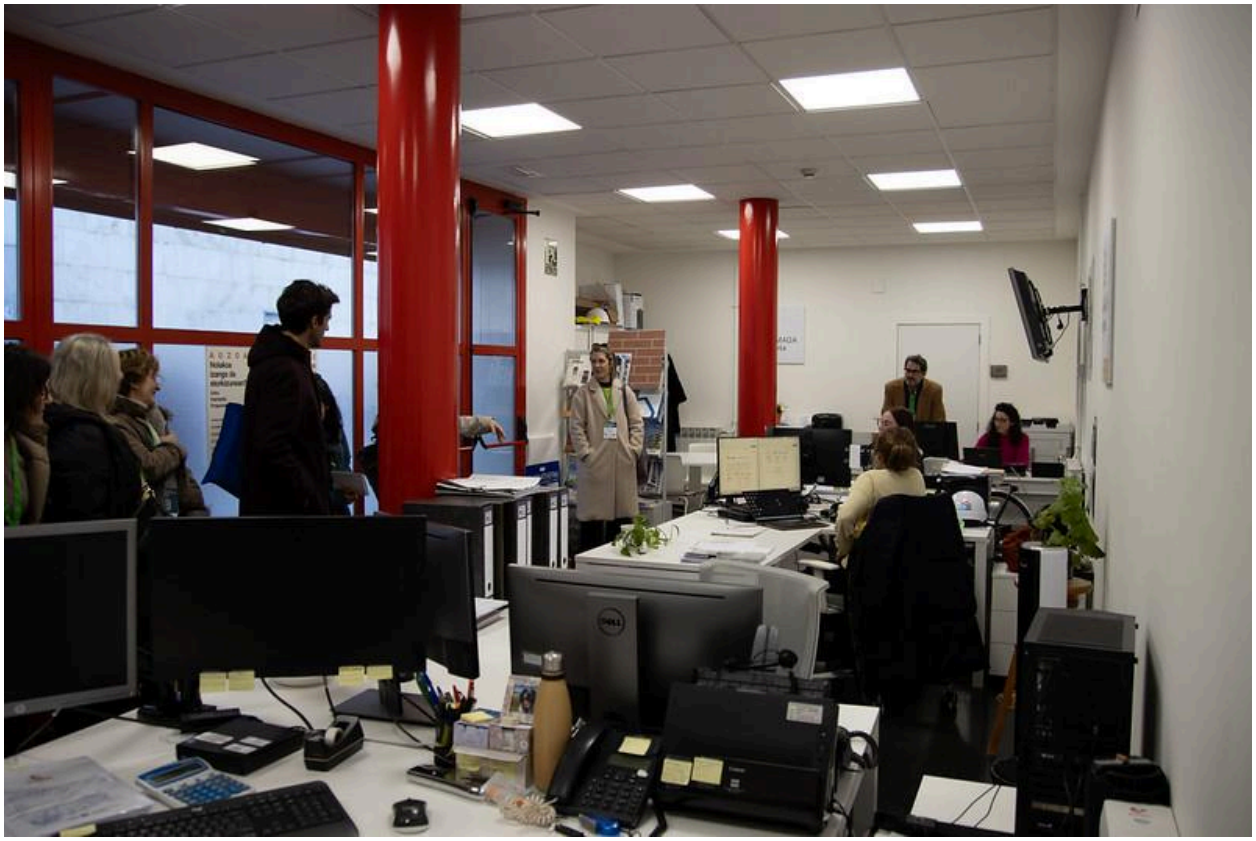
The regeneration of Zaramaga is notable for its integrated approach. It combines energy efficiency improvements, enhanced accessibility, green infrastructure development, and support for local energy communities, aiming to strengthen both environmental sustainability and boost social cohesion. Opengela's presence in Zaramaga helps residents navigate these complex, multi-layered processes and access both technical support and financial instruments to make renovations feasible.

The Zaramaga Opengela office opened in February 2023 and functions as a central point for residents. Its location within the community centre (Centro Cívico Iparralde), with direct access from the street, is an intentional decision to make the office highly visible and approachable. This is characteristic of the Opengela model which prioritises placing offices in areas with high footfall, ensuring that residents can easily access the services provided. This deliberate emphasis on accessibility reflects Opengela's commitment to embedding support directly within the daily life of the neighbourhood.

From slaughterhouse to vibrant community centre: Centro Cívico Iparralde, Zaramaga. Image source and copyright: Mel Esquerre

Opengela office in Zaramaga and information materials. Image source and copyright: Mel Esquerre

Inside the Opengela office, architects and other professionals meet residents face-to-face, answering questions, helping them reach consensus, and guiding them through every step of the renovation process. But they can also meet on site, or borrow one of the larger rooms in the community centre. “We go wherever we are needed", explained one of the architects.



Opengela office in Zaramaga. Image source and copyright: AVS Euskadi

Staff have noticed a “contagion effect,” with other building owners signing up for renovations once they see neighbours participating, but ultimately it is the owners' associations that make the final decisions. The team is candid that the building works can be disruptive, yet everyone agrees that the disruptions will be worth it in the end.

Like elsewhere, labour availability is a challenge, so the office organises the work in batches to make tendering easier. Contracts are private between the owners and contractors, and any changes (for example, adding features not covered by grants), must be approved. Architects from Opengela monitor and follow projects closely, though official certification is handled by the municipality. On average, grants cover about 70% of the costs, and roughly a third of residents have received additional support due to vulnerability.

The upgrades themselves focus on improving comfort and efficiency, including insulating façades, replacing windows, improving heating systems and adding extra insulation to the roofs. Where there are no lifts, residents can apply for funding to have them installed.

Beyond the technical support, the Opengela offices have helped residents to think collectively. For instance, one block faced disagreements over how to renovate their terraces and Opengela staff facilitated discussions that allowed the residents to reach a consensus, ensuring they could access the maximum available grant funding.

At its core the Zaramaga Opengela office has helped residents move from thinking as individuals to acting as a community, planning and making decisions together.

The mural

Vitoria-Gasteiz is a city of murals, where vibrant artworks brighten façades and public spaces while telling the stories of its communities. In Zaramaga, one such mural preserves collective memory, paying tribute to those who lost their lives.

Left: Block on Reyes de Navarra 28 showing the mural before the renovation. Photo on the right shows the renovated block ready for the new mural installation. Image source and copyright: Ayuntamiento de Vitoria-Gasteiz / Mel Esquerre

One of the most culturally significant elements of the Zaramaga renovation project is the *No hay presente ni futuro sin memoria* (There can be no present or future without memory) mural created in 2013 on the façade of a block on Reyes de Navarra 28, one of the blocks undergoing renovation works. The artwork commemorates the tragic events of 3 March 1976, when police opened fire during a workers' assembly in Zaramaga, killing and injuring several people, a pivotal moment in the neighbourhood's working-class history.

The mural is more than just artwork, it's a vital part of the Zaramaga community's identity. Building owners were clear that their participation in the renovation programme would only happen if the mural was preserved. Recognising its importance, the Opengela office has led a careful participatory process to ensure the mural is restored once the renovation is complete with local government footing the bill for this.

The new mural will retain much of the original narrative and imagery. Local residents, associations, past contributors to the original mural and people connected to the history of March 3 have taken part in workshops to shape the updated design. Its reinstatement stands as a powerful symbol of respect and consideration for the community, reminding everyone that the regeneration of Zaramaga is about people as much as it is about buildings.

Monitoring

Zaramaga buildings undergoing renovations are being monitored via wireless sensors that track electricity and gas consumption, indoor temperature, humidity, and CO_2 levels. The system integrates this data in real time on a platform that links consumption patterns to household profiles, providing both residents and professionals with insights before and after the renovation works. Residents who opt in to be monitored can access their own data securely and in real time via the Opengela website.

➡️ https://opengela.eus/

Case study: Asociación Española de Gestores Públicos de Vivienda y Suelo (AVS)

AVS Euskadi study visit to Zaramana neighbourhood. Image source and copyright: AVS Euskadi

AVS plays a central role in supporting public sector professionals involved in building renovation, regeneration and renewal (the “3R” agenda) in Spain. AVS facilitates knowledge exchange, capacity building, and coordinated discussion on the implementation of national and European rehabilitation policies, including the Spanish Urban Agenda and PRTR rehabilitation plans. Through its 3R Working Group and annual meetings, updates on policy, financing tools, and energy-efficiency strategies are analysed and shared among members.

AVS also organises specialised training courses and seminars on integrated urban regeneration. These cover topics such as planning, management models, financing, social mobilisation and good practices in rehabilitation, bringing together local and regional housing authorities, technical experts and civil society to share experiences and tools. Through events, workshops, policy dialogues, and professional development activities, AVS strengthens the capacity of public housing managers and local authorities. These activities help them navigate the institutional, technical, and financial dimensions of energy renovation and urban regeneration under current national and EU frameworks.

AVS is also part of *Alianza por la rehabilitación de viviendas sin dejar a nadie atrás* (Alliance for Housing Rehabilitation That Leaves No One Behind), a coalition of civil society organisations formed to ensure that housing renovation and rehabilitation policies are inclusive, equitable and socially just.

The alliance advocates for policies and programmes that prioritise vulnerable households, removing barriers that have historically excluded them. It also pushes for measures such as appropriate funding schemes, 100% aid for very low-income families, local rehabilitation offices, social safeguards to prevent gentrification and rent hikes, and the embedding of social criteria and gender perspectives in renovation planning and implementation.

➡️ https://gestorespublicos.org/

Innovation in renovation/participation - EU funded examples

Getafe Municipality, Community of Madrid

Getafe is a municipality in the southern part of the Madrid Metropolitan Area, with a population of approximately 190,000. It experiences a semi-arid Mediterranean climate characterised by cold winters and hot summers. Getafe's rapid population growth and industrial expansion over the past six decades led to the construction of many homes, over half of the housing stock, between 1960 and 1980. Much of this housing is poorly built, lacking energy efficiency and, in many cases, heating systems. Combined with extreme temperature fluctuations, these conditions make households vulnerable to energy poverty.

The *EPIU (*Energy Poverty Intelligent Unit) *Hogares Saludables* project in Getafe identifies significant risks related to overheating, particularly affecting vulnerable households. In response, the project implements targeted interventions, addressing these challenges at both building and neighbourhood levels. These measures focus on improving housing conditions, increasing energy efficiency, and enhancing the resilience of vulnerable neighbourhoods.

Hogares Saludables office in Getafe. Image source and copyright: Ayuntamiento de Getafe

Alongside this, Getafe Rehabilita, the comprehensive Strategy for the Rehabilitation and Regeneration of the Built Environment in Getafe, is the municipality's main framework for improving energy efficiency, increasing accessibility and comfort in homes, regenerating neighbourhoods and fostering community energy initiatives. This ambitious strategy is delivered via a network of physical offices, designed to be accessible to all residents, not just those in vulnerable situations:

Oficinas de Hogares Saludables (Healthy Homes Offices): A service to help residents understand energy bills, access energy-related financial help, improve energy efficiency in their homes, and reduce energy costs. It operates centrally and through neighbourhood outreach points.

Oficinas de Transformación Comunitaria (Community Transformation Offices): Funded by European NextGeneration and Spanish government funds, this service provides tailored guidance on residential energy communities (how to start them, legal and administrative steps, technical and financial advice).

In short, Getafe Rehabilita goes beyond physical renovation, focusing on empowering residents and fostering active participation. It helps people understand their energy consumption, provides access to resources and support, and encourages the formation of residential energy communities.

➡️ https://emsvgetafe.org/hogares/

One Click Reno, Valencian Community

Image source and copyright: One Click Reno

A LIFE-funded programme that aims to dramatically increase both the rate and depth of building renovations across the EU by making renovation benefits clearer and more actionable. At its core, the project develops Building Renovation Passports (BRPs), automatically generated, digital roadmaps tailored to each building that show staged renovation options, expected energy savings, costs, comfort improvements, and sustainability outcomes. The Spanish pilot is taking place in the Valencia region and is focused on multi-family buildings or condominiums built before 1980. Hot summers and mild winters in the region make energy renovations a hard sell.

The tool is currently in development and includes design input from public bodies, technical experts, property managers and other sector stakeholders. This co-creation process aims to build a tool that is technically robust and also understandable and actionable by owners, enabling them to select the timing, the measures, the strategies and the way that they really want to customise their renovation.

By giving residents access to customised renovation roadmaps the project promotes ownership of renovation decisions and supports a more inclusive transition to energy-efficient buildings.

➡️ https://www.oneclickreno.eu

Red de Oficinas Verdes de Pamplona

La *Red de Oficinas Verdes* (Green Office Network) operates in the neighbourhoods of La Milagrosa, Rochapea and Txantrea in Pamplona. The offices provide free technical information, administrative support, and mediation between residents to ensure that

renovation projects are carried out in a participatory manner and in compliance with current regulations.

Alongside the Green Offices, *Oficinas de Transformación Comunitaria* (Offices of Community Transformation) guide and support citizens who want to create an energy community and help them access the benefits of renewable energy.

Outreach activities engage a wide audience to raise awareness, empower residents, foster connections, and support the creation of groups that can grow into energy communities. The offices assist both new and existing groups by helping them identify their needs and guiding them through the process of designing and establishing an energy community. Advisory services are also available and provide targeted technical, administrative, legal, economic, and social support to address specific challenges and facilitate the successful development of these communities.

Oficina verde services flyer. Image source and copyright: Ayuntamiento de Pamplona

➡️ https://www.pamplona.es/AgenciaEnergetica

Lessons for the UK

I have spent months researching how other countries design, deliver and speak about retrofit programmes for lower income groups, particularly those who live in blocks of flats. The difference with the UK is striking as we continue to struggle with both effective delivery and meaningful public engagement.

Buildings don't exist in isolation: they are lived in, shaped by the daily rhythms of families, communities, and neighbourhoods. A truly successful retrofit, or a meaningful urban intervention, starts with people. It asks not just "How do we make this building more efficient?" but "How do we make the lives of the people inside it better?" European examples show that when residents are central to the design of such programmes, retrofit can deliver both technical improvements and social justice.

As retrofit programmes expand in response to climate targets and new energy efficiency standards, they will increasingly shape the everyday lives of people across the UK. Yet, despite the scale and significance of these interventions, residents' voices are rarely embedded in the design, governance, or financing of schemes. Too often, decisions are made for communities rather than with them, reinforcing existing inequalities.

This report highlights a range of European examples that demonstrate how technical innovation can be combined with meaningful resident participation, information, transparent decision-making, and more thoughtful, user-centred design. Taken together, these examples suggest that alternative approaches are both possible and already in practice elsewhere, making retrofit more inclusive, accountable, and responsive to the people who live in the homes being improved.

Funding and Financial Mechanisms	**Establish long-term, collective funding mechanisms for social housing:** European experience demonstrates the value of stable, long-term building funds that support the ongoing maintenance and retrofit of social housing. Denmark's National Building Fund, established in the 1970s, has enabled systematic reinvestment in existing housing stock over decades, funding major renovations, energy upgrades, and neighbourhood improvements alongside new development. This long-term approach allows costs to be shared over time and decisions to be made strategically rather than reactively. The UK lacks any equivalent mechanism. As a result, investment in social housing retrofit remains fragmented and short-term. Establishing a dedicated social housing building fund would enable planned, transparent, and equitable investment in existing homes, ensuring that retrofit is treated as a core aspect of housing provision.

	Make financial transparency and participatory budgeting the default for social housing: European examples, particularly from Denmark, show that social tenants are not only informed about how money is allocated, what works are planned, and where their building sits within a wider programme, but are also actively involved in shaping investment priorities. This participatory approach gives residents a tangible sense of ownership over their homes and neighbourhoods. In contrast, many UK social tenants have little or no information about when major works will take place, how resources are prioritised, or how they might influence these decisions. Clear, accessible financial information at building and neighbourhood level should be standard practice, but it must be accompanied by meaningful mechanisms for participation. This includes opportunities to contribute to decisions about sequencing, scope, and priorities for investment, supported by accessible information and facilitation. Every social tenant should be able not only to understand how rent contributions are used, but to have a recognised role in shaping how collective resources are invested. This should be treated as a core requirement of public and social housing governance, not an optional engagement exercise.
	Provide tailored, creative, and sensible funding mechanisms for retrofit: European experience highlights that one-size-fits-all funding rarely meets the needs of diverse communities, particularly in mixed-tenure or low-income neighbourhoods. Programmes such as Opengela in Spain demonstrate that flexible financial instruments- tailored loans, favourable terms, bridging credit lines, and grant mixes- enable households who would otherwise be excluded from renovation projects to participate fully. By designing funding that is sensitive to local circumstances and flexible in delivery, retrofit programmes can achieve higher participation, greater equity, and more durable outcomes.
Resident Participation and Governance	**Move from symbolic participation to real resident power:** European examples show that meaningful accountability emerges when social tenants hold formal decision-making power, including strong representation on boards and governing bodies. Embedding them directly into governance structures, potentially including minimum thresholds for tenant representation, would mark a shift from consultation to co-decision. Crucially, this requires support and

	capacity-building: tenants need access to training, resources, and facilitation to participate effectively and confidently. Without these measures, participation risks remaining symbolic, reinforcing rather than challenging existing power imbalances.
	Invest in resident organising and housing literacy: Resident organising is a critical but underdeveloped element of the UK housing system. Examples such as Living Rent in Scotland and Making Rights Real, and the participatory learning models observed in European housing assemblies demonstrate how knowledge-sharing and collective organising strengthen both individual and community capacity. Expanding housing literacy, through accessible training, open learning spaces, and local leadership development, would enable residents not only to engage with retrofit, but to shape housing policy more broadly and challenge structural inequalities.
	Design for mixed tenures and collective decision-making: Mixed-tenure buildings present particular challenges, especially where social tenants and private owners have different capacities and incentives. European cases show that these challenges can be addressed through legal frameworks that enable collective decision-making, supported by tailored financial instruments. The UK lacks a robust legal basis for mandatory residents' or owners' associations in multi-unit buildings. Establishing such frameworks, alongside proper support for residents, is essential for large-scale retrofit in both private and mixed-tenure stock.
Local Organisation and Community Engagement	**Recognise and fund the role of local organisations:** Local organisations already embedded in neighbourhoods play a vital role in trust-building, communication, and participation. European examples, particularly from Denmark, show how municipalities work in partnership with existing clubs, associations, and community groups, while actively investing in their capacity. UK regeneration and retrofit programmes should systematically partner with, fund, and support these organisations, rather than relying solely on centralised communication strategies that often fail to reach the most marginalised residents.
	Provide integrated, locally accessible one-stop shops: One-stop shops (OSS), such as those demonstrated by Opengela, are among

	the most effective mechanisms for enabling inclusive retrofit. By combining technical, financial, administrative, and social support in a visible, local presence, OSS models help residents navigate complex processes and build trust over time. Physical accessibility, continuity of staff, and an explicit advocacy role for residents are essential features. Physical OSS should be treated as core delivery infrastructure, not an optional add-on.
	Tailor retrofit to social and cultural context: Effective retrofit is sensitive retrofit. European examples highlight the importance of understanding local social dynamics, cultural practices, and histories, particularly in areas of poverty or marginalisation. Programmes that fail to invest time in relationship-building and local knowledge risk actively harming communities, as seen where trust is broken or residents feel imposed upon. “Doing with, not to” must be a guiding principle. Energy efficiency is not, in itself, a motivating concern for most households. Successful programmes recognise this and invest in education, accompaniment, and long-term support before, during, and after works. Walking alongside residents, rather than expecting immediate buy-in, is essential for participation, satisfaction, and long-term performance.
	Use multiple, inclusive channels for information and participation: No single tool or format can reach everyone. European programmes demonstrate remarkable creativity, variety, and cultural sensitivity in engaging residents. From high-tech building passports to low-tech, face-to-face assemblies, neighbourhood meetings, and open learning sessions, EU approaches are tailored to local contexts, languages, and community norms. They adapt not only to different technological access levels but also to cultural practices, trust dynamics, and social expectations. UK retrofit programmes must adopt a similarly plural and sensitive approach. Information and participation should be offered in multiple formats, languages, and settings, and should accommodate both direct and representative forms of engagement. By drawing on the diversity and adaptability of European models, UK programmes can reach a wider range of residents, build trust, and ensure that participation is meaningful rather than tokenistic.

Policy, Planning, and Coordination	**Provide clarity, coordination, and certainty in national policy:** The repeated delay of key UK policies, including the Warm Homes Plan, and the Heat in Buildings Bill in Scotland creates uncertainty that undermines delivery, skills development, and resident confidence. European approaches demonstrate the importance of clear national frameworks, stable funding, and long-term targets. Retrofit and regeneration require policy certainty measured in decades, not spending cycles.
	Treat retrofit, regeneration, and adaptation as integrated, neighbourhood-scale interventions: All examples examined in this report emphasise the need to move beyond individual dwellings or single buildings. Fragmented interventions, such as insulating part of a block while leaving the surrounding neighbourhood untouched, undermine both technical performance and social outcomes. Integrated neighbourhood-scale approaches require joined-up budgets, cross-departmental coordination, and shared targets across housing, energy, health, and regeneration. Without this integration, public investment risks entrenching spatial inequality rather than reversing it.
	Make area designation and prioritisation transparent and justifiable: European approaches to area-based retrofit clearly articulate why neighbourhoods are selected, what designation enables, and how funding is unlocked. This transparency builds legitimacy and understanding. In contrast, opaque selection processes in the UK risk mistrust and confusion. Clear, publicly understandable criteria for prioritising vulnerable neighbourhoods should underpin future programmes, with the explicit aim of improving quality of life, accessibility, and long-term resilience.
Skills, Employment and Local Benefits	**Use retrofit and regeneration to build local skills and employment:** Long-term regeneration and retrofit programmes create sustained demand for skilled labour. At a time of acute skills shortages in construction, this represents a missed opportunity in the UK. European programmes demonstrate how training, apprenticeships, and local employment pathways can be embedded directly into neighbourhood-level projects. Priority should be given to residents of

	areas undergoing regeneration, linking climate investment with economic and social benefit.
	Enable collective energy solutions alongside retrofit: Although not the primary focus of this research, energy communities are a natural complement to retrofit. In countries such as Spain, groups of residents in blocks of flats can collectively develop renewable energy projects, supported by legal and technical frameworks. The UK currently lacks accessible pathways for such collective solutions, particularly in lower-income or mixed-tenure buildings. Addressing this gap would unlock additional social, economic, and environmental benefits.

Epilogue: Learning from Europe

Brexit may have closed the door to most EU funding programmes and removed the UK from EU directives and requirements, but it cannot close our eyes to the knowledge, innovation, and practical experience available across Europe. From Denmark's long-standing building funds to Spain's neighbourhood energy communities, our neighbours show how inclusive funding, resident-led decision-making and user-friendly retrofit programmes can be delivered at scale.

The UK can and must engage with these lessons. Research partnerships, study visits, shared technical guidance, and programmes like Horizon demonstrate that collaboration is still possible, and necessary. By actively learning from European examples, we can avoid repeating mistakes, accelerate delivery, and embed proven best practices in UK retrofit, regeneration, and social housing programmes.

Glossary

Right to Buy: The Right to Buy scheme, introduced under the Housing Act 1980, gives long-term council tenants in England the legal right to purchase their homes at a discount, with eligibility, discount levels, and resale conditions defined in subsequent legislation such as the Housing Act 1985 and the Housing and Planning Act 2016. Abolished in Scotland.

The Scottish House Condition Survey: The SHCS is a national survey that looks at the physical condition of Scotland's homes. It runs every year. The latest data available found “disrepair to critical elements, which are central to weather-tightness, structural stability and preventing deterioration of the property, stood at 45% [of properties] in 2023”

The Tenement (Scotland) Act 2004, and the 2009 amendment: In Scotland, the Act is the primary legal framework governing tenement buildings in Scotland. It sets out the rules and responsibilities that apply to flats within tenements. In 2009 the Climate Change (Scotland) Act 2009 amended the Tenements (Scotland) Act 2004 to remove legal barriers to improving the energy performance of tenement buildings.

The Tenement Working Group: The Scottish Parliamentary Working Group on Tenement Maintenance was initially convened in 2018 as a direct response to the state of disrepair of Scottish housing stock, and a recognition that The Tenements (Scotland) Act 2004 does not consistently fulfill its intention to encourage owners to establish effective arrangements for managing communal repairs and undertaking maintenance.

In 2022 the Scottish Government tasked the Scottish Law Commission with making recommendations for legislative reform to establish compulsory owners’ associations. In December 2025 the Scottish Law Commission released their report on tenement law, to be presented to the Scottish Government in 2026.

EESSH2, to be replaced by SHNZS: The Energy Efficiency Standard for Social Housing (EESSH) was established to raise the energy performance of Scotland’s social housing stock. In 2022, the Scottish Government announced it would be replaced by the new Social Housing Net Zero Standard (SHNZS). There is no timeline for the new standard, as a result originally agreed EESHH2 milestones are currently on hold.

The Home Energy Efficiency Programmes for Scotland: Area Based Schemes (HEEPS: ABS) and the Social Housing Net Zero Standard Fund (SHNZSF): Since 2020 the SHNZSF makes funding available to social landlords for the retrofit of their existing housing stock.

The Scottish Government funds local authorities to deliver energy efficiency programmes in areas with high levels of fuel poverty through HEEPS:ABS. The assistance is usually provided to private homeowners as a grant-in-kind.

Local Heat and Energy Efficiency Strategies (LHEES): Documents created by local authorities to support Scotland's net zero and fuel poverty goals. From 2023 every local authority is required to publish a strategy and delivery plan. Each LHEES should include consultation and engagement with local communities, though the local authority determines how to do so.

The Heat in Buildings Bill: Proposed legislation to decarbonise Scotland's existing homes and workplaces, the Bill would introduce minimum energy efficiency standards for all homes by the end of 2033, and for private landlords by the end of 2028. In November 2025 the Scottish Government announced a further delay to the Bill.

Draft Energy Efficiency (Domestic Private Rented Property) (Scotland) Regulations: A proposal to introduce a minimum energy efficiency standard (MEES) in the Private Rented Sector in Scotland, requiring an EPC Band C or better by 2028 for new tenancies and for all existing tenancies by 2033.

The Energy Performance of Buildings (Scotland) Regulations 2025: The new EPC regulations will come into force on 31 October 2026 when all EPCs issued under the 2008 Regulations will become invalid. New EPCs will include a report detailing measures for improved energy efficiency and alternative heating systems, with estimates of each system's emissions, installation and running costs. New EPCs will expire after 5 years.

Rent controls and the Housing (Scotland) Act 2025: The Act introduces a framework for significant changes to the Scottish housing sector, with a focus on rent controls.

Fuel poverty (Scottish definition): In Scotland, a household is in fuel poverty if both of the following things are true:

1. In order to maintain a satisfactory heating regime, total fuel costs necessary for the home are more than 10% of the household's adjusted (i.e. after housing costs) net income; AND
2. If, after deducting fuel costs, housing costs, benefits received for a care need or disability, and childcare costs, the household's remaining adjusted net income is insufficient to maintain an acceptable standard of living

Fuel poverty (English definition): Fuel poverty in England is measured using the Low Income Low Energy Efficiency indicator. Under this indicator, a household is considered to be fuel poor if:

1. they are living in a property with a fuel poverty energy efficiency rating of band D or below; AND
2. when they spend the required amount to heat their home, they are left with a residual income below the official poverty line

Energy Poverty (EU definition): Energy poverty is defined as 'a household's lack of access to essential energy services that provide basic levels and decent standards of living and health, including adequate heating, hot water, cooling, lighting, and energy to power appliances, in the relevant national context, existing social policy and other relevant policies, caused by a combination of factors, including but not limited to non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes.

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