The Great Repair I

Analysis

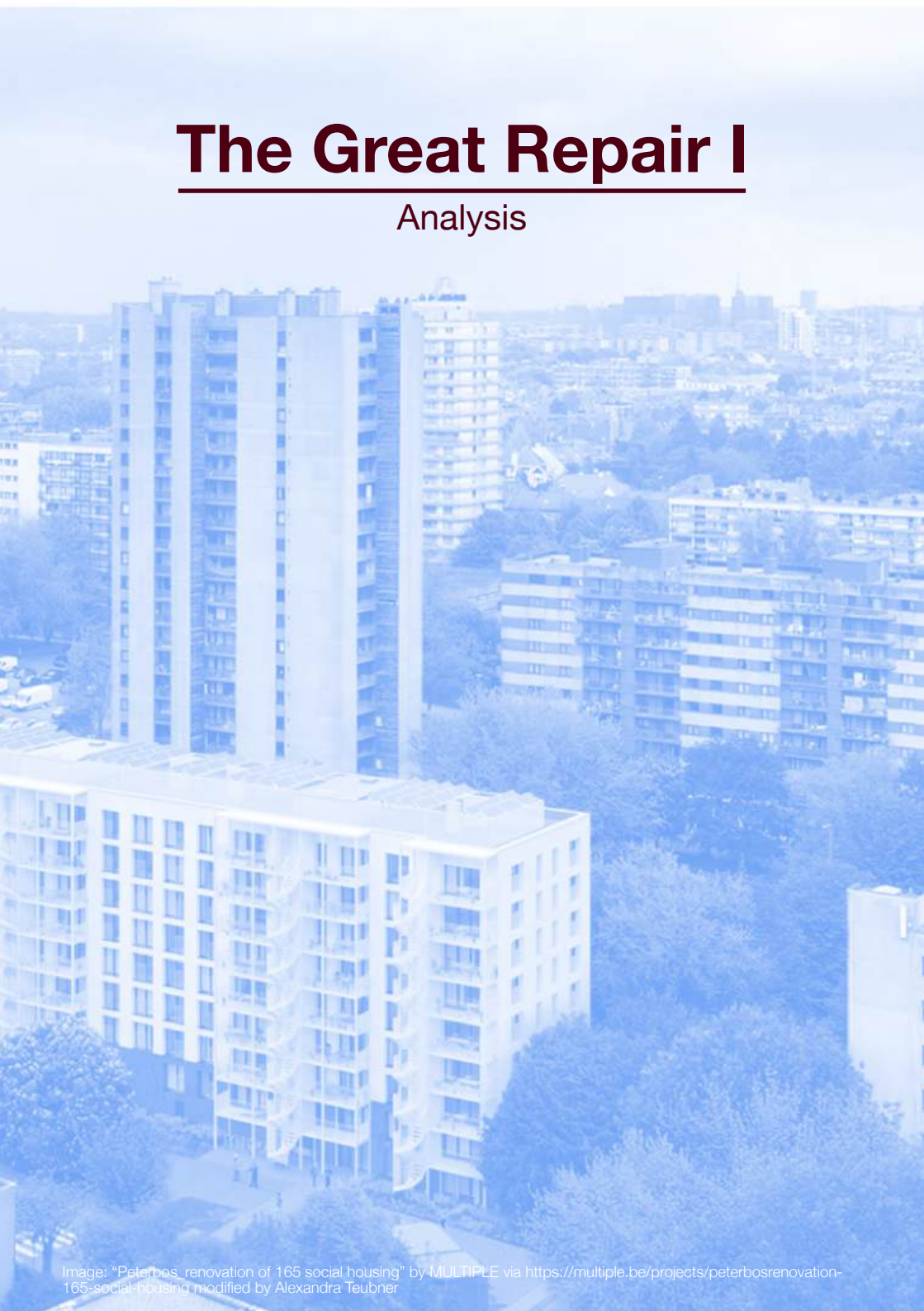


Image: “Peterbos_renovation of 165 social housing” by MULTIPLE via https://multiple.be/projects/peterbosrenovation-165-social-housing modified by Alexandra Teubner

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The Great Repair

The social housing market in Brussels is facing an increase in pressure and an affordable housing crisis. Out of the total housing stock in Brussels, only 7% is social housing making up for around 41,000 social housing units. This leaves around 56.000 households on the waiting list for social housing which can take up to ten years. At the same time, the social housing stock built in the post-war period is aging. This is creating issues of physical obsolescence and outdated infrastructures. Besides this, many housing estates suffer from a lack of social participation and active ground floors. This results in underused areas, limited social interaction and a practice of suboptimal maintenance cultures. These ground-floor spaces are crucial zones for the usage of these buildings as they play a role in everyday life. They are used as entrances, storage rooms, outdoor areas and can be used to create social bonds with fellow inhabitants.

As Brussels is facing a constraint in budgetary needs and the renovation of the social housing stock is a complex and long process. The activation of the ground floors can in part create a solution for both the residents of social housing and the social housing companies which are trying to juggle the continuous limitations of both renovating social housing and keeping residents in place. Activating ground floor spaces can be targeted as an underexplored factor in trying to improve the liveability, care and communal life in social housing.

This brochure understands ground floors as a shared resource that relies on everyday care through time, the involvement of its residents and not only its spatial reconfiguration. Through this, renovation is seen as an ongoing practice of care and reparation instead of a one-time technical operation. It specifically is about in between processes before big renovations start. In this scenario, the buildings lack general maintenance and care but they will be renovated in the long term. As the wait for these renovations can take time, in between solutions are needed.

This brochure starts off with a theoretically informed framework which examines the reactivation of ground floors through different combinations of governance with residence involvement, and practices of care. From this, a variety of case studies which are both based in Belgium and also internationally are selected and examined. These case studies touch on different aspects of the transformation and use of ground floors emphasizing different interesting practices like collective use, co-management between different actors, co-construction, sociocracy, small-scale economic activities, and everyday maintenance. It is important to note that none of these cases can be applied exactly to a Brussels context. However, they can be used as examples that show specific insights as well as limitations for a future project in the Brussels social housing scene.The examples and lessons that are drawn from the benchmarking will be mobilised in the conclusion which offers building blocks based on the insights and limitations of the benchmarks. By critically reflecting on the conditions relevant to Brussels, this work explores how ground floors create and provide active support in long term care and participation in the social housing sector of Brussels.

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Theory

Common-Pool Resources

Resident Participation

Sociocracy

Care and Maintenance

Maintenance

Authenticity

Living Heritage

This Brochure draws on a set of complementary conceptual tools that guide how we analyse and compare renovation practices in large social housing estates. Rather than approaching renovation as a purely technical operation, these frameworks allow us to understand social housing as a shared, lived environment shaped by governance structures, everyday practices of care, and spatial conditions. They inform both the selection of benchmarks and the way resident involvement, maintenance cultures, and spatial interventions are assessed across cases.

A first point of departure is the critique of the paternalistic and centralized management models that have historically characterized many post-war housing estates. These models often limited resident agency, resulting in underused shared spaces and weak forms of appropriation and care. Drawing on Elinor Ostrom's theory of **Common-Pool Resources** (1990), social housing is here understood as a common good composed of shared material resources (such as courtyards, circulation spaces, and facilities) and immaterial ones (local knowledge, repair practices, social norms). From this perspective, long-term sustainability depends on forms of shared stewardship, where residents are not passive users but active participants in maintenance, decision-making, and collective care. Within this perspective, governance is understood as the set of arrangements through which decisions about renovation and maintenance are made, and through which responsibilities are distributed among housing providers, residents, and other actors. Drawing on the Housing Europe (CECODHAS) report (Pittini, 2011) and the Méthos study (n.d.), **Resident Participation** is not conceived as a continuum of forms and scales, ranging from information and consultation to co-design and co-management. Participation may concern specific domains, such as shared spaces or everyday maintenance, while remaining limited in others, such as budgeting or long-term strategic decisions. This allows participation to be analysed as a situated and negotiated practice, shaped by institutional, legal, and financial constraints, rather than as a fixed model.

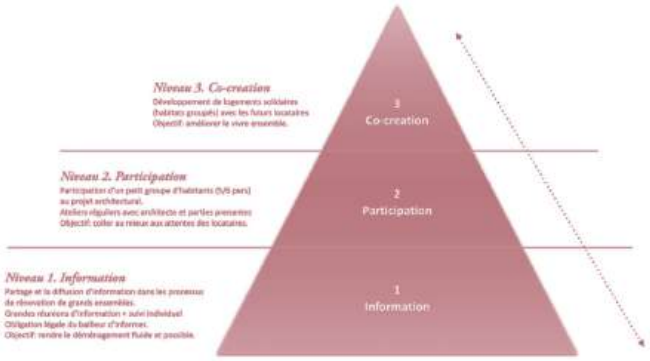


Image: "Different levels of participation. Extract report Méthos" by méthos via https://www.methos.fr/en/work/participation-cohousing modified by Alexandra Teubner

Within this broader understanding of governance as shared stewardship and situated participation, **Sociocracy** can be introduced as a concrete governance model that offers practical mechanisms for collective decision-making and distributed responsibility. Sociocracy is based on four interrelated principles.

First, decision-making is grounded in consent, whereby decisions are adopted in the absence of reasoned and substantial objections, allowing for workable and revisable outcomes.

Second, roles and responsibilities are allocated through an egalitarian selection process based on consent, fostering transparency and shared accountability.

Third, governance is organized through semi-autonomous circles that have decision-making authority within their domain, such as maintenance or shared spaces.

Fourth, these circles are connected through double linking, ensuring both horizontal and vertical feedback loops between different levels of action.

Together, these principles support collaborative problem-solving in contexts where multiple actors share responsibility for common resources. In this brochure, sociocracy is not assessed as a model to be implemented, but serves as a conceptual tool to analyse how decision-making and responsibility are organized in some selected benchmarks (Owen & Buck, 2020).



Image: "Sociocracy converts a traditional hierarchy (on the left) into double-linked circles (on the right), creating a system with both 'governance from above' and 'governance from below.'" by Renee L. Owen & John A. Buck via https://doi.org/10.1080/14623943.2020.1821630 modified by Alexandra Teubner

While the governance models discussed above structure how decisions and responsibilities are distributed, a second lens focuses on how renovation is enacted and sustained through everyday practices of **Care and Maintenance**. Building on the work of Tronto (1993) and Mattern (2018), renovation is approached as an ongoing practice of care rather than a one-time intervention. **Maintenance** is understood as a continuous, everyday activity that sustains both the material fabric of buildings and the social relations they host. This perspective foregrounds small-scale actions, shared responsibilities, and resident involvement as central to the durability and lived quality of social housing. These approaches are further connected to heritage theory through the concepts of **Authenticity** and **Living Heritage**. Following Wijesuriya (2018) and Özem (2024), post-war housing estates are considered as living environments whose value lies in architectural form but more importantly also in everyday practices of use of the community involved. Care and maintenance thus become heritage practices in themselves, preserving the integrity and meaning of places while allowing gradual adaptation. A spatial translation of these ideas can be expressed in the notion of Tactical Urbanism (Lydon & Garcia 2015). Small-scale and often temporary interventions such as reactivated courtyards, shared workshops, or collective outdoor spaces, are read as concrete expressions of common governance and care. Its importance lies not in the temporary nature of the intervention, but in the way it can be used as an experiment to test practices of care and maintenance, and if successful can be transformed into a longer-term practice.

Together, these frameworks guide the analysis of the benchmarks presented in this brochure. Particular attention is paid to how residents are involved, at what scale, and in which domains, from consultation and co-design to co-management, highlighting the diverse governance arrangements through which renovation, maintenance, and everyday life are negotiated in practice.

Sources

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Case Studies

Houlette 37
Belgium

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Parc du Peterbos
Belgium

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Quartiere chiesa Rossa
Italy

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Kleiburg
Netherlands

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Void Decks
Singapore

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Pla Buits
Spain

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La Borda
Spain

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Pioneer Valley Cohousing
USA

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Bruit du Frigo
France

The following case studies bring together a range of projects, from Brussels-based social housing renovations to European and international examples that explore alternative ways of managing, maintaining, and activating shared spaces. While the contexts differ, all cases engage with questions of collective use, everyday maintenance, and the governance of common spaces within or around housing environments. Rather than presenting these projects as models to be replicated, they are approached as situated practices that reveal different ways of organising renovation, resident involvement, and long-term care. Each case is analysed through a shared framework, addressing its context, stakeholders, governance arrangements, relation to maintenance and common spaces, budgetary conditions, and limitations, in order to identify transferable insights for the Brussels social housing context.

Houlette 37

Houlette 37
Belgium

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Parc du Peterbos
Belgium

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Quartiere Chiesa Rossa
Italy

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Kleiburg
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Void Decks
Singapore

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Pla Buits
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La Borda
Spain

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Pioneer Valley Cohousing
USA

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Bruit du Frigo
France



Image: “Avenue de la Houlette 37” by Région de Bruxelles-Capitale via https://monument.heritage.brussels/fr/buildings/41268 modified by Alexandra Teubner

Houlette 37 (Le Logis-Floréal, Watermael-Boitsfort, Brussels) is a social housing estate with 32 units in Brussels, which was recently renovated in 2024-2025. The management and renovation fall under the SISP Le Logis-Floréal and it is a recent and relevant example of how small- to medium-scale interventions can enhance the everyday life of residents while improving technical performance and shared spaces. The project includes the renovation of the building envelope (façade insulation, balconies, windows), upgrading technical systems (heating, ventilation, energy performance), and a strong focus on shared and outdoor spaces. In this benchmark we focus on the latter which includes a renovation and regeneration of a: secured bicycle storage, stroller storage room, multifunctional shared outdoor spaces, reconfigured green areas with biodiversity and meeting places, and a collective garden supporting social cohesion (Le Logis-Floréal, n.d.). The project uses a resident-centered approach, with a dedicated “facilitatrice de chantier en site occupé” to support communication, help residents adapt to new installations, and mediate everyday issues during construction (Le Logis-Floréal, 2025a).

This benchmark shows how ground floors, communal areas, and outdoor spaces can be upgraded without large, disruptive master plans. The benchmark thus focuses on this aspect of the renovation in Houlette 37 which is shown on the following map.

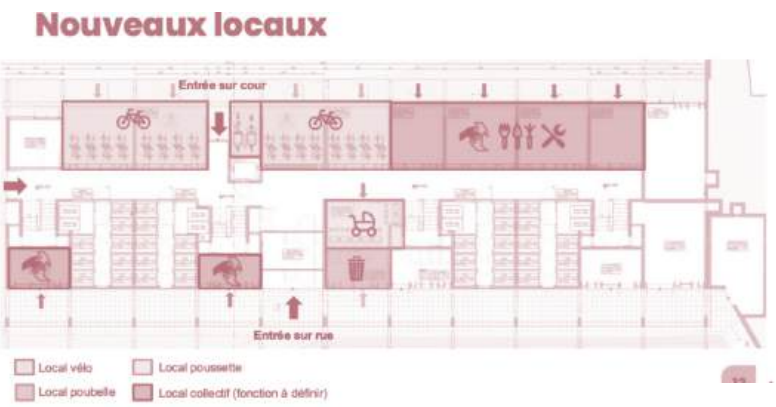


Image: “Nouveaux locaux” by le logis floreal via https://www.lelogisfloreal.be/wp-content/uploads/2025/08/Houlette-37-brochure_post_chantier.pdf modified by Alexandra Teubner

Relevance

The relevance of the Houlette 37 project lies in its strong focus on ground floors, communal, and outdoor spaces as part of the renovation of social housing. The project includes a resident-centred approach, notably through the presence of a facilitatrice de chantier on an occupied site, who supported communication.

On top of that there was resident involvement through collecting and integrating their input during the process. The social services department organized two meetings in the building to discuss the future layout of the communal areas and surrounding areas with the aim to promote community life. Numerous ideas and opinions were put forward as shown on the following plan (Le Logis-Floréal, 2024b).





Image on the left: “Ideas and Opinions on Landscaping of Outdoor Spaces” by le logis floreal via https://www.lelogisfloreal.be/wp-content/uploads/2025/08/Houlette-37-brochure_post_chantier.pdf modified by Alexandra Teubner
Image on the right: “Before and After of the Outdoor Area” by le logis floreal via https://www.lelogisfloreal.be/wp-content/uploads/2025/08/Houlette-37-brochure_post_chantier.pdf modified by Alexandra Teubner

Thereby, the Construction Site Newsletter made it possible to regularly inform residents about the progress of the construction and explain the operation of the new systems. Pictures of the new outdoor area were also published in the magazine, showing that a table, benches, a pond and new plantings will be added with the help of the gardeners at Logis-Floréal. As well accompanied with the invitation to reclaim space and come spend time here (Le Logis-Floréal, 2025).

As such, Houlette 37 offers a concrete case to examine how participation can be integrated into renovation projects, and how the activation and maintenance of shared spaces are addressed within the institutional framework of Brussels social housing.

Context

Some conditions for the project development should be taken into account when looking at this brussels case study. Houlette 37 is located in Watermael-Boitsfort which is a commune known for its garden-city heritage. Thereby, the SISP managing the estate is part of a cooperative housing model which historically emphasizes community life (Le Logis-Floréal, 2025b). The context in which the renovation took place was also informed by the requirements of the energy performance upgrade, due to regional climate obligations. The residents in the buildings faced issues of outdated infrastructures, but also a lock of bike storage, underused green areas, and insufficient shared spaces. The conditions enabling the project should be seen against this specific context. The existing cooperative principles informed the openness to resident involvement. There were also regional funding schemes supporting the energy-efficient renovation. Interestingly, the presence of vacant units allowed the staged renovation without evictions. We should also emphasize the strong internal structure at Logis-Floréal that cannot be found in other SISP, composed of a social support team, technical support and a communication officer. However, the fact that the work was carried out on an occupied site also requires a dedicated facilitator to ensure that everything runs smoothly. The project focused on improving both technical performance and shared spaces.

Stakeholders

Different stakeholders are involved in the project, presented through four levels of, primary, public and institutional, technical and economic, and social and community stakeholders. They are presented in this paragraph as well as their role in the project.

The Primary Stakeholder

Residents of Houlette 37 are the direct beneficiaries and the most affected stakeholders (and can be made vulnerable as well). The residents remain in the building during the renovation works and experience daily disruptions (like noise, access constraints, changes in systems). As the users of the new technical and communal infrastructures, they provide feedback on the needs and lived experience. They are the first ones to be affected by the projects and they mainly participated by being consulted and had some limited agency in the co-design of the communal spaces. However in general there was no evidence of shared governance or long-term resident-led management of the communal spaces.

Le Logis-Floréal (SISP), is the owner, project manager and central actor linking social housing policy, technical execution and resident relations. They are the legal owner of the building and responsible for the renovation project. In the project, they are in charge of the coordination and supervision and the liaison with contractors, designers, and public authorities. The communication with the residents before and during the works is managed by them as well as the (main) long-term management and maintenance of the building.

Public and Institutional Stakeholders

SLRB (Société du Logement de la Région de Bruxelles-Capitale) is the supervisory authority. It is the key actor ensuring alignment with regional social housing policies and standards and climate goals. On the one hand, they provide public funding and subsidies for the renovation and set strategic priorities like energy performance, housing quality, and social objectives. On the other hand, they monitor the project's implementation done by the SIPS.

Brussels-Capital Region and Regional Authorities, are also implicit stakeholders since they make the regulatory framework like urban planning, energy performance, safety standards. Indirectly the authorities influence through their policies on housing, energy, and social cohesion.

Technical and Economic Stakeholders

PIC is the entrepreneur in this project and the crucial operational actors (SLRB, n.d.). They translate the policy and design into physical transformation and they are responsible for executing the renovation works and the managers of the on-site construction activities. Coordinates subcontractors and ensures compliance with technical specifications, deadlines, and safety norms are their other tasks.

The design and engineering teams are the architects, engineers, technical consultants (not specified by name). They develop renovation plans and technical solutions while addressing energy efficiency, ventilation, heating, accessibility, and building safety. This stakeholder supports Logis-Floréal in technical decision-making.

Social and Community Stakeholders

Facilitatrice de Chantier (site facilitator) is also present during the construction process as social mediation role and acts as an intermediary between residents and Logis-Floréal. The facilitator responds to residents' questions and concerns (comfort, nuisances, accessibility) and explains technical changes and supports appropriation of new systems. By being present it helps to reduce conflict and misunderstanding during the renovation work.

The Social Services Department (Logis-Floréal) organized meetings and collective moments with residents in which social needs related to communal spaces and surroundings were identified. In this way it promotes community life and social cohesion within the building and ensures that the renovation is not only technical but also socially inclusive.

Budget

Public numbers show a renovation budget in total of €2,607,953 (SLRB, n.d.). Thereby the cost for the maintenance of the building and the common spaces are not discussed separately but a relatively high part goes to the payment of the Chantier facilitator. However, this budget will not be available for future projects in Brussels, nor will the payment for these actors so they will not go on with it in the future. In general the budget was high but the amount specifically spent on the communal spaces is unknown. What interests us from the budget is what was spent on the transformation and maintenance of the ground floors.



Image: "Enveloppe Houlette 37" by SLRB via 'https://sirp-bghm.brussels/fr/chantiers/quartier-floreal-0 modified by Alexandra Teubner

Limitations

Positive Results

Positive results of the renovation of the communal spaces after the renovation consist of the functional improvements. Concretely, the new bike room, stroller storage, and shared outdoor spaces. Thereby, the green areas are planned to be more attractive for functional use. Social interaction can be enhanced through the collective garden and the meeting spaces as well as an increased sense of care for the shared spaces since there is a new function attached to its uses. The effective resident communication with the presence of the facilitator is another positive effect.

Limitations

However, there are limitations that make this difficult to transfer to another case of ground floor renovation in Brussels. To start with, with the current budgetary problems, actors like the facilitator on the site aren't possible in future projects. Another limitation can be seen in the resident participation, which was present but limited to consultation and not a form of co-management. This makes it difficult to maintain the shared spaces in the future. There were also many barriers that hindered the participation. Firstly there was no radical governance innovation: resident participation was present but limited to consultation, not co-management. Another factor is the cooperative culture at Logis-Floréal which is not a standard in other SISP organisations. The resident engagement cannot be transferred to other locations since it is based on a historical strong resident culture. However, we can learn and use success stories from this site while keeping in mind that it might be more challenging in other locations. In terms of maintenance of the new proposed spaces, the long-term maintenance depends on continued involvement of residents and adequate SISP support.

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Parc du Peterbos

Houlette 37
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USA

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Bruit du Frigo
France



Image: “Parc du Peterbos” by VVV via https://vvvarchitectes.be/Parc-du-Peterbos-1 modified by Alexandra Teubner

The work of VVV in combination with Studio Paola Viganò has created a masterplan which focuses on the redevelopment of the public space surrounding Peterbos. This includes aspects such as the integration of green spaces, paths and improving the open space as a “lived in park”. The masterplan of VVV and Studio Paola Viganò is leading as the idea for the redevelopment of the Peterbos (Viganò et al., 2022). Several plans of this masterplan will be implemented under the Contrat de Quartier Durable (DWC Peterbos | Anderlecht, s.d.).

The masterplan of VVV and Studio Paola Viganò shows a vision of new pedestrian paths, ecological infrastructures, plazas, reconfigured entrances, and the “domestication” of these monumental modernist grounds. The site is a “park in which people live”: green and open, but socially fragile and spatially isolated (Viganò et al., 2022). Even though this masterplan has envisaged a lot of works and renovations, we will be focusing specifically on the ground floor activation through smaller scale organisations within this project. Through the Contrat de Quartier Durable, which is partly funded by the municipality of Anderlecht and the Brussels government, many small-scale projects focused on social participation have been created (DWC Peterbos | Anderlecht, s.d.).

Relevance

Due to its location in Brussels, the budgetary and governmental aspects are important to look at as they can provide structure for future programs on ground-floor activation and resident participation. As it already is a social housing complex in Brussels facing the issues that this brochure is focusing on, it can give us a grip and realistic idea on how these projects actually take place within this context. Furthermore, there is a focus on the ground level, small-scale reparation and activation within the bigger picture of the masterplan which was developed. It gives a clear idea of the framework surrounding Brussels and its social housing policies and developments which are already in place.

Context

Peterbos itself is located in Anderlecht with a prevalence of low incomes and high unemployment. It was built between 1968 and 1980 as part of the modernist expansion of Brussels. The idea of the Peterbos is the towers creating a big public park with a lot of green space. Due to a history of fragmented social housing, delayed modernism, second-ring development, and enclaves that have few services and a heavy social stigma it has been undergoing a lot of struggles and decline. With traffic hierarchies, car-dominated surfaces, steep slopes, unfinished construction and parking encroachment the cohesion of pedestrians has basically collapsed. The ground here is a mess in a way that tells a story: barriers, slopes, disconnected spaces, shaped by topography, cars, and patchy construction phases. About 90% of the area is open ground, originally designed as modernist park-like surroundings, but now it’s mostly asphalt, deteriorated, and cut off from the city around it (Viganò et al., 2022).

VVV and Studio Paola Viganò Project

The masterplan of VVV and Studio Paola Viganò wants to rethink the public space in Peterbos to give the area a new sense of life and make it more sustainable, ease the communications between inhabitants and create an opening to the outside of Peterbos. Through this, it has made four goals priority:

1. Connecting Peterbos Park to other neighborhoods in the municipality (access to the neighborhood)

2. Rethinking traffic in Peterbos (mobility and parking)

3. Rethinking the use of public spaces (redesigning the squares in the park)

4. Activating the ground-floor spaces of the residential towers in conjunction with public spaces

CQD

Under the Contrat de Quartier durable, multiple small-scale projects have arisen with the goal of reactivating ground floors and inhabitants. This is created on participation where there is an open budget for its inhabitants to propose an activity, in function of the sustainability goals, to activate Peterbos socially or physically. For example, a participatory garden has been created where inhabitants work together on the green space. Other projects include social rehabilitation initiatives where inhabitants get together to cook and create intercultural social connections (DWC Peterbos | Anderlecht, s.d).

Ground Floor Activation

Through different small scale initiatrives, the masterplan has created projects to activate the ground floor with resident participation. Through participative processes, projects to create open green space in Peterbos was activated.

One of these initiatives include the creation of mosaic street furniture to brighten up the area and create a space for people to gather.

Furthermore, a project called Raconte Arts was set up in order to create a connection between inhabitants through arctistic creations in open spaces. Through this project, the goal was also to activate outside areas and get active use out of neglected spaces.

Another project that has been initiated is the expansion and renovation of the local youth center and to build a room for residents to work on their own repairs. It puts residents to work by renovating the ground floor areas of communal spaces.

Stakeholders

Primary Stakeholders

The municipality of Anderlecht which coordinates the Contrat de Quartier durable. Through this, it sponsors and coordinates the works on the masterplan of VVV and Studio Paola Viganò.

The Brussels Capital region is also part of the funding of the Contrat de Quartier Durable and oversees and creates the framework surrounding the policy on these contracts.

The SLRB as owners and managers of the social housing stock.

The residents of the Peterbos are in the end the users of the public space, facilities and social projects. Without active participation of the residents, the projects wouldnt be possible.

Public and Institutional Stakeholders

Institutions of the Brussels-Capital region such as urban.brussels and perspective.brussels are in charge of urban planning, strategy and permits.

Beliris, the federal-regional partnership for infrastructure and renovation projects is responsible for the bigger renovations.

The CPAS is in charge of social services and local support which is necessary in a socially challenged neighbourhood such as Peterbos which is undergoing change and challenges.

Technical and Economic Stakeholders

Most importantly, VVV architecture and Studio Paola Viganò have created the masterplan for the landscape architecture of Peterbos and are in charge of the urban design.

Social and Community Stakeholders

SAAMO Brussels is in charge of community development, social cohesion and resident empowerment in Peterbos (Samen op straat Peterbos - SAAMO., n.d).

D'Broej Anderlecht is in charge of youth work and street outreach to create inclusion for young people (Sociale Kaart, n.d.).



Image on the left: "Images from the master plan" by Aernouts, Cognetti and Maranghi via https://link.springer.com/chapter/10.1007/978-3-031-19748-2_11 modified by Alexandra Teubner
Image on the right: "Mixité: emancipation and individual initiative" by Aernouts, Cognetti and Maranghi via https://link.springer.com/chapter/10.1007/978-3-031-19748-2_11 modified by Alexandra Teubner

Budget

As this project is large, many different types of budgets can be differentiated and not everything is publicly available. There is no official budget. Investments through regional subsidies via the Sustainable Neighbourhood Contract. Focus on low cost, high impact strategies through de-sealing (removing asphalt), reorganizing parking, improving pedestrian access and slopes, ecological infrastructures (ditches, swales, infiltration).

For the whole renovation of the landscaping and the public space designed by vvv and Studio Paola Viganò, € 3.655.000 was made available (Peterbos Park | Wallonie-Bruxelles Architectures, n.d.).

The Contrat de Quartier durable has gotten an envelope of 60.000 euro to spend over 5 years between 2019 and 2024. This is the overall participatory budget (Peterbos Park | Wallonie-Bruxelles Architectures, n.d.).



Image: "Ceci aussi est Peterbos [illegible] SAAMO [illegible] https://www.saamo.be/fr/[illegible]/ceci-aussi-est-peterbos" modified by Alexandra Teubner

Limitations

Positive Results

Peterbos is a good case to look at for ground-floor activation because a lot of space already exists at ground level. Between the towers there is a lot of open ground, even if it is now broken, sloped, or used for parking. This means that new activities do not need new buildings, but can use what is already there. Small changes can already make parts of the ground floor more usable for residents.

Another positive point is the Contrat de Quartier Durable. Through this program there is already a structure for participation. Residents can propose ideas and use a small budget to test activities. This makes ground-floor activation more realistic, because it is not only planned by designers but also comes from people living there. Even small projects, like the garden or cooking activities, show that people are willing to use shared spaces if they are involved.

Peterbos also has several local organisations that are already active on site, like SAAMO Brussels and D'Broej Anderlecht. These organisations know the neighbourhood and the residents. They help people to participate and lower the threshold to join activities. Without these actors, many ground-floor projects would probably not work.

The modernist layout of Peterbos is often seen as a problem, but it can also be an opportunity. The distance between buildings and the large open spaces make it possible to create meeting places, paths, and shared spaces at ground level. Ground-floor activation here does not have to be commercial. It can focus on social and collective uses that fit better with social housing.

Finally, Peterbos is interesting because it works with small and low-cost interventions. Not everything needs to be finished or permanent. Temporary uses and small changes can already change how people use the space and how they feel about it. This makes Peterbos a useful case to understand how ground-floor activation can work in a difficult social context, without big budgets or full renovation.

Limitations

The success of ground-floor activation and small-scale projects largely depends on active resident participation. In a socially fragile context with high unemployment and vulnerability such as the Peterbos, sustained engagement cannot be guaranteed.

While public space and ground-floor activation are addressed, the residential towers themselves remain largely unchanged. Structural, energy, and spatial limitations of the existing buildings restrict the overall impact of the interventions.

Many initiatives under the Contrat de Quartier Durable are temporary or project-based. Once funding ends, there is a risk that activities and social dynamics will not be maintained in the long term.

The participatory budget allocated to the Contrat de Quartier Durable is relatively small compared to the scale of social and spatial challenges in Peterbos, limiting the scope and durability of interventions.

The involvement of multiple institutional, technical, and social stakeholders creates challenges in coordination, decision-making, and implementation, potentially slowing down projects or diluting responsibilities.

Interventions are highly sensitive to the existing social stigma, insecurity, and spatial isolation of Peterbos. Without broader structural socio-economic improvements, spatial upgrades alone may not fully achieve social integration or neighborhood revitalization.

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Image: "Parc du Peterbos" by VVV via https://vvvarchitectes.be/Parc-du-Peterbos-1 modified by Alexandra Teubner



Image: "Parc du Peterbos" by VVV via https://vvvarchitectes.be/Parc-du-Peterbos-1 modified by Alexandra Teubner

Quartiere Chiesa Rossa

Houlette 37
Belgium

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Parc du Peterbos
Belgium

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Quartiere Chiesa Rossa
Italy

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Kleiburg
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Void Decks
Singapore

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Pla Buits
Spain

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La Borda
Spain

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Pioneer Valley Cohousing
USA

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Bruit du Frigo
France



Image: “Chiesa Rossa, Milano” by territoridellacondivisione via https://territoridellacondivisione.wordpress.com/2012/11/08/chiesa-rossa-milan/ modified by Alexandra Teubner

The Chiesa Housing estate in Milan is a social housing estate from the early 20th century with issues of obsolescence and in need to undergo a large renovation. Like Brussels, the Milan social housing stock is facing a crisis. There are many more people looking for housing than there is housing available(Secchi, 2016).

Due to the condition of these buildings, they need to underg a large-scale renovation or face demolition, however the municipality of Milan is looking at alternative options with less traumatic and budgetary intense activity. Through looking at alternative ways of renovation and avoiding demolition of the buildings, they try to tackle the high demand for social housing as well as actively making changes to a building to reconfigure it for the next decade. This is similar to the issues in social housing faced in Brussels(Secchi, 2016).

The Quartiere Chiesa Rossa in Milan is a typical example of the social housing stock in Milan, facing extreme obsolescence but with high demand and use from its inhabitants.

The ground floors in this neighbourhood were once built with the idea of active ground floors for “diverse uses” such as workshops, commercial activities and local association centres. Now the buildings face obsolescence, the ground floors have also become inactive.

It is through action on these ground floors that the municipality of Milan has started trying to reactivate the neighbourhood and using these activities as a way to recover the obsolete ground floors(Secchi, 2016).

Relevance

The housing stock in Milan is faced with the same limitations as the one in Brussels. It is an old modernist housing stock facing severe obsolescence whilst also facing high demands of use and population from its residents. This example gives an opportunity for a new way of thinking on the generation of a successful activation and renovation of ground floors at a low cost whilst also involving residents. It also actively focuses on the activation of existing housing stock which is facing difficulties instead of reaching for big term renovations which are budgetary and socially impactful.



Image: “Ein Ausflug nach Chiesa Rossa, dem Wohnheimviertel, das auf europäische Fördermittel wartet.” by Milano Today via https://www.milanotoday.it/dossier/sociale/chiesa-rossa-riqualificazione-reportage-2024.html modified by Alexandra Teubner

Context

In order to activate the ground floors of social housing complexes, the municipality of Milan has introduced a series of policies aimed at reusing these spaces which were abandoned for a long time. The demolishment of public housing is considered an exceptional solution which the city tried to avoid. Instead it tries to fo focus on the renovation and reactivation of the existing building stock. One of the main strategies is to offer favourable lease conditions and financial support for the basic refurbishment of ground-floor spaces that were originally intended for commercial, productive, or community uses(Secchi, 2016).

These measures mainly target young entrepreneurs under the age of 35, supporting them in starting new activities within the neighbourhood. Through a combination of social, economic, and spatial policies, the municipality aims to unlock the unused potential of these areas while improving the overall quality of the built environment. The reactivation of ground floors is seen as an opportunity not only to bring new functions into the buildings, but also to improve the relationship between the housing estates and the surrounding city(Secchi, 2016).

The idea behind this approach is that by introducing new activities at street level, everyday life in the neighbourhood can gradually be enhanced. Active ground floors can generate movement, social interaction, and a stronger sense of safety and belonging, contributing to a slow change in the social composition of the area. In this way, the strategy seeks to “re-weave” the urban fabric, using the ground floor as a key element to reconnect the housing estate with the wider urban context. For example, besides trying to re-activate the ground floor, open public spaces, an orchard and vegetable gardens have been added to the area in a general urban reactivation policy (Chiesa Rossa, Milan. A Strong Sense Of Proximity, 2013).

Stakeholders

Primary Stakeholders

The residents are the people who are actively feeling the impact of these activities and who participate in these ground floor activations are primary stakeholders.

It is the young entrepreneurs, who are under 35 years old, who are the users and creators of the activity and renovation of these ground floors. They initiate the activity on the ground floors. Through the targeted lease programs and favourable policies they are targeted and initiate these short term leases.

Institutional Stakeholders

The municipality of Milan is responsible for the governance, the funding of the project and the policies allowing this project to enforce itself. It has implemented favourable leases for the ground floors of the social housing complexes and it provides a small budget for the basic renovation of these ground floors. It is the municipality which is the administrative headpiece for this project.

The ALER Milano/ IACP is the public housing authority of Milan, which could be translated to the SLRB in the case of Brussels. Their role in this project is to manage and facilitate between the municipality and the inhabitants of this project. Important to note, they do not facilitate budgets! They own and manage the ground floor spaces and coordinate the refurbishment works and approval of spaces for temporary or entrepreneurial use.

Other stakeholders

Local associations organise the social and community facilitation, they are also allowed to occupy or manage spaces for temporal, cultural or social initiatives. they ensure that the spaces are used for the right reasons creating community engagement rather than only commercial use.

Budget

The interventions in Quartiere Chiesa Rossa are based on a limited and careful use of financial resources. Instead of large-scale demolition or new construction, the budget is mainly used for upgrading what is already there. Municipal funds are used for basic refurbishments of vacant ground-floor units, allowing these spaces to become usable again without heavy investments. This includes simple works such as repairs, cleaning, and adapting interiors for new functions(Secchi, 2016).

Besides this, the municipality supports new activities through incentives and subsidized leases. This reduces the financial risk for small businesses, associations, and local initiatives, making it easier for them to settle in the neighbourhood. Rather than spending money on new buildings, the budget is used to make existing spaces accessible and affordable(Secchi, 2016).

Public-space improvements are also done by reallocating existing resources. For example, street sections are reconfigured instead of fully rebuilt, which keeps costs low while still improving safety, accessibility, and use of the ground floor (Secchi, 2016).



Image: “Karte des IACP-Viertels „Chiesa Rossa“ in Mailand.” by Arbalete via https://it.wikipedia.org/wiki/File:Milano_mappa_quartiere_Chiesa_Rossa.svg modified by Alexandra Teubner

Limitations

Positive Results

The Quartiere Chiesa Rossa had many similarities with Brussels, it also faces significant struggles. The activation of ground floors can trigger important transformation without the high displacement and cost need for demolition. This allows not only to positively impact the buildings themselves but also the inhabitants, people developing the ground floors as the surrounding urban fabric as well.

One of the most significant outcomes of this case study is the activation of ground floor spaces through local entrepreneurship, collectively enhancing the neighbourhood and its surrounding urban fabric. This case study shows that this is a strategy that is able to serve as a potential model in Brussels, facing similar constraints. Brussels may not be an exact replica of Milan but it can draw inspiration from the similar situation for ground floor activation.

Limitations

Even though there are many positive effects to be noted from the ground floor activation through short- term leases, there are still limitations in how replicable it is for the Brussels context.

First of all, the quality of space is one of the most important factors for a successful project. The activation of ground-floor spaces alone is not sufficient if the environment on the tresst stays unatratracive to residents. This would also be the case in Brussels which we need to be wary of. The ground floors can be renovated and reactivated but as long as the urban fabric remains lacking, the environment would remain attractive for investments and entrepreneurs as well as the public in general.

Besides this, the existing urban form is also something which needs to be critically examined. Existing urban forms such as introverted courtyards and segregated service precincts limit permeability and requires significant reconfiguration to change behavioural patterns. This adds on to the previous limitation in which the existing urban fabric is

essential for its development.

The social complexity of the population makes fully integrating new uses challenging. With residents who have diverse needs, informal uses of space, and an aging demographic, any intervention must navigate these layers carefully to be inclusive and effective.

Another constraint which is relevant to Brussels is the Budget. Through limited public funding, the speed of interventions and scale are constrained. If Milan were to have enough funding for the full renovation, they would impose this. However, it is through this ground floor activation that they are trying to make work with limited funding. It is also relatively unclear what budget is proposed for this project. Even though funding is clearly an obstacle, this ground floor activation does challenge a way in which it might be possible to actively re-activate ground floors in social housing through transitory urbanism.

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Image: “Mailand | Chiesa Rossa – Der Park, das Bauernhaus und die alte Kirche” by urbanfile via https://blog.urbanfile.org/2017/11/11/milano-chiesa-rossa-il-parco-la-cascina-e-la-chiesa-antica/ modified by Alexandra Teubner

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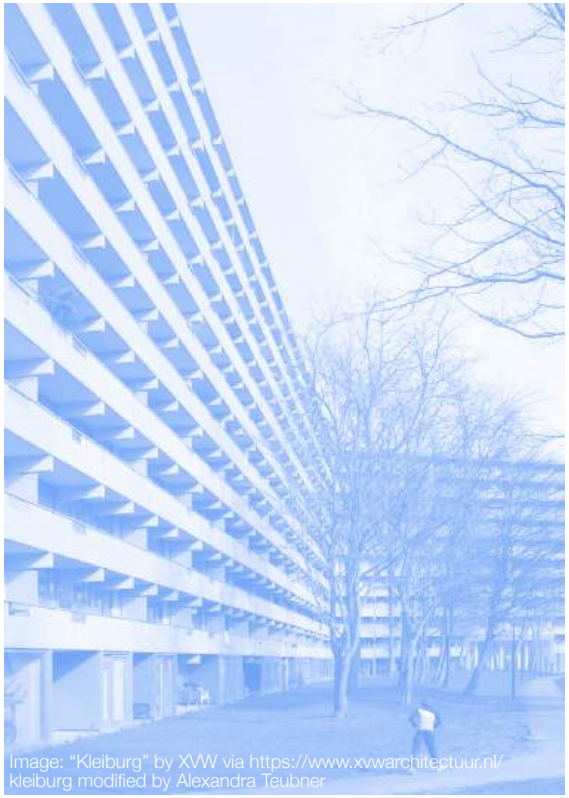


Image: “Kleiburg” by XVW via https://www.xvwarchitectuur.nl/kleiburg modified by Alexandra Teubner

A social housing unit constructed in the 1970s was renovated with ground-floor transformations and a DIY framework. Former ground floors that had been utilised as storage spaces were repurposed to accommodate small businesses, workshops, and bicycle parking areas. Passages beneath the buildings were expanded and illuminated to enhance safety and encourage activity. During the renovation process, tenants exchanged excess building materials (e.g., wooden planks, powders) or furniture that had become superfluous following the refurbishment (Morka, n.d.).

Relevance

The project focuses on the renovation and conversion of ground floors, with the aim of creating a new governance model to manage the rest of the apartment blocks. The budget was reduced to facilitate the execution of the project, resulting in an iconic project for minimum intervention and maximum social impact. This benchmark is relevant because the budget is minimised to renew the ground floors and public realms, and their maintenance is carried out through resident participation.

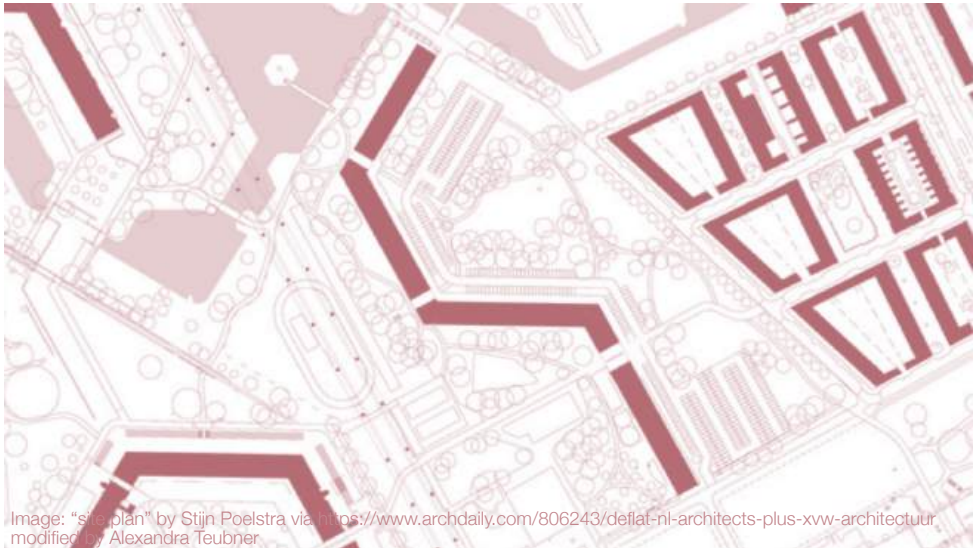


Image: "site plan" by Stijn Poelstra via https://www.archdaily.com/806243/deflat-nl-architects-plus-xvw-architectuur, modified by Alexandra Teubner

Context

The Kleiburg building is part of the Biljmermeer neighbourhood in the south of Amsterdam, which was built in 1969 as a post-war social housing project. It is made of 10-storey high slabs of housing units in the shape of hexagons, creating a continuous wall-like structure in the urban environment. Kleiburg is one of the original buildings standing until today, which was meant to be destroyed but was stopped by the protests in 2011. Hereafter, the project for renovating these housing slabs was initiated (DeFlat, 2019).

A political agenda was in operation to retain one of the original housing slab units as a legacy of modernist housing units, a programme which was fostered by the municipality. Housing corporations such as Rochdale requested €70 million for renovation costs, a financial undertaking which proved to be non-viable. This necessitated the exploration of a new renovation model. Amsterdam was experiencing increasing demand for low-income home ownership, and models of community participation involving DIY and self-build were politically encouraged. Consequently, stakeholders were able to focus their initial budget on the renovation of structural elements in the ground floors and public areas (Magni, 2018).

Governance Model of deFlat

A Public–Private–Resident Collaborative System

The project created a governance structure that differs sharply from typical social housing renovations, where the process is usually dominated by either a public housing corporation or a private developer.

For Kleiburg, neither of these traditional models worked. The building was too large, too degraded, and too politically sensitive for standard renovation. So, a completely new structure was invented (Magni, 2018).

The De FLAT Consortium, a short-term, goal-oriented private partnership, was established to assume ownership for €1 and oversee the ground floor activation, façade enhancements, and structural

rehabilitation. The partnership implemented the Klusflat (DIY) approach, which sold apartments incompletely so that homeowners could affordably renovate their interiors themselves, in place of depending on government subsidies or comprehensive developer-led renovation. A new governance model that strikes a balance between practicality, cost, and architectural preservation is formed by this tripartite organization (Magni, 2018).

The Owners' Association (VvE)

The Owners' Association (VvE) is the formal collective body that assumes governance of the building following the completion of individual apartment sales. Every homeowner in Kleiburg becomes a member of the VvE automatically, and their voting rights are proportional to the size of their apartment. The VvE assumes responsibility for all shared elements of the building, including the structure, galleries, lifts, roofs, façade components, and technical installations. Each resident is responsible for the interior of their own unit, in accordance with the DIY model (DeFlat, 2019).

The VvE collects monthly contributions (service costs) from all owners to fund maintenance, repairs, cleaning, insurance, and the long-term reserve budget. It makes decisions collectively in scheduled meetings, where residents vote on issues such as repairs, upgrades, technical interventions, or financial planning. Because Kleiburg is extremely large (500 units), the VvE operates with a professional management company appointed by the owners to handle administration, budgeting, maintenance contracts, and coordination with the municipality (Magni, 2018).

Stakeholders

Primary Stakeholders

The De FLAT Consortium is in charge of the project. This group is made up of Kondor Wessels Vastgoed, Hendriks CPO, Vireo Vastgoed, and Hollands Licht. They bought the building for €1 and did all the renovations. NL Architects and XVW Architectuur designed the common areas, façades, and structural renovations. They are responsible for the design of the project areas (Magni, 2018).

Public and Institutional Stakeholders

The municipality of Amsterdam, conversely, was the originator of the initial pressure to avoid demolition and to support the preservation of the edifice. Politics and municipal government were the primary catalysts for the commencement of this project, and they ensured the building's protection from demolition.

Social and Community Stakeholders

Future residents and the local communities of Bijlmermeer are the people this project is all about. Future residents are the main people involved in the DIY governance model and the renovation of the structure, while local communities in Bijlmermeer play a really important role in the renewal of public realms affected by ground-floor activation.

Budget

The Housing Corporation of Rochdale (initial stakeholder) estimated 70 million euros for full renovation, which was financially impossible. This induced a new approach, proposed by De Flat, changing the entire financial model. Leaving apartments unfurnished and unfinished reduced initial investment dramatically (Wilkinson, 2017).

An academic estimate suggested that the renovation cost is approximately €250/m², which accounts for about 20% of the apartment sale price (around €1,150/m²). The developers only had to pay for the renovation of the ground floors. The total floor area of Kleiburg is 66,000 m², and the initial total cost is 70 million euros; only looking at the ground floors is 1/10 of the total floor area, which is 6,600 m², gives us the rough approximate number of € 6.6 million for renovation of the ground floors. However, real numbers are conceivably lower than this approximation due to the community-engaged conversions of the ground floors (Wilkinson, 2017).



Image: "Klusflat" by Stijn Poelstra via https://www.archdaily.com/806243/deflat-nl-architects-plus-xvw-architectuur modified by Alexandra Teubner

Limitations

Positive Results

It was affordable, offered a new DIY model for stakeholders and tenants, and made the ground floors more lively, with more social interaction and safety. Residents took part in activities on the ground floors alongside a participative maintenance model, meaning the resident blocks could look after themselves for longer without stakeholder investments (monthly payments and voting). Mixed-use ground floors also increased local economic activity. This governance model got the public, private, and residents working together, which makes it a great example for similar governed cities like Brussels. This project won the 2017 EU Mies van der Rohe Award for innovation in housing (DeFlat Kleiburg, 2024).

Limitations

The idea of doing housing renovations themselves depends on what the tenants can and can't do, which can create differences between households. Maintenance depends a lot on the resident associations, which might cause problems in the future. The grounds also need ongoing support from the community and the local council. The DIY governance model isn't that useful in cities like Brussels, because it depends a lot on home ownership. But it's important to get the community involved and to keep the ground floor active when you're renovating social housing projects.

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Image: “Hochhaus Kleiburg in Amsterdam (NL)” by Stijn Brakkee via https://www.db-bauzeitung.de/bauen-im-bestand/projekte/hochhaus-kleiburg-in-amsterdam-nl/ modified by Alexandra Teubner

Void Decks

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Image: “Residents transformed one void deck in central Singapore into a garden with wall art and vertical planters.” by Shubhangi Goel/ Bloomberg via https://www.bloomberg.com/news/features/2023-07-27/singapore-hdb-residents-fill-void-decks-with-gardens-libraries modified by Alexandra Teubner

The term 'void deck' refers to the open, unsheltered spaces found on the ground floor of Singapore's Housing and Development Board's (HDB) residential blocks. Originally introduced in the 1970s, they were designed as informal meeting points and communal gathering areas to foster social cohesion among residents (Goh, 2003).

This example was chosen to show how a shared space can be used, governed and maintained with a residents' committee, that gives the residents the opportunity to participate. Additionally, there have been projects on a small scale that reuse these void decks and are residents led, which can be an inspiration for small-scale projects.

Relevance

Void decks serve as a prime example of how small-scale interventions can upgrade common spaces by introducing new social functions. The accessible way for inhabitants to get funding for their ideas is a huge motivational factor and low-budget in comparison to a renovation. The implemented Residents' Committee is also a huge asset in getting residents involved in the shared maintenance of those void decks.



Image: "Smart Void Deck at Jurong" by THESMARTLOCAL via https://thesmartlocal.com/read/study-spots-in-singapore/ modified by Alexandra Teubner

Context

In Singapore, 80% of the population lives in public housing. The system is a managed free market where housing units are owned and traded (Goh, 2003). These huge housing estates were created after the 1960s by the Singapore's Housing and Development Board (HDB) that was found to resolve the housing shortage (Lee & Jung, 2023). Many of those buildings have an integrated void deck as a space for inhabitants to gather and share the public space at a block level (Goh, 2003).

Since the original creation of the void decks, there have been multiple small projects to regenerate the decks by bringing in different functions. One prominent example of revitalisation is the 'Green Hub,' initiated by 21 residents during the pandemic. What started as a vertical urban garden has expanded into an eco-habitat and community library, supported by the Lively Places Programme. The space is now being maintained by 10 gardeners and 40 volunteers. The furniture and most other things have been donations from the public (CNA Insider, 2025).

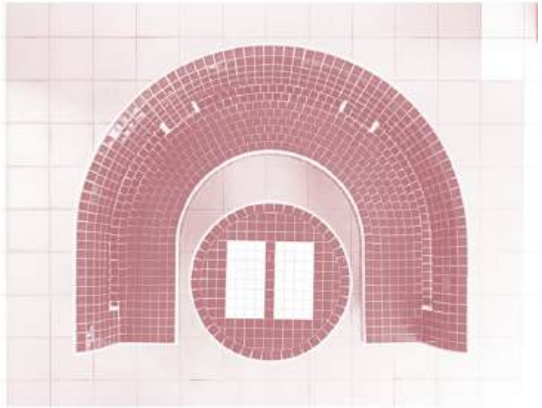


Image: "Singaporean social housing tables from above" by Hype&Hype via https://hypeandhyper.com/singaporean-social-housing-tables-from-above-2/ modified by Alexandra Teubner

Stakeholders

The Primary Stakeholders

The Singapore's Housing and Development Board (HDB) is the main actor in the space since they are the owners of the residents blocks and public spaces (Lee & Jung, 2023). Their governance is focused on the decentralisation of the HDB's functions (Chin, 2004).

Public and Institutional Stakeholders

Town councils within HDB were therefore created, that give the residents a greater say. These town councils are hiring local bodies that manage and maintain the common areas. The council is responsible for the day-to-day upkeep, including cleaning and the maintenance of the void decks. Residents that were elected as representatives are part of the town council (Chin, 2004).

Social and Community Stakeholders

The Residents Committee has further responsibilities and they organise the residents voice. They are responsible for tasks involving organising and creating community spaces such as community gardens, etc. (Lee & Jung, 2023). In the case of the void decks, they are the ones coordinating the temporary usage in cooperation with the HDB (Chin, 2004). They can be renting it to residents for events like weddings or funerals or many more activities. The residents' board is the key in social activation.

Budget

The HDB publicises an Annual Report each year, including a financial statement (HDB | Annual Reports, n.d.). But with this project looking at the void decks mainly, there was no information about the budget to build, maintain or reactivate the void decks. But a program that the HDB and Urban Redevelopment Authority (URA) have created called the "Lively Places Program" is funding many different residents-led projects since 2016 (HDB | Lively Places Fund and Challenge, n.d.). The HDB and URA have allocated $500,000 for the first five years ('New $500,000 HDB Fund to Encourage Ground-up Community Activities', 2016). The program is being continued to this day, but the budget for it is unclear. This program funds projects, that are led by residents, that organize activities with neighbours and complete the project within a year (Lee & Jung, 2023). The main goal is to revitalize local public spaces (HDB | Lively Places Fund and Challenge, n.d.). Depending on how many participate and what the project is exactly, one can get a budget between $5,000 and $20,000 (HDB | Lively Places Fund and Challenge, n.d.).

One project that has been funded and concerns the void decks, is the already mentioned Green Hub. Another is the "Friendly Senior Citizens' Corner" which was to revamp the citizens' corner and to make it more inviting and to conduct new activities, or the "Love Thy Neighbour" project, that was live-streaming Christmas celebrations at the void deck. Another was the "Bukit Panjang Community Art" project, that beautified the Bangkit void deck with art or the "#ReadDrawPlay" project that was designing a corner at a void deck to encourage young children to read, draw and play with their neighbours (HDB, n.d.).

Especially, the social relevance of these projects was clearly visible. Most of the projects are low cost and based on volunteering, which makes them cost-efficient. How effective the projects are long-term depends greatly on what they are exactly, since some of them are one-time events only. But at the first glance, the budget in regard to the output seems worthwhile.

Limitations

Positive Results

The void decks are a great example for how to get residents involved in their shared spaces and give them decision power back. They are a space that people pass through daily, which gives a great incentive for inhabitants to make the shared spaces enjoyable. This is something that could be implemented for ground-floors in Brussels. Overall, the void decks can be a great inspiration when looking at getting residents involved in general and when looking at different options on what can be done with common spaces and how they are being maintained.

Limitations

What has to be considered as a limitation, is that the decision falls to the HDB in the end and residents can only participate to a small degree and do their own projects, if they get chosen for the funding. The context in Singapore is a very politically controlled space, which makes participation different to a European idea of self-management. Additionally, most inhabitants are probably still passive and uninvolved.

It is also mentioned that in some cases the functional emptiness of the void deck can lead to a generalized sense of emptiness throughout the neighbourhood instead of offering more urban connections (Goh, 2003). And in comparison to a possible renovation of ground-floors into common spaces in Brussels, the void decks were always intended as such and have an advantage in that spatial regard. The HDB also has more financial means than the SLRB in Brussels, so they have more options to fund the residents-led projects.

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Image: "Pla BUITS (Vacíos Urbanos con Implicación Territorial y Social)" by periferias via https://periferiaspaisajesurbanos.com/pla-buits-vacios-urbanos-con-implicacion-territorial-y-social/ modified by Alexandra Teubner

Pla Buits (“Empty Plots Plan”) is a municipal initiative in Barcelona that temporarily opens unused or vacant public spaces for community-led projects, often of a social, cultural, or environmental nature (Urban Nature Atlas, 2021). The benchmark addresses the governance, care, and maintenance of shared spaces without individual ownership. Responsibility for the vacant plots is temporarily delegated to citizens and local organizations, allowing for collective care and everyday maintenance within a clear institutional framework. The project offers multiple examples of transitory urbanism, in which unused communal spaces are activated through temporary uses. The experimental nature of these interventions provides valuable insights into how short-term, low-cost initiatives can inform longer-term approaches to use and manage these shared spaces.

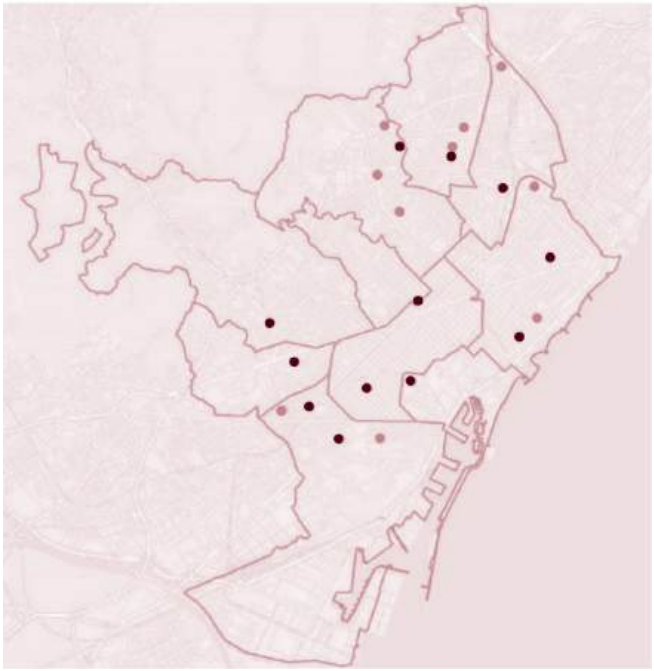


Image: “Map of active plots (in dark), the 2015 call for applications (in light) and district boundaries (in black)” by cartodb database via https://www.academia.edu/29851411/El_Pla_Buits_de_Barcelona modified by Alexandra Teubner

Relevance

Although Pla Buits is not a social housing project, it is a relevant benchmark due to its governance model and approach to the activation and maintenance of shared spaces. Similar to social housing in Belgium, the plots remain publicly owned, while use and care are entrusted to local actors through temporary agreements. The project demonstrates how cooperative governance structures can enable co-design, shared responsibility, and everyday maintenance on limited budgets. By allowing residents and organizations to take care of vacant spaces, Pla Buits fosters a culture of maintenance and collective ownership with significant social impact. This makes it an inspiring reference for the Brussels social housing context, particularly in relation to the temporary use of underutilized spaces and the activation of common areas through low-cost, community-driven initiatives.



Image: “The ConnectHort site during its refurbishment.” by Vicente Zambrano via https://www.academia.edu/29851411/El_Pla_Buits_de_Barcelona modified by Alexandra Teubner

Context

With the initiative of Pla Buits, the municipality of Barcelona aimed to involve civil society in defining, installing, and managing unused spaces across the city's districts, making it a co-management project. Thereby they specifically aim to promote social activism and cohesion in the neighborhood by emphasizing the regeneration and dynamization of the urban fabric. Local non-profit organizations and individual citizens can propose projects like urban gardens, bike garages, or recreational spaces. If they get selected, they manage the space under formal agreements with the city for one to three renewable years. The program emphasizes co-production since civil society actors design, implement, and maintain the spaces while the city plays a managerial role. The initiative had 2 editions, with 12 projects in the first one (2013) and 5 projects in the second one (2015). The most popular projects were

"ConnectHort" in Poblenou, a community garden dedicated to permaculture which has restored the abandoned area through sustainable urban agriculture practices. Another successful project was "Illa dels Tres Horts" in Font de la Guattlla, an orchard where work is done with vulnerable groups and allows the recovery of vulnerable species (Baiges, 2016).

Barcelona faces numerous temporarily vacant plots or underutilized spaces due to municipal planning delays. The objective was to stimulate civic engagement, urban regeneration, and public-interest activities using low-cost, provisional interventions. The conditions for the project development consisted of vacant municipal plots that were temporarily unassigned to long-term projects. Another condition enabling the project was the engagement of local non-profit organizations and motivated citizens. There was a municipal willingness to cede temporary use free of charge, with clear and flexible governance agreements. On top of that, a supportive political and executive leadership enabled the encouragement and involvement of civil society. Finally, a vibrant local associative network with prior experience in citizen-led initiative was already in place (Urban Nature Atlas, 2021).

Stakeholders

Public and Institutional stakeholders

Under the leadership of the Department of Urban Planning, the municipality of Barcelona gave 19 parcels to local non-profit organisations or individuals who were selected through the competition. The public and institutional stakeholder is the Barcelona City Council – Department of Urban Planning as Strategic leadership, regulatory and procedural authority. They are the initiator and coordinator of the Pla Buits programme and identifiers and providers of the vacant municipal plots. They design the competition framework and selection criteria and select projects and grant temporary use rights. Other tasks of this stakeholder is to monitor compliance with basic rules (safety, legality, temporality). Deliberately they do not impose project content, leaving autonomy to users. As the institutional stakeholders, they are the key enabling actors and shift from direct provision to facilitator of co-production (Gascó & van Eijk, 2018).

Social and Community Stakeholders

Local organisations and some individual citizens have a role in both the design and implementation phase, making it a clear example of co-production. Thus, in this case local government, local (non-profit) organizations, and citizens collaborate to produce a public service (reuse of empty spaces). They are totally responsible for the empty spaces they are managing and, therefore, are in charge of implementing the proposed project, be it an urban garden or a bike garage.

A difference was made between promoting organisations and non-promoting organisations since not everybody has the same tasks and responsibilities.

Promoting organisations are local organizations or citizens who proposed the project. They are the ones in charge of the management of the overall project and act as the contact organization to both the Department of Urban Planning and the district. Actors like: protest groups like 15-M, catholic charity groups, residents' associations,

(deeply rooted in the neighbourhood and with a strong interest in seeing an increase of its quality of life) and individuals (they have done so because of their personal interest in improving the conditions of the neighbourhoods they live in).

Non-promoting organisations are the supporters of the initiative. They help the project by giving knowledge to actors like: residents' associations, parents' associations, handicapped foundations, schools, libraries, small companies, and universities.

All involved actors are co-producers and developed important feelings of ownership. They expressed a willingness to take responsibility for the empty space. By working together through different 'layers' net-working was not always smooth (for instance due to disagreement among different actors on what to do or how to do it). The collaborative spirit and commitment of different citizens and associations rooted in the neighbourhood were highly valued (Gascó & van Eijk, 2018).



Image: "Empty Plot Plan - Barcelona" by INTERPLACE via https://interlace-hub.com/empty-plots-plan-and-hands-green-barcelona?utm_source=chatgpt.com modified by Alexandra Teubner

Budget

The Pla Buits programme operates through a two-tier budget structure. At the programme level, Barcelona City Council allocated approximately €400,000 to prepare and adapt vacant municipal plots for temporary use. At the project level, however, no standard operational funding was provided to participating organisations. Instead, local organisations were responsible for financing and managing their own projects, with indicative project budgets often ranging between €50,000 and €100,000, sourced through a combination of internal resources, grants, and community-based funding (Interlace Hub, n.d.).

Barcelona's Pla Buits programme provided an initial municipal budget of approximately €400,000 for adapting vacant plots for community use. Participating local organisations were not guaranteed direct operational subsidies from the city. Instead, they assumed responsibility for financing and managing their own activities on the ceded spaces. In practice, organisations typically self-financed project costs through internal funds, grants, crowd-funding, or external support. They did only get access to the use of the basic infrastructure prepared by the city.

From an investment aspect, the municipality did a minimal investment and provided the plots free of charge. The technical relevance was quite simple, requiring low-cost materials and temporary setups while the interventions like urban gardens were adaptable. On the other hand the social relevance was high since it strengthened the community ties and increased the local civic engagement. A system robustness approach indicates a low-risk due to the temporary nature of the interventions while the governance is flexible but requires strong coordination among co-producers and city authorities. Additional costs include small stipends or employment for project managers within organizations, materials for installations, and basic maintenance and the cost of maintenance of the plots fell under the operating organisations.

Limitations

Positive Results

Pla Buits had positive results that mainly manifested in the residents' feeling of empowerment, especially since the sense of ownership among the co-producers was quite strong. The development of urban green spaces and the limited temporary green jobs in the underutilized plots was thereby also a positive result of the intervention. It can also be taken as a successful co-production model and the collaboration between different levels of the city, organisation and citizens. The enabling factors for the co-producers' engagement were firstly the already strong associational network of the vibrant civil society that was in place. Nonetheless it was an easy methodology of co-production. Thereby on the political and executive level, there was a will and commitment from the city government. Lastly, the motivation of the individual and organizations was fundamental in enabling the production and collaborations (Orduña-Giró & Jacquot, 2015).

Limitations

There were also limitations to the intervention. The networking and collaborating with many actors was not always smooth as the different actors disagreed on the project design and its implementation. The bureaucracy thereby slowed down the projects' approval and progress. The lack of resources also limited the quality of participation and in some cases there was a limited individual citizen engagement and the projects relied more on motivated representatives. The temporary nature of the plots was unique in its experimental nature but it limits long-term impact since the plots may eventually be repurposed according to municipal plans. Participation was also hindered due to a lack of resources within the organizations, affecting its ability and internal efficacy. The bureaucratic structure of the city council thereby slowed the process down. The individual citizen involvement was thereby lower, this suggests a need for individual co-producers who act both as clients and volunteers, rather than merely receiving the services offered in the empty spaces (Voorberg et al., 2015).

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Image: La Borda in Barcelona von Lacol by Frank Kaltenbach via https://www.detail.de/de_de/la-borda-in-barcelona-von-lacol modified by Alexandra Teubner

La Borda is a cooperative housing project based on a Community Land Trust model in Barcelona. It is developed on land that is publicly owned whilst the project is managed by its residents and operates on a lease that was granted by the Barcelona City Council for 75 years. The initiative first started in 2012 as part of a grassroots movement aiming to reclaim the former industrial site of Can Batlló and transform it into a community-driven urban space (RE-DWELL, n.d.).

La Borda was created as a prototype for cooperative housing and also an experiment in co-construction. It prioritised low environmental impact and strong resident participation throughout the design and development process. It reached completion in 2018 with the project consisting of 28 housing units and a range of shared spaces like communal kitchens, laundry facilities, guest rooms and collective areas which were designed to encourage social interaction and collective living (RE-DWELL, n.d.; Housing Europe, 2025).

Relevance

Even though La Borda isn't a social housing complex, people do not own their land as it is based on the community land trust model. Through this, it is interesting to see how people interact through co-creation on a project through which they don't have actual ownership of the land itself. The idea of co-creation is what is important to this case as many communal areas and facilities have been created by and for its residents. This could be something of interest for the activation of residents in social housing also not in ownership of their plots of land that they work on.

Context

La Borda came from from a grassroots movement in the La Bordeta neighborhood of Barcelona. Here, local residents mobilized to reclaim and repurpose the former Can Batlló industrial complex. Through community-led urban transformation they tried to actively claim the urban space. This initiative responded to broader structural challenges in Barcelona such as a severe housing crisis with by rising housing costs, speculative real estate pressures, limited access to public and affordable housing (Ajuntament de Barcelona, n.d.).

In this context, La Borda proposes an alternative housing model that removes land from the speculative market through the CLT structure while promoting collective ownership, affordability, and long-term housing stability. By combining cooperative housing with co-construction and participatory governance, the project seeks to challenge conventional housing production models in Barcelona (Avilla-Royo et al., 2021; RE-DWELL, n.d.).

Co-Construction

Through the comunnal construction of the residents, participation in the whole creation of the project was involved. This way, future inhabitants were able to define the process of their future living space in connection with their needs. From the start of the project, participation was organised through workshops, work groups and discussions at general assembly meetings. Future inhabitants were involved in every part of the process with a technical support team to further help with the curation of the project (Housing Europe, 2025).

Stakeholders

For the stakeholders, many different groups and cooperatives are involved in this project. more than 400 people, 7 active commissions, 18 projects and 28 organisations support the project of over 5000 square meter (Housing Europe, 2025).

Primary Stakeholders

Resident members of La Borda: The cooperative members are the main actors of this project as they actively participated in design workshops, decision-making processes, and the self-organization of working groups and committees throughout planning, construction, and ongoing management. The core group of residents is a community of 50 people.

Lacol Arquitectura Cooperativa: The architectural cooperative Lacol is responsible for the design of La Borda. They worked closely together with residents through a design process which was participatory. Through this, they integrated social, environmental, and economic objectives (Avilla-Royo et al., 2021).

Institutional Stakeholders

Barcelona City Council: The City Council provided the land through a 75-year lease and offered regulatory support that enabled the cooperative and CLT-based model to be implemented.

Municipal housing agencies: Public housing bodies supported the project through planning assistance and regulatory exemptions, such as the removal of mandatory parking requirements, which helped reduce construction costs and reinforced the project's sustainability goals (Avilla-Royo et al., 2021).

Collectiu: Collectiu guided the creation of La Borda through legal advice.

Economic Stakeholders

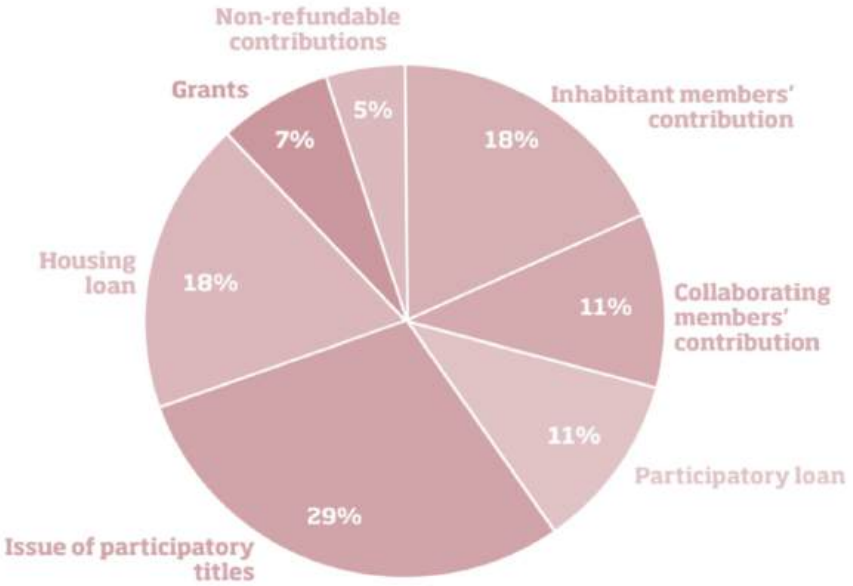
Coop57 and ethical finance networks: Cooperative and ethical finance institutions provided loans and facilitated participatory bonds, allowing the project to be financed outside conventional mortgage systems. This alternative financial structure was essential to maintaining collective ownership and long-term affordability (Brysch et al., 2023).

Technical stakeholders: As the project relied on co-operation of future residents, active research and technical support behind the project was necessary. In order to do this, a team of technical advisors worked closely together in the co-creation process.



Image: "La Borda in Barcelona by Lacol" by Institut Municipal de l'Habitatge i Rehabilitació de Barcelona via https://www.detail.de/de_en/la-borda-in-barcelona-von-lacol?srsltid=AfmBOorp9fN4gFJfqDuswuwtXpspYSSrIn6u-5DxQSEqvy5rdrd3MR3 modified by Alexandra Teubner

Budget



The total cost of La Borda is estimated have cost approximately €2.7–3.1 million. This covers construction and other associated investments (Housing Europe, 2025). Funding was assembled through a mixed financial model which inclused the contributions of the residents members which consisted of upfront fees and shares of the cooperative. Participatory loans were issued to 443 individual and organizational supporters which provided for around a third of the total budget. Besides this, ethical and solidarity based loans were also provided which took care of a small share of the budget. This financial structure enabled the project to remain affordable while avoiding dependence on speculative real estate financing (Housing Europe, 2025; Brysch et al., 2023).

Limitations

Limitations

This model relies heavily on the motivation of residents, cooperative financing, and strong institutional support. This makes it difficult to replicate within a large-scale social housing framework such as the one in Brussels. Even though participation can be a strength, it requires a significant amount of time and long-term engagement from residents. This was feasible for La Borda but might be more complex in a social housing context. Besides this, the regulations and political willingness of the Barcelona City Counficl are closely tied together. In a context with more constraints around its bureaucracy, this example may be too difficult to operate. Due to its complexity in social and bureaucratic organisation, this project wasn't as quick-paced and took several years to accomplish. This does not allign with the need of a quick response to social housing issues. Furthermore, collective decision making and self management is able to lead to conflicts and uneven participation with members. Continuous mediation is central here.

Positive Results

Even though La Borda has quite a few limitations due to its limited replicability, it is a relevant reference for co-construction and its surrounding governance structure on it. It is a highly active community driven project creating a collective urban intervention through the construction of housing. This shows that residents can be actively involved in the design of collective and ground floor spaces for communal needs. Through the creation of communal areas such as kitchens, workshop spaces, multipurpose rooms which are all primarily on the ground floor, a mmix between communal and private living has been created.

Through everyday, collective action by and for the own residents and programs, ground floors are activated. This may not be completely replicable to Brussels but the key principles like the early involvement of residents, collective programming of ground floor spaces and flexible shared areas can be adapted to other contexts such as the Brussels one.

La Borda shows that ground-floor activation does not need large-scale investments but can emerge from co-designed, shared spaces that support everyday social life an approach applicable to existing housing contexts like Peterbos.



Image: “La Borda in Barcelona by Lacol” by Frank Kaltenbach via https://www.detail.de/de_en/la-borda-in-barcelona-von-lacol?srsltid=AfmBOorp9fN4gFjfqDuswuwtXpspYSSrIn6u-5DxQSEqvy5trdrd3MR3 modified by Alexandra Teubner

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Image: “Pioneer Valley Cohousing, Amherst, Massachusetts, from the series “Sweet Earth: Experimental Utopias in America”” by Joel Sternfeld via https://whitney.org/collection/works/27312 modified by Alexandra Teubner

Pioneer Valley Cohousing (currently called Cherry Hill Cohousing) is a cooperative housing area in Massachusetts, the USA. The housing community adopted community-participation with voting, and decisions were based on consensus. Through time, this governance model seemed inconvenient, where for every decision, consensus was needed, and even a small group that disagrees with the idea blocks the application of the decision. In 2012, PVC adopted sociocracy to overcome this issue, and now decisions are made in circles that allow citizens to make decisions in their domain.

Relevance

Even though it's not a social housing project, this benchmark is quite significant in terms of citizen participation and governance model that allows citizen to maintain their public and shared spaces. PVC applies sociocracy as part of its law, and it is one of the best examples that applies sociocracy. This case explains the importance of sociocracy through the experience of a housing community with its citizens. This requires good community participation and perhaps a strong resident base.



Image: "Pioneer Valley Cohousing, Amherst, Massachusetts, from the series "Sweet Earth: Experimental Utopias in America"" by Joel Sternfeld via https://whitney.org/collection/works/27312 modified by Alexandra Teubner

Context

Pioneer Valley Cohousing (PVC) in Amherst, Massachusetts, started using a system called Sociocracy (also called Dynamic Governance) in 2012. Since PVC was set up in 1994, its members have made decisions by consensus, which means everyone has to agree before a decision can be made. For a year, a group of seven PVC members worked on a plan to make the change while learning about dynamic governance (Eckstein, 2016).

The most important building in the community is the Common House. This is where they all meet, eat, and have fun. It is at this location that decisions are made and activities are pursued. In some cases, rest is also taken there. In summary, the space may be considered an additional component of the domestic environment, through which preferences and aversions are expressed (Eckstein, 2016).


Image: "A community garden in PVC" by Cherry Hill Cohousing via https://web.cohousing.com/ modified by Alexandra Teubner

While households have separate incomes and private lives, neighbours work together to organise and oversee common areas and communal events. The most common legal structure is an HOA, condo association, or housing cooperative. Regularly planned shared meals, meetings, and workdays are all part of community activities. For movies, games, celebrations, and other occasions, neighbours get together. Cohousing helps people to form groups and plan activities for older and younger people (Cherry Hill Cohousing, 2024).

Why Leave Consensus Behind?

There are often problems when people are trying to agree on something. There are lots of choices that need to be made, and it can be hard to move forward when everyone is close to agreeing. Sometimes, a few people can stop progress, which can make things go nowhere. Not many people went to the meetings, and it seemed like no one was happy. It took a lot of effort for everyone to agree on what to do, so the community didn't want to review a proposal after a decision had been made. Usually, the people who spoke the most ended up running the discussions, while others were ignored because the process didn't have a way to hear everyone's opinions fairly (Mangrum-Price, 2016).

Shifting to Dynamic Governance/Sociocracy

The transition from the prior governance model exerted a considerable influence on the community. This assertion is substantiated by the collated data from the residents, specifically Bill, Laurie, Amy, Jana, and Jennifer (Mangrum-Price, 2016).

Since switching to dynamic governance, PVC has seen some big changes, but also some smaller ones. Bill has noticed that when we use rounds in meetings, it seems to change the culture a bit, with people who are more reserved feeling like they'll be able to share their views, because it's part of the meeting's format. Laurie has said that it feels unsettling to be held captive by the whole consensus thing, but it also feels secure. Amy and Jana have said that we're getting a lot more done in terms of making choices and having a way to carry them out. The community is relieved that choices can be reviewed and aren't set in stone, as Jana says. This shows that the system can change and adapt to new situations. Some of the key parts of this process include mapping the double connecting circles, how we select people, and how we make sure the minutes are transparent for the community. Even though she wasn't keen on leaders at first, Jennifer thought it was interesting that her new role as general circle organiser came about because the community thought it would be helpful. At first, PVC tried really hard to avoid creating any kind of hierarchy and chose to stack their circular layout (Mangrum-Price, 2016).

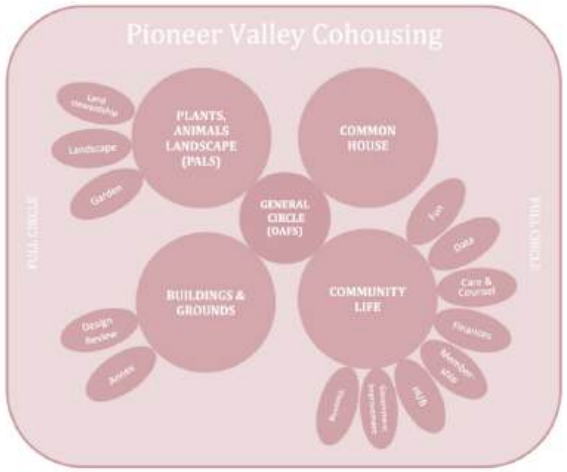


Image: “Sociocracy model of PVC in a circular flower diagram” by Mangrum-Price via https://www.sociocracyforall.org/wp-content/uploads/2019/11/Deborah-new.pdf modified by Alexandra Teubner

In this particular instance, the PVC is comprised of four primary circles, each of which governs itself with a smaller group of members. These four circles are responsible for responding to the main circle, and they function through a feedback mechanism to ensure that no group remains unaware of each other's decisions without impeding the others. The primary focus of these mechanisms pertains to the shared spaces, encompassing both open and closed areas, which are maintained through the collective decision-making process of the residents.

Stakeholders

Primary stakeholders are the residents from the initial construction and the transformation to the sociocracy governance model. In 1994, the construction was made with the collaboration of future residents, local municipalities, and local architects. Changing to the sociocracy was made by the 7 core members in the residents' association. They studied sociocracy for a year, and they taught the community how to go with it and adopted the dynamic governance model. Therefore, the main stakeholders are the residents, and the supporting stakeholders revolve around their decisions(Mangrum-Price, 2016).



Image: "Cohousing" by Okrągłe Miasteczko via https://okraglemiasteczko.net/okragle-miasteczko/cohousing/ modified by Alexandra Teubner

Budget

This project is not exactly a physical renovation, but more of a governance model change for the community, where it already uses community participation. The community already sustains itself with its monthly payments, creating its own budget pool for improvements in the housing area. Since the project was also proposed and applied by the resident groups, this project offers no budgetary limits to exhibit.



Image: "Pioneer Valley Cohousing" by Mary Kraus via https://www.marykrausarchitect.com/projects/pioneer-valley-cohousing/ modified by Alexandra Teubner

Limitations

Positive Results

The housing area under discussion is notable for the manner in which it mobilises its citizens, using a well-coordinated, dynamic governance system. It is a noteworthy example of transformation, having moved from a consensus-based model to a sociocratic model. This change was achieved without the need for budgetary provisions or structural preparation, and with the sole contribution of resident participation.

Limitations

Adopting this governance model quickly requires a base community that is already well-integrated and self-governed. Even in this case, there has been a teaching and adaptation phase. It requires good community participation and coordination, so it might take longer and be more difficult to apply to different kinds of housing communities.



Image: “A cohousing using sociocracy: Pioneer Valley” by Sociocracy for all via https://www.sociocracyforall.org/cohousing-using-sociocracy-pioneer-valley/ modified by Alexandra Teubner

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Bruit du Frigo

Houlette 37
Belgium

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Parc du Peterbos
Belgium

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Quartiere Chiesa Rossa
Italy

|

Kleiburg
Netherlands

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Void Decks
Singapore

|

Pla Buits
Spain

|

La Borda
Spain

|

Pioneer Valley Cohousing
USA

|

Bruit du Frigo
France

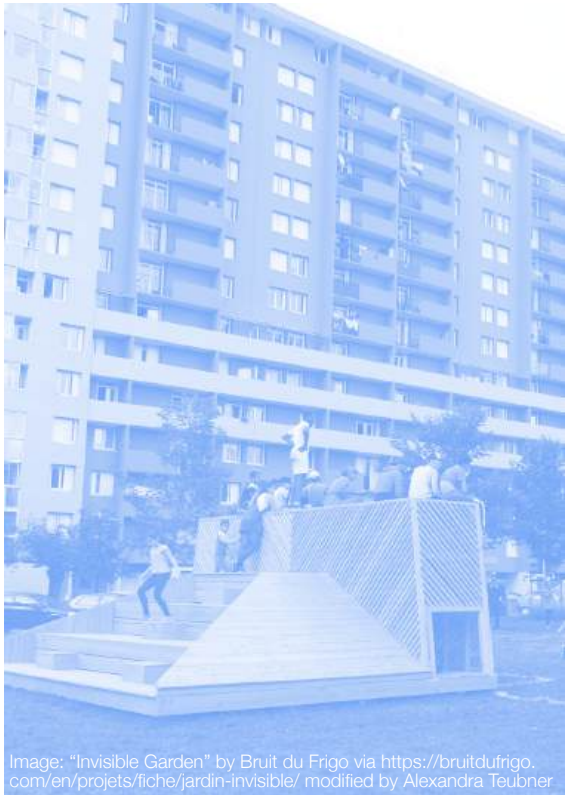


Image: “Invisible Garden” by Bruit du Frigo via https://bruitdufrigo.com/en/projets/fiche/jardin-invisible/ modified by Alexandra Teubner

Founded in 1997, Bruit du Frigo is an urban creation studio that sits at the intersection of architecture, art, and social mediation (Bruit Du Frigo, n.d.). By gathering architects, artists, and builders, the studio develops contextual projects that activate public spaces (Bruit Du Frigo, n.d.). They describe themselves as "explorers of space" and "activators of use (BRUIT DU FRIGO Présentation, n.d.). This is also the reason why they are a great example to illustrate how creative and participatory methods can be used to co-produce outdoor interventions in space. Their way of working closely with residents and including them in the construction of projects, is what is inspiring about their approach.

Relevance

Bruit du Frigo's general approach with challenging traditional built-to-last planning and applying Tactical Urbanism is highly relevant when looking for short-term solutions in the Brussels social housing context. The approach to connect different housing blocks in the "Jardin Invisible" is interesting, because the building structure is quite similar with small apartments and a lack of private outdoor spaces. So creating external living rooms to bring people together is a great approach. The citizen power gained through their participatory approach and the co-construction is exemplary and also makes it cost effective. Not only through saving personnel but also due to the temporary structures that test ideas to avoid wasting budget for future renovations.



Image: "Sketch of Invisible Garden" by Bruit du Frigo via https://bruitdufrigo.com/wp-content/uploads/2019/12/LIVRE_JardinInvisible_%C2%A9Bruitdufrigo.pdf modified by Alexandra Teubner

Context

Bruit du Frigo's work is a manifestation of Cooperative and Situated Urbanism. It challenges traditional "built-to-last" planning by utilizing Tactical Urbanism with short-term, scalable interventions used to catalyse long-term change. Bruit du Frigo's theoretical approach is geared towards the question: Can we imagine an alternative urbanism to traditional "built-to-last" planning? Through methods such as urban foresight, citizen emulation, a focus on daily practices based on an unconventional, playful and poetic approach, they connect them strongly to many types of urbanism. Namely cooperative urbanism, that focuses on the co-production of common spaces in cooperation or situated urbanism that reveals and enhances the poetic and functional potential of place. They focus as much on the process as the results and encourage initiatives of appropriation and self-construction (BRUIT DU FRIGO Présentation, n.d.).

The concrete context description here focuses on the "Jardin Invisible" [Invisible Garden] project, developed between 2017 and 2019 in the Saragosse district of Pau, France. It is a landscape mediation project where the aim is to integrate forgotten public spaces into the living fabric of the city (Olivetti, 2022). Most interesting is the dynamic participatory process that was used to decide what would be best for the space.

The end result was six build temporary installations and a master plan that are creating a linear garden from east to west ('Invisible Garden', n.d.). This was reached in close cooperation with the residents of the neighbourhood ('Invisible Garden', n.d.). People were brought along and were included in decision and created from beginning to end (Bruit du frigo & Agence BASE, 2020).

Bruit du Frigo's first step was to immerse themselves in the everyday life for six days and have many spontaneous encounters with people on the streets and interview actors that know the area well. After this the first collective gathering was initiated where residents and stakeholders came together to discuss what a dream garden would look like, what memories people have in the spaces and to get feedback on the materials collected from the immersion phase. After a technical

assessment where it was decided to build three installations, the first construction phase happened. These installations are prefigurations that use temporary installations to test the future permanent park. They are a living prototype. Bruit du Frigo was on site for ten days and welcomed anyone interested in helping. The goal was to let appropriation of the space happen even before the project is finished. This ended in a celebration to celebrate the shared success (Bruit du frigo & Agence BASE, 2020).

After a yearlong laboratory to observe local practices and listed to feedback they reconnected with inhabitants and went into a second phase of construction. Three new installations were built and wished such as wishes for outdoor fitness equipment were included. This was a great success with even more residents participating than the first time. In the end a workshop was held to inform and show how the feedback and participation was taken seriously and was implemented (Bruit du frigo & Agence BASE, 2020).

If a smaller scale project interests you, “Le Banc Musclé is another fascinating example. In this project Bruit du Frigo built a muscular bench through co-creation with and for young inhabitants of a neighbourhood in the public space (‘Le Banc musclé’, n.d.).

Stakeholders

The stakeholders vary depending on what project Bruit du Frigo is doing but with a general emphasis on getting residents of the concrete neighbourhood involved.

The Primary Stakeholders

In the case of the Invisible Garden, the project was commissioned by the City of Pau as part of a larger urban renewal program (ANRU) (‘Invisible Garden’, n.d.). They therefore are the final decision makers and provide the budget for the project.

Very important for this was to get residents involved, which is why they were included from the beginning (Bruit du frigo & Agence BASE, 2020). Individuals were input givers or even part of the construction team (‘Invisible Garden’, n.d.). Walking workshops were held where residents could experience their neighbourhood and talk to Bruit du Frigo (‘Invisible Garden’, n.d.).

Technical and Economic Stakeholders

Base The technical team of this project, including Bruit du Frigo and SCE was led by the landscape architects Base. They were in charge of administration and were overlooking the project (‘Invisible Garden’, n.d.). Additionally, they created a masterplan that was implemented in Saragosse based on the temporary projects of Bruit du Frigo (Bruit du frigo & Agence BASE, 2020).

Bruit du Frigo was in charge of managing the participatory framework. This meant that they met around 200 residents, throughout the journey of the project. The project team collected their stories, skills, and desires to help design the future park facilities, turning these individual "fictions" and "realities" into a collective history for the neighbourhood (‘Invisible Garden’, n.d.). They also organised and overlooked the constructions (Bruit du frigo & Agence BASE, 2020).

SCE was in charge of the technical studies needed for this project (‘Invisible Garden’, n.d.).

Social and Community Stakeholders

Additionally, they got support from local associations, who opened their doors and shared their expertise and vision of the territory. These partners included social workers, activity leaders, project managers, educators, and directors (Bruit du frigo & Agence BASE, 2020).



Image: “Photo of Participants” by Bruit du Frigo via https://bruitdufrigo.com/wp-content/uploads/2019/12/LIVRE_JardinInvisible_%C2%A9Bruitdufrigo.pdf modified by Alexandra Teubner

Budget

The concrete budget provided for this project or Bruit du Frigo’s work by the city of Pau is not published. But since the Invisible Gardens project was two years long and included work preparing and executing the installations it was probably not so small. Although the fact that residents helped in the construction probably reduced the cost of construction a little bit. The city spent a small part of their budget on the temporary structures to avoid risking the construction of permanent features residents might not support, which makes the up-front investment worth it in the long-term.



Image: “Photo of Temporary Construction” by Bruit du Frigo via https://bruitdufrigo.com/wp-content/uploads/2019/12/LIVRE_JardinInvisible_%C2%A9Bruitdufrigo.pdf modified by Alexandra Teubner

Limitations

Positive Results

Bruit du Frigo's work is an amazing example in regard to participation and co-creation. Even though the scale of the Invisible Garden project is bigger than what is likely possible in the Brussels context, the way to include residents and use temporary installations to impact the neighbourhood connection long-term is exemplary. The building's structure with smaller apartments and no private outdoor space is like many social housing blocks which makes it transferable. The project started with getting to know the neighbourhood and talking to many citizens which is also a step that can be taken fast.

Limitations

Bruit du Frigo's work mainly focuses on outdoor spaces, which brings limitations to an indoor context. They are very flexible in their project outcomes and work very freely without a set idea in mind. Although this is helping them to do the participation at an eye-to-eye level, it might be challenging in a context of more specific set requirements.



Image: "Photo of Temporary Construction" by Bruit du Frigo via https://bruitdufrigo.com/wp-content/uploads/2019/12/LIVRE_JardinInvisible_%C2%A9Bruitdufrigo.pdf modified by Alexandra Teubner

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Conclusion

The Great Repair Brochure I, came into existence through a collaboration between VUB-ULB students of the Master of Urban Studies, and the teams of the Bouwmeester Maître Architecte (BMA) and the Société du Logement de la Région Bruxelloise (SLRB). The goal was to explore social housing in a broader approach of repair, which emphasizes the everyday realities of social housing and works towards a more just societal transformation.

Within the reality of renovation, we looked for how Brussels' social housing estates can be regenerated by taking inspiration from other contexts. Guided by a theoretical framework of repair, care and maintenance, diverse examples were examined ranging from Brussels to Singapore. These national and international cases emphasized different dimensions of good practices across various scales, offering lessons that we can adapt to the specific context of social housing renovation in Brussels.

Each case has a different dimension of "good practice", helping us identify the building blocks for a Brussels-specific model of mixed agency. Our criteria were specific: we sought out low-budget strategies, the activation of ground floors, maintenance of the spaces by a governance among residents and different actors, and models of co-construction. The selection of benchmarks ranged from active social housing renovations in Brussels to non-social housing contexts that focused on small-scale regeneration of common spaces. Central to our evaluation was the role of the residents themselves. We explored how they can be empowered to govern their own environments alongside institutions and maintenance services, rather than remaining passive recipients of top-down management. Our goal was to see what does and doesn't work when activating communal spaces before, during, or after renovation, while exploring new models of caring for these places through governance that respects a compromised budget.

The Search for a Good Case

A "perfect practice" that ticks every box does not yet exist. This reality reinforces the urgency to find and create a strong case ourselves. Nonetheless, the studied benchmarks offer vital building blocks, ranging from structured governance models to experimental, temporary uses of space where tenants were actively involved in co-creation. While many of these examples are not traditional social housing practices, they remain highly relevant because they challenge the status quo. They help us imagine new forms of repair that can inspire the social housing sector in Brussels, offering alternative ways to regenerate common spaces and install a form of shared maintenance that is shared rather than top-down.

Toolbox/Building Blocks

To realize a new form of mixed agency in Brussels, we must move from individual case studies to a hybrid model. The synthesis of these benchmarks reveals a toolbox where resident empowerment and community building are the primary drivers for longer term maintenance.

Building block 1. Social Mediation and Meaningful Resident Involvement

For mixed agencies to succeed, we must bridge technical maintenance with the social reality of the estate. The first building block requires moving beyond merely consulting residents toward true co-management.

Benchmarks: Taking from Houlette 37, we see that resident-led management requires a bridge. Figures like an on-site facilitator are essential in facilitating and translating technical work with resident needs and to ensure that repair is a dialogue with the residents. This is expanded by the Pioneer Valley and Singaporean Residents' Committees, which show how governance structures (like sociocratic circles) allow residents to take the lead in decision-making. These cases teach us that mediation isn't about communication but shifting

power so that residents become central actors in the management of their own environment.

Building block 2. Reactivating the Ground Floor (as important social driver)

The ground floor is the most critical interface between the private home and common estate. It is where maintenance is most visible and where community building can be fostered. The second building block shows the impact of using flexible, low-barrier programming to turn unused spaces into active common hubs.

Benchmarks: The Void Decks of Singapore provide an example in using ground floors for social functions that are easy to access. Quartiere Chiesa Rossa and Pla Buits demonstrate how to do this with a limited budget by using short-term rental contracts. The municipality allows residents to test practices of using and managing the spaces. This reactivation ensures that common spaces are no longer unused and that the community can care for a common purpose space. This is combined with low-barrier community ownership where the lower bureaucratic barriers allow residents to manage common spaces together.

Building block 3. Maintenance and Co-Construction

Physical repair can be a powerful tool for social cohesion if the residents are part of the process, fixing a space becomes then an act of building a community. The third building block is using the act of building and fixing to foster a culture of collective ownership.

The Benchmarks: Bruit du Frigo and Kleiburg show that tactical interventions are both cost-effective and socially impactful. Interventions like “external living rooms” or DIY renovation frameworks put the resident central in the construction of the places. When residents help build or repair their shared spaces, as seen in the grassroots model of La Borda, they are far more likely to maintain them. This turns maintenance from a chore into a form of community care.

Brussels as a Pioneer

The fact that no single benchmark can be perfectly transported to Brussels as a good maintenance practice in social housing proves the need for innovation. The goal is to create a mixed agency that can carry out both improvement works and daily maintenance, involving an alliance between residents and professional services that can create a sustainable long lasting alliance. In this model maintenance is a broader act of community building, creating a sustainable social infrastructure that lasts long after the renovation is done. Brussels is uniquely positioned for this shift because our housing stock is currently undergoing massive physical changes. It has the opportunity to become a pioneer by creating a new model of social infrastructure that is sustainable in its maintenance of the common spaces.

The second phase of this research will move from these insights to a concrete pilot case study. We will take inspiration from these benchmarks to build a prototype of a mixed agency involving both residents and maintenance services of social housing companies. This agency would carry out improvement and maintenance works in shared spaces. While our current focus is on ground floors and shared spaces, the long-term vision is a model where residents eventually gain the agency to work on the apartments themselves. In this way, we explore a first step in The Great Repair, in which we aspire for a social housing sector that is cared for.



Image: "Peterbos_renovation of 165 social housing" by MULTIPLE via https://multiple.be/projects/peterbosrenovation-165-social-housing modified by Alexandra Teubner