5. Delivering SME, Innovation and Partnership-Friendly Procurement

Overview

The social housing sector is called upon to contribute to the fair energy renovation of the EU building stock and achieve the Renovation Wave and Green Deal objectives. This entails adopting new approaches and technologies in a spirit of collaboration with industry. What would otherwise take decades to deliver, with the right technology providers and an entrepreneurial mindset could be accomplished in years – in time to achieve the Green Deal targets. In this sense, social and affordable housing providers and local authorities rely on imaginative entrepreneurs and established companies to deliver innovation that would ensure climate neutrality of buildings while keeping a desired level of affordability.

Public procurement rules are first and foremost a guarantee of cost-efficient use of public money. In the sector, companies usually follow public procurement rules (PP), even when they are not public entities. Most of these innovative projects rely on public funding to a certain extent, which falls under the criteria of the EU Public Procurement rules and thresholds. The PP procedures are often complex and time-consuming.

Although the current rules allow for a variety of options for public contracting entities to ask for innovative solutions, they can also work as barriers to entry for SMEs. Arguably, SMEs hold further promise for the green transition and system disruption than incumbent firms[17]. A scarcity of these young, dexterous innovators may thus reduce the introduction of the sort of radical green innovations which would lay the foundations of the low-carbon building (e.g.).

SMEs, by definition, often do not have sufficient resources to test their technologies and go through the needed standardisation and certification processes to enter a standard-heavy market. Additionally, innovation implies costs related to research, development, production and distribution of products or services throughout the different stages of a firm's life cycle. These costs often require upfront investment that most cannot afford. Last but not least, other non-technical skills (such as in regulatory, administrative) necessary to comply with PP conditions might not be readily available, especially in the smaller companies.

[17] Large incumbent firms are more likely to engage in incremental innovation as they are more reluctant to be engaged in activities that would put in danger their existing profitable market position. Also, rising small competitors increase pressure on incumbent firms to adopt similar innovative, agile approaches in order to keep afloat in the market.

Should a municipality or a SHO want to attract these innovators or even other stakeholders, additional considerations and capacity need to be put in place to address the complexities of the PP process. However, also here, there is a perceived lack of expertise in developing innovation or socially driven PP in contrast with the business-as-usual requirements in building renovation. Providing guidance and capacity building, providing procurement templates and contracting documents, and encouraging project promoters to shift towards PP processes that focus on additional benefits, and not only on the lowest price, could offer opportunities to break the aforementioned limitations, and bring the right organisations to the market.

There are a number of opportunities and solutions to explore. SHOs or local authorities can choose to enter collective (framework) arrangements to provide stability to innovators while ensuring value-for-money; Regional level organisations can provide support to drafting complex SMEs and partnership-friendly PP procedures, or; a financing institution can simplify financing conditions, for example through the preparation of a pre-approved list of service providers. This chapter will explore these or other solutions that can help procurement processes become SME, innovation and partnership-friendly.

In this chapter the following questions will be addressed:

I. What procurement methods are available?
II. How to develop procurement that attracts innovative SMEs?
III. How to find the right partners for innovation in the social and affordable housing sector?
IV. How to promote partnerships for district renovation?
V. How to procure a green building?

Recommendations and Good Practices

I. What procurement methods are available?

The EU's regulatory framework on public procurement can be found in the free movement provisions of the Treaty on the Functioning of the European Union (TFEU) and in a series of directives and regulations among which the main interesting ones for accelerating and scaling up renovation projects are:

The Public Sector Directive regulates the procedures for awarding major contracts of public bodies (government departments, local authorities, etc) for public works contracts, supply contracts and

service contracts. For example, it requires major contracts to be advertised through the EU's Official Journal so that they are publicised to all interested parties and regulates the criteria that can be used for selecting firms to tender and award contracts. The Public Sector Directive states some general principles for the contract award procedures, that are required:

- The principle of equal treatment: "…the equal treatment principle requires that comparable situations must not be treated differently and that different situations must not be treated in the same way, unless such treatment is objectively justified"
- The principle of transparency which require publicity for the bid: involves ensuring that the entire procurement process is open and accessible to all interested parties.
- The principle of non-discrimination: emphasizes the need to treat all economic operators (potential suppliers or contractors) fairly and without unjust discrimination. This principle is fundamental to ensuring an open and competitive procurement process.

The Utilities Directive regulates the procedures for awarding major contracts for bodies in the sectors of water, transport, energy and postal services.

Services of General Interest (SGIs) are services that are considered essential for the well-being and quality of life of citizens. They are typically provided by the public sector or under public control to ensure that everyone has access to basic services. SGIs can include areas like healthcare, education, public transportation, postal services, and social services. The provision of SGIs can vary from country to country, and the European Union (EU) recognizes the importance of SGIs and allows member states to organize and fund them in a way that suits their needs, as long as they comply with EU directives and principles. Services of general interest (SGIs) are a core component of the European economic, social and legal systems and are a supporting pillar of the European social model and of a social market economy.

The De Minimis Rule is a concept related to state aid in the European Union. State aid refers to financial support provided by governments to businesses, which can distort competition within the EU. The De Minimis rule allows member states to provide small amounts of aid to businesses without needing to notify or get approval from the European Commission. There are specific thresholds set for different sectors, and if the aid amount stays below these thresholds, it is considered not to significantly distort competition and is exempt from the usual state aid rules.

The General Block Exemption Regulation (GBER) is a regulation within the EU that sets out specific categories of state aid that are exempt from the normal notification requirements. It simplifies the process for member states to grant state aid for certain purposes without seeking approval from the European Commission. The GBER outlines the conditions and limits under which state aid can

be granted without distorting competition. It covers various sectors, including social infrastructure and housing, and is designed to promote economic development and other policy objectives while maintaining fair competition within the EU.

The Social Infrastructure and Social Housing Providers as Social Economy Entities, it refers to the essential physical and organizational structures and facilities that support the functioning of a society, such as schools, healthcare facilities, and housing. Social housing providers are organizations or entities, often in the public or social economy sector, responsible for providing affordable housing to people in need. Social economy entities are organizations that operate with a primary focus on social or environmental objectives rather than profit. They can include cooperatives, non-profits, and other entities that prioritize social good over financial gain. Social housing providers often fall into this category, as their main goal is to provide affordable housing and support social well-being.

The contracting entity / public buyer will need to familiarize itself with the public procurement rules in its country to ensure that the procurement procedure for construction works is conducted in accordance with national regulations:

- Advertising requirements: contracts must be advertised in an open and transparent manner via a 'call for competition' to ensure equal access to contract opportunities across the EU.
- Technical specifications which must enable equal access to candidates.
- Selection and tender stage: the directives and therefore the national laws give a list of information that the contracting authority can require from the candidates, the instructions that the contracting entity should give to them and describe the process of scoring the different offers from tenderers.
- Noticing and standstill: the contracting entity should follow rules on how to notice unsuccessful candidates and wait a minimum period, called 'standstill', before contractualising with the chosen company.
- Contract award procedures: Several types of procedures exist for competitive bidding. The project leader or promotor should ask a legal advisory or legal department for recommendations on the procedure to choose according to their project and their social and sustainable ambition.

The following table lists the procurement procedures with a brief analysis of barriers and benefits of each one regarding energy renovation tenders.

Table 2. Public contracting procedures and benefits and barriers for energy renovation.

PUBLIC CONTRACTING PROCEDURES	BARRIERS FOR ENERGY RENOVATION	BENEFITS FOR ENERGY RENOVATION
Open procedure: It is a competitive process that allows any interested economic operator to submit a tender in response to a procurement opportunity.	– Risk of Less Specialized Bidders: May attract bidders with varying expertise levels. – Potential for Higher Administrative Burden: Dealing with more bids may increase administrative workload. – Less Negotiation Flexibility: Limited opportunities for negotiation, reducing flexibility.	✓ Increased Competition: Allows a larger pool of bidders, fostering healthy competition. ✓ Simplified Process: Fewer stages streamline the procurement process, potentially shortening the timeline. ✓ Inclusion of Small Businesses: Less restrictive criteria enable small businesses to participate. ✓ Transparency: Open nature enhances transparency in the procurement process.
Restricted procedure: It is a two-stage process that involves a pre-selection stage followed by the submission of tenders.	– Limited Competition: Restricts the number of bidders, reducing competition. – Administrative Burden: Pre-selection involves detailed qualification assessments, creating administrative challenges. – Extended Timeline: More stages may lead to a longer procurement timeline. – Potential Exclusion of Small Businesses: Small businesses may struggle to meet pre-selection criteria.	✓ Quality and Expertise: Ensures qualified bidders, leading to higher quality and expertise. ✓ Tailored Solutions: Allows for focused and customized solutions from shortlisted bidders. ✓ Efficient Evaluation: Focuses on a smaller number of tenders, potentially streamlining the evaluation process. ✓ Risk Mitigation: Identifies financially stable and capable contractors, reducing project risks. ✓ Negotiation Flexibility: Permits negotiation with shortlisted bidders for refined proposals. ✓ Project-Specific Requirements: Ensures bidders have necessary skills for complex, project-specific needs.
Competitive negotiated procedure: The contracting authority engages in negotiations with multiple qualified bidders to achieve the best possible terms and conditions for the contract.	– Complexity: The negotiation process can be complex, potentially extending the project timeline. – Resource Intensive: Requires significant resources, leading to higher administrative costs. – Transparency Challenges: Managing transparency during negotiations may be challenging. – Potential for Unequal Treatment: Risks perceived or actual unequal treatment of bidders if not managed carefully.	✓ Tailored Solutions: Allows for customized and innovative solutions through in-depth negotiations. ✓ Flexibility: Offers flexibility to adjust project specifications based on discussions with bidders. ✓ Quality Assurance: Promotes a focus on quality by exploring technical aspects during negotiations. ✓ Risk Mitigation: Provides an opportunity to collaboratively address and mitigate project risks.
Competitive dialogue: Procurement method that allows any public entity to engage in structured and interactive discussions with potential bidders	– Time-Consuming: May extend project timeline due to the iterative nature of the procedure. – Resource Intensive: Requires significant time, personnel, and financial resources.	✓ Tailored Solutions: Allows customization for specific project needs. ✓ Innovation: Encourages creative and technologically advanced solutions. ✓ Flexibility: Offers adaptability in adjusting project specifications.

before finalizing the contract specifications.	– Complexity: Management complexity requires careful handling for fairness and transparency.	✓ Collaborative Approach: Fosters collaboration for better understanding of project requirements.
Innovation partnership: Designed to foster collaboration between public authorities and businesses, particularly in the development of innovative products, services, or works.	– Time-Intensive: Collaborative development may extend project timelines. – Resource Demands: Requires significant resources from both providers and businesses. – Risk Management: Demands careful consideration for effective risk management.	✓ Stimulates Innovation: Encourages cutting-edge solutions for energy renovation projects. ✓ Collaborative Approach: Promotes collaboration between public authorities and businesses. ✓ Adaptive Development: Allows flexibility for iterative improvements in the development process. ✓ Customized Solutions: Results in tailored solutions for social housing energy renovations.
Design contest: Is a procurement method focused on selecting the best design proposal for a particular project.	– Resource Demands: Requires significant resources from participants and social housing providers. – Implementation Uncertainty: Winning designs may not guarantee immediate implementation, leading to uncertainty. – Subjectivity in Evaluation: The evaluation process involves subjective judgments. – Time Considerations: May extend the project timeline, potentially delaying the start of renovations.	✓ Innovative Solutions: Promotes creative and innovative solutions for energy renovation projects. ✓ Diverse Participation: Attracts diverse designers, fostering competition and diverse perspectives. ✓ Cost-Efficiency: Offers a cost-effective way to acquire high-quality design ideas without committing to a full project. ✓ Community Engagement: Engages the community and raises awareness of energy renovation projects.
Green Public Procurement: Is a strategic approach to public procurement that integrates environmental considerations into the purchasing process. The goal is to reduce the environmental impact of public sector activities by promoting the adoption of goods, services, and works that have a lower impact on the environment throughout their life cycle.	✓ Upfront Costs: Higher initial costs of green technologies may be a financial barrier. ✓ Limited Supplier Awareness: Suppliers may lack awareness or experience with green technologies. ✓ Perceived Complexity: Perceived administrative complexity may hinder adoption. ✓ Lack of Expertise: Limited expertise in evaluating and selecting green solutions may pose challenges. ✓ Regulatory Compliance: Ensuring compliance with environmental standards may require additional effort. ✓ Market Availability: Limited availability of green products may constrain options for social housing providers.	– Sustainability Impact: Aligns energy renovation projects with broader sustainability goals. – Market Development: Encourages the growth of a market for sustainable technologies and practices. – Resource Efficiency: Promotes the use of environmentally friendly technologies, leading to reduced resource consumption. – Innovation Promotion: Drives innovation in energy-efficient technologies for social housing. – Cost Savings Over Time: Long-term benefits include energy savings and reduced environmental impact, potentially leading to cost savings.
Socially Responsible Public Procurement (SRPP):	Upfront Costs: Additional costs may impact project budgets.	Positive Social Impact: Aligns projects with broader social objectives, contributing to community well-being.

The goal is to use procurement as a tool to achieve social objectives and contribute to the well-being of society. This approach goes beyond traditional procurement practices, considering not only economic factors but also social and ethical aspects.	Limited Supplier Awareness: Suppliers may lack awareness of socially responsible practices. Perceived Complexity: Implementation may be perceived as administratively complex. Lack of Expertise: Providers may lack expertise in evaluating suppliers based on social responsibility. Legal Frameworks: Complex or absent legal frameworks may pose challenges. Balancing Priorities: Balancing social responsibility with other priorities requires careful consideration.	Ethical Supplier Practices: Encourages ethical supplier selection for fair wages and safe working conditions. Inclusivity and Diversity: Promotes inclusivity through engagement with diverse suppliers. Environmental Considerations: Aligns with responsible procurement, potentially including environmental aspects. Transparency and Accountability: Emphasizes transparent and accountable procurement processes. Long-Term Value Creation: Recognizes the contribution of socially responsible practices to long-term value.

Source: GNE Finance Own elaboration.

Public procurement is a constrained process but once the process has been systematised and the sustainability and social criteria have been introduced into a public procurement process, it is easy to replicate it for other projects in a quick and agile way, which is why it is important for all administrations to understand the process.

Public Procurement usually aims to optimize costs, quality, and efficiency while ensuring compliance with applicable laws and regulations. However, a district renovation that prioritises a more strategic approach to sourcing and acquiring goods, services, and works that prioritize sustainability, social responsibility, and community well-being, should include other criteria. This was demonstrated by ÖrebroBostäder (a housing provider from Sweden – see box below) where they included in the procurement elements the obligation to involve the residents in the construction work themselves. Stemming from that example, there are a number of criteria that can be considered in bidding process assessments:

- Energy efficiency and green materials: prioritize sourcing energy-efficient building materials, renewable energy solutions, and technologies that minimize the environmental impact of the renovation.
- Waste management and recycling: emphasize sourcing materials that are recyclable and encourage waste reduction and efficient waste management during the renovation process.
- Low carbon footprint: consider materials and processes that contribute to reducing the overall carbon footprint of the renovation, such as locally sourced materials to minimize transportation emissions.
- Engagement with local businesses and SMEs: collaborate with local businesses, small and medium-sized enterprises (SMEs), and startups to promote economic growth within the community and foster local entrepreneurship.

– Engagement with residents.

EXAMPLE

Northerm Europe

Örebro - Sweden

Vivalla

ÖrebroBostäder, a public housing provider in Sweden, is a showcase for an innovative procurement practice in renovation of the Vivalla district. They prioritized social impact by including jobless locals as trainees in the renovation of their own neighbourhood – Vivalla. Supported by the Swedish Ministry of Employment, a unique bid specification allowed for the traineeship programme and work on community engagement, by the contractors Skanska and White Arkitekter. This collaborative approach demonstrates how carefully drafted and inventive procurement clauses can drive inclusive development, empower communities, and transform public housing projects.

II. How to develop procurement that attracts innovative SMEs?

Under EU principles innovation procurement processes should be advertised and open to all economic operators, irrespective of financial thresholds. Notwithstanding, specific provisions have been included in recent public procurement legislation (2014) to adapt procedures not only to large companies but also to smaller innovative suppliers. In this regard, the European Commission published a useful guide that offers practical advice on innovation public procurement. Some of the advice is included in the following table.

Table 7. Ideas to bring innovative SMEs to public procurement bids.

OPTION	EXPLANATION	WORDS OF CAUTION
1: Engage with innovative companies	Contact directly potential innovative SMEs. Communication could an email to pre-identified companies, networking or handing out information at events. The communication may be minimalistic and low-effort (e.g. sending a web link to a procurement notice to some companies or industry	To avoid discriminatory or unequal treatment, public buyers are subject to restrictions on the means through which they share information with suppliers. To ensure open and effective competition, make sure no potential supplier is granted exclusive or preferential access to

	associations) or elaborate (e.g. a presentation of the procurement documents at a trade fair, webinar or social media campaign)	documents or information. A good practice is to document any oral communication with business.
2: Adjust the selection criteria	Economic operators are often required to provide a list of works carried out in the past. This requirement poses a challenge for start-ups, which have just been established and have not yet had time to build references. Public buyers have the option to request other evidence from economic operators as a means of proof, for example: - educational and professional qualifications; - an indication of the supply chain management and tracking systems that the economic operator will use when performing the contract.	To attract start-ups to compete for the contract you can consider a mix of means that do not require a bidder to have been in business for many years, but still ensure the start-up has the capacity to deliver. It is good practice to develop a sound risk management plan with the start-up to consider any contingency that would hinder the contract.
3: Use lots	Under the new EU rules, public buyers can consider lots in all public contracts. The size of each lot can be commensurate with the operational capacities of start-ups and innovative SMEs.	Beware to ensure interoperability and/or open standards requirements to interconnect the different services or products that vendors provide in the different lots. Consider also that additional lots will require an added administrative burden to manage the procurement process.
4: Consider SME-friendly payment schemes	Advance payments are a decisive factor in enabling SME participation. In the case the SME is a subcontractor, the public buyer can include short payment period towards subcontractors as a clause in the contract or a criterium in the financial capacity assessment.	
5: Mobilise innovation brokers	An innovation broker can be any institution with the capacity and purpose to match nascent innovation with a need on the demand side. It can be actively engaged in funnelling ideas from potential suppliers of innovation to networks of potential public buyers of innovation, be it housing providers or municipalities. Innovation brokers can facilitate the preparation of innovative ideas for specific public procurement procedures. Their tasks may include: – Advising public buyers on how to define their needs. – Organising public buyers interested in innovation procurement into networks to share knowledge, exchange good practice and communicate to the market. – Identifying promising innovative solutions.	Public buyers remain responsible that the whole procedure – engaging with the market before the procurement and executing the procurement itself – is open, transparent and non-discriminatory.

Source: Adapted from European Commission (2021). Commission Notice: Guidance on Innovation Procurement.

EXAMPLE

Western Europe

Paris - France

Caserne de Reuilly

The Caserne de Reuilly stands as a testament to the transformative potential of integrating circularity obligations into the earliest stages of procurement procedures. This pioneering project, initiated in 2013, not only revolutionized the landscape of affordable housing in Paris but also set a precedent for sustainable urban development practices nationwide. One of the key outcomes of this approach was the stimulation of innovation within small and medium-sized enterprises (SMEs) operating in the construction sector. Faced with the imperative to meet circularity obligations, these enterprises were compelled to explore novel technologies, processes, and business models that prioritized resource efficiency and environmental stewardship.

III. How to find the right partners for innovation in the social and affordable housing sector?

Creating partnerships in the social and affordable housing sector involves addressing the unique characteristics of the sector. But finding the right partners is a challenging process, which cannot be curtailed as it requires a deep understanding of the market players. Finding organisations that share your goals (or are comfortable in the social and affordable housing sector) is key to achieving social value.

What is an industrial partnership?

Industrial partnerships are formed and led by businesses to boost their innovation and competitiveness. The terms of the partnership generally involve looking at the main challenges and opportunities and wider business needs, such as skills shortages, regulatory gaps, etc. These issues are addressed collectively, by engaging in collaboration on projects, initiatives, or ventures that leverage the strengths, resources, and expertise of each business partner.

The following step-by-step process can help you navigate this process:

1. Draw the vision and mission your organisation, including wider ones such as community development and social responsibility.
2. Attend industry events, conferences and networking functions to meet potential partners. You can also research organisations, especially companies, with a track record in affordable housing or social responsibility.
3. Establish relationships with key stakeholders in the sector. In the private sector SMEs or sector representatives (business associations) are the best positioned to help you navigate the sector complexities but also provide specific recommendations on valuable partners.
4. Create a foundation of trust and open communication. Emphasize dialogue based on the social impact, including increased access to affordable housing or community development.
5. Understand the needs, strengths, and resources of each organisation.
6. Integrate sustainable construction practices and energy-efficient designs to align with both social and environmental goals.
7. Identify areas of collaboration. Consider EU co-funded projects to start with, for example:
    a. To share best practices, resources, and lessons learned to test new approaches or enhance effectiveness of the organisations on delivering social impact.
    b. Build capacity together by exploring training and capacity-building opportunities for the staff in the partnership.

c. Develop together new products or services with research and innovation organisations to meet the needs of the community and comply with more demanding regulations.

8. Define key performance indicators (KPIs) to measure the success of the partnership.
9. Regularly evaluate and adjust strategies based on performance metrics
10. Showcase successful collaborations through public relations efforts.
11. Learn and adapt the partnership based on the results or changing circumstances.

EXAMPLE

Western Europe

Brussels - Belgium

The Living Labs Brussels Retrofit

"The Living Labs Brussels Retrofit" was an industry-led project where a close collaboration between companies and universities was promoted to develop and test innovative approaches to respond to the challenges of energy renovation of the Brussels housing stock. The partnership provided spaces for experimentation and innovation, supported SMEs in the acquisition of know-how and improved cooperation with the construction industry, with the aim of ensuring large-scale uptake of affordable retrofitting practices. A number of innovative products were developed within this collaborative framework, for example, "Modul'Air", a social housing company developed prefabricating façades with integrated insulation and ventilation to accelerate retrofitting of its apartments with minimal impact on residents. "Prio Climat" involved testing the comfort levels of several hybrid indoor ventilation systems within social housing.

IV. How to promote partnerships for district renovation?

While a number of solutions exist, open innovation methodologies and owner-based communities hold considerable innovation potential.

Open Innovation

Open innovation approaches promote SMEs' participation in industrial partnerships. The adoption of the open innovation approach in SMEs builds upon principles of integrated collaboration, co-created

shared value, and cultivating innovation ecosystems that go beyond industrial partnerships, including all stakeholders in the quadruple helix innovation process: the private sector, public authorities, and universities, as well as civil society. Living labs are user-centred initiatives where the quadruple helix stakeholders (industry, academia, public authorities and civil society) come together, both in physical and virtual forms, to think, create, and discuss, with the main goal of developing innovative solutions in real-life environments, related to new technologies, services, products, and systems. Living labs in European practices have been appointed as great solutions for SMEs to identify local needs, bring together different actors, and test the market readiness of their products and service.

CHALLENGES IN IMPLEMENTING SOCIAL HOUSING RENOVATION LIVING LABS FOR SMEs

To enhance the effectiveness of living labs as an innovation tool and collaboration enhancement for social and affordable housing renovation projects, it is essential to be aware of the main challenges for SMEs that may arise at the implementation stage:

- Companies are usually sceptical about the benefits arising from user integration. The intrinsic user involvement in Living Labs can be compromised by difficulties in engaging with end-users. Additionally, the Living Lab's open innovation focus can hinder companies from joining due to intellectual property (patent) related issues.

- The Living Lab implementation requires considerable time and effort. This creates extra management activities and potentially introduces difficulties in the process. The lack of public policies for financial support is a common constraint observed across Living Labs.

Energy Communities

Energy communities[18] can help pave the way for a shared energy transition among housing owners while empowering citizens to take an active role in electricity production and consumption. Energy communities can adopt various legal forms, such as associations, cooperatives, corporations, nonprofit organizations, or small to medium-sized enterprises. They enable citizens, along with other market actors, to collaborate and invest collectively in energy assets. These communities can encompass diverse social profiles, making them a suitable space for vulnerable individuals with limited resources, supported by the collective effort and working from the grassroots to alleviate energy poverty.[19]

[18] https://energy.ec.europa.eu/topics/markets-and-consumers/energy-communities_en

[19] Energy Communities have been introduced in the chapter "1.3. Promoting Co-ownership of Dwellings and Utilities".

EXAMPLE

Southern Europe

Viladecans - Spain

Vilawatt Project

VILAWATT, a project in Viladecans, Catalonia, epitomizes collaborative governance and energy transition through the Quadruple Helix model and the creation of energy communities. The project set up a public-private-citizen partnership (PPCP), as the main governance structure to manage 4 key services: 100% renewable energy supply; fast renovation of private buildings; consulting services and learning communities (energy audits & contract optimisation, training and empowerment in energy culture, financing options); and efficiency incentives via the Vilawatt local currency. The project shows the potential of urban authorities to test high risk experimental ideas. Viladecans City Council was transformed into a lab where governance and energy models and services are tested and lessons learnt

V. How to procure a net-zero or nearly zero energy building?

Procuring a nearly zero energy building (NZEB) involves incorporating sustainable practices and environmentally friendly features in the design, construction, and operation of a building, and being able to involve the occupants in that process. These practices can include energy-efficient design (maximizing natural light, energy-efficient windows, or incorporating proper insulation), water conservation (such as low-flow fixtures, rainwater harvesting systems, and landscaping with native plants that require less water), choosing environmentally friendly materials (recycled materials or nature-based like wood), waste management, or choosing materials that have a beneficial effect on air quality.

These intentions can be explicit from the outset in the technical specifications and design phases, translated into procurement criteria and targets. Bear in mind the building will only be NZEB to the extent the specifications in the tender documentation detail so. This can be a complex process, which requires collaboration along the entire project timeline. An innovation broker, already mentioned,

could be beneficial to ensure the process has intended results. Working with the designers, architects and contractors that have specialised in green practices is recommended.

In the social and affordable housing sector, building the business case is key. The environmental advantages of constructing a NZEB building must be accompanied by a thorough financial analysis[20], comparing the costs and benefits of a NZEB building versus a conventional one. Include upfront costs, operational savings, and the return on investment (ROI). These should go hand-in-hand as potential tax incentives or grants mostly depend on the environmental impact – reduction in energy consumption and carbon emissions. Most of the times, these incentives / grants make all the difference between a self-sustainable project and a running a loss.

The following scheme shows a series of recommended actions that can be taken along the procurement (and the operation) phase to ensure that the building delivers on green intentions.

[20] See chapter 5.2.

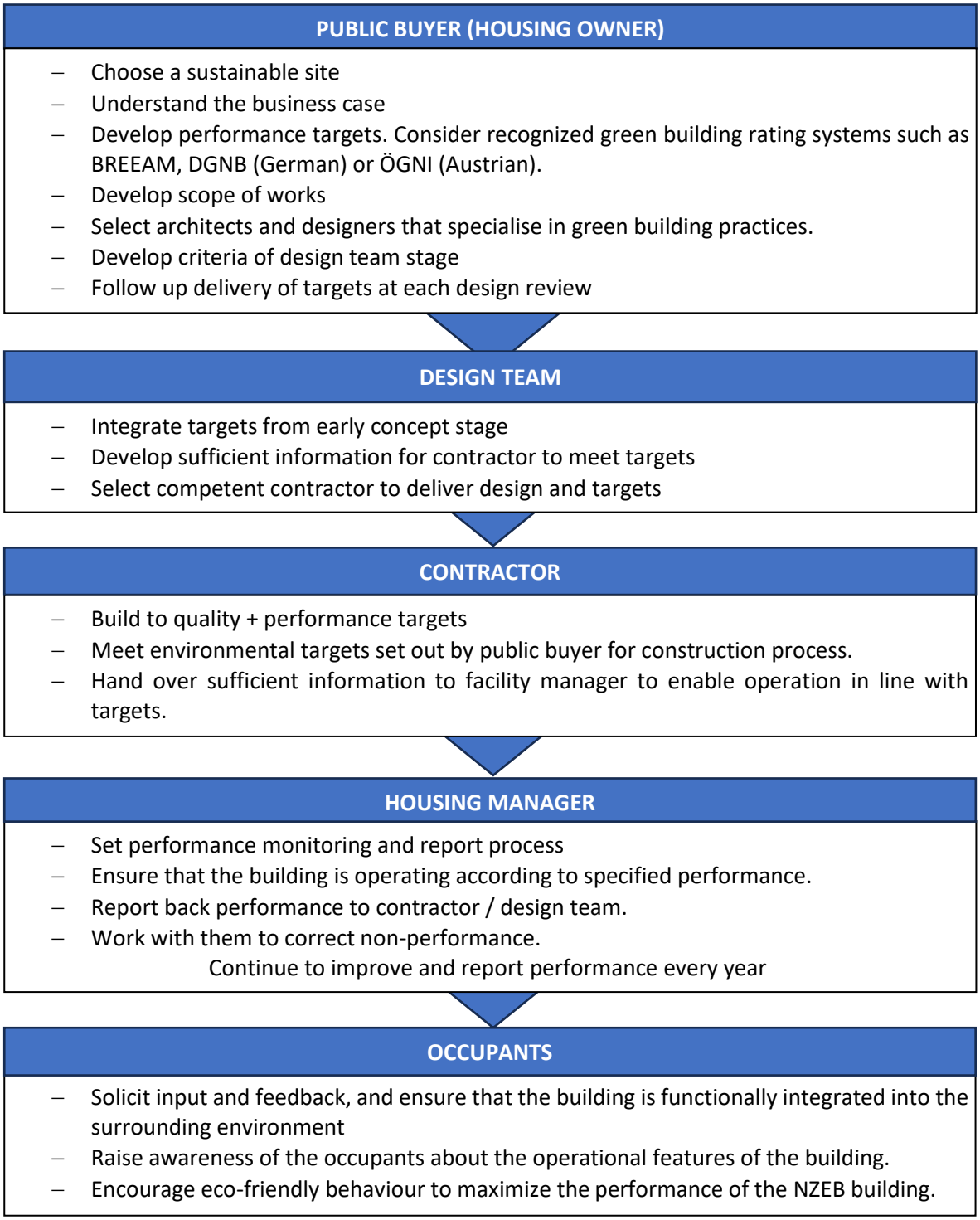

Figure 13. Players and process in procuring a NZEB building.

Source: adapted from IGBC (2023). "Implementation of Circularity, Whole Life Carbon and Life Cycle Costing In Public Construction Projects".

EXAMPLE

Western Europe

Hoeselt - Belgium

Sociale Energie Sprong

Sociale Energie Sprong is a pioneering example of NZEB building design, focusing on sustainability and energy efficiency. It emphasizes green electricity for heating, integrates solar panels, and offers energy storage options for optimized management. Innovative technologies ensure zero-emission operation, while water recovery systems conserve resources. Insulating building envelopes and intelligent energy monitoring further enhance efficiency. Stakeholder engagement ensures tenant involvement and acceptance. Overall, Sociale Energie Sprong sets a high standard for sustainable building practices, prioritizing environmental preservation and community well-being.

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