

# Advancing Social Innovation for a Carbon–Neutral Future: A Portfolio-Based Approach for the New European Bauhaus



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**Abstract** This chapter explores the New European Bauhaus (NEB) EU research programme as a relevant instrument for advancing the European Green Deal by fostering tangible and on-the-ground improvements in people’s quality of life, mixing social innovation with more traditional innovation fields and approaches. The NEB programme, launched by the European Commission in 2020, brings forward a set of initiatives by integrating sustainability, inclusivity, and aesthetics. By leveraging partnerships across public, private, and civil society sectors, the NEB promotes small-scale, adaptable initiatives that collectively contribute to climate neutrality. The urgency of building a carbon–neutral future is framed as a complex problem that addresses technological, environmental, and social responsibility, given its impact on different sectors such as healthcare, education, mobility, housing, and overall well-being. Social innovations are positioned as essential to tackle the challenges bound to these interconnected sectors. However, exploiting social innovation to achieve systemic change requires dismantling existing barriers between sectors, governance levels, and cultural structures, and reframing the traditional “scaling” mechanisms in a broader perspective that combines bottom-up and top-down approaches. The chapter outlines how the NEB programme relates to social innovation for climate neutrality. Secondly, it emphasises the importance of adopting mission-oriented and portfolio-based approaches in EU-funded research schemes to ensure sustainable transitions. The chapter concludes with an analysis of the progress made by the NEB and the challenges that remain to include social innovation among the fundamental means to meet the grand societal goals of the European Green Deal and EU Missions.

**Keywords** EU Green Deal · EU Missions · Impact monitoring assessment and learning · Scaling mechanisms · NEB values and principles

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# 1 Introduction

The urgent need to build a carbon-neutral future is crucial, as it directly impacts the quality of life of urban populations, impacting a variety of interconnected factors, such as health, education, mobility, housing, employment and overall well-being. The pursuit of sustainability is not only an environmental objective but also a social responsibility. The climate crisis disproportionately affects vulnerable populations, worsening inequalities and threatening access to basic resources like food, clean water, and healthcare. Since these aspects are linked to broader societal systems, improving them requires collective action rather than individual efforts. Therefore, tackling the complexities of the quality of life necessitates more than fragmented solutions; it calls for implementing social innovation initiatives that can bring about systemic transformation.

Social innovations, as defined in Chap. 1, are novel social practices, that comprise new ideas, products, services, governance models, rules and social relations. According to Franz et al. (2012), social innovations stand distinct from other forms of innovation as they necessitate not only operational or technological support, but also require profound shifts in individual and organisational behaviours, norms, culture, beliefs and values. Over recent decades, numerous activists, networks, private companies, research institutes, NGOs and local governments worldwide have been actively involved into diverse social innovation initiatives tailored to specific contexts, often operating at the local scale. These initiatives confront persistent issues within current economic systems while striving to establish concrete alternative solutions that could impact existing development structures. Although recognised as crucial for climate neutrality, the process to scale up, out and deep (Moore et al. 2015) social innovation initiatives is accompanied by several difficulties as described in Chap. 5. The very idea that social innovation can create impact only by leveraging scaling mechanisms should be reconsidered, starting from a better understanding of the social innovation process based on the analysis of real-life cases (Rizzo et al. 2020; Healy et al. 2024). To have impact on grand societal challenges social innovation projects do not only require activism from specific networks, partnership development, institutional and governmental support, but also to dismantling existing barriers between sectors, departments, governance levels, power dynamics and inner cultural structures (Hölscher et al. 2018). Addressing such complexity requires a deep understanding of how socio-technical and socio-technological systems function and co-evolve towards unknown statuses (De Roo 2018) and the capacity to navigate transitions towards sustainability and climate neutrality. The adoption of mission-oriented (Mazzucato 2018a; b) and systemic approaches has been highlighted as crucial to address transitions towards sustainability (Geels 2002). Such approaches share the need for audacious long-term goals and for a portfolio-based approach (Mazzucato et al. 2024) that spans across different levels of governance and practice. The scale of the problems to be tackled calls for systematic initiatives, and the portfolio-based approach of funding schemes is emerging as a potential response since it involves a diverse set of coordinated actions across sectors,

where public, private, and civil society actors work together to foster innovation and experimentation (UNDP 2022). Instead of focusing on a large-scale approach with fixed actions to achieve outcomes, portfolios advocate for a complementary array of smaller, adaptable initiatives allowing flexibility in response to complex challenges. Aligned with this strategy, Mazzucato (2018a; b) emphasises the importance of adopting “mission-oriented” policies, where governments set clear goals (missions), while fostering a diverse range of experiments and innovations to flourish under that mission’s umbrella. The purpose behind adopting such an approach is to allow for the necessary flexibility for a successful portfolio to combine risk-taking and long-term vision, experimentation and stability, learning from failures as much as from successes, aligning decarbonization and economic growth with social and environmental outcomes. The concept, coming directly from the recognition of the difficulty of measuring the impacts of small-scale initiatives such as social innovation projects, is particularly relevant when related to grand societal challenges such as building a carbon-neutral future, where a variety of solutions must co-evolve towards common results.

The New European Bauhaus (NEB) EU research funding programme builds on these foundations to advance the implementation of the European Green Deal on the ground, while supporting the EU Missions and positively impacting people’s everyday lives. Launched by the European Commission in 2020, the programme aims to merge three key values—sustainability, inclusion, and aesthetics—to drive the Green Deal forward ([https://new-european-bauhaus.europa.eu/index\\_en](https://new-european-bauhaus.europa.eu/index_en)). It sustains a set of actions aligned with the EU Missions, from research to more practical and community-building initiatives, with the aim of integrating its key values into innovative solutions across various sectors that address climate, societal, and economic challenges.

The following Section presents the NEB as a program established to translate the European Green Deal into concrete changes in living environments that enhance the quality of the physical spaces, services, interactions, and experiences, positively impacting on people’s daily lives. Social innovation projects and initiatives are framed as a fundamental component of the NEB, bringing a strong focus on collective actions on the ground that place social aspects at the center. The set of actions carried out by the NEB in its initial phase is described. The chapter concludes with a discussion of the progress of the NEB and the remaining challenges related to how the newly established NEB Facility can better leverage on social innovation for climate neutrality.

## 2 The New European Bauhaus: Tangible Transformations to Improve Everyday Lives

The New European Bauhaus programme was launched in September 2020 and formally established in 2021 to translate the European Green Deal into tangible improvements and concrete changes that enhance our everyday life in neighbourhoods, transforming living environments into sustainable, inclusive and beautiful places. The NEB addresses global challenges by focusing on local projects that offer a platform for experimentation while being a bridge between the worlds of science, technology, art and culture, and promotes a holistic approach to urban transformation, and promotes carbon-neutral lifestyles. These experiments focus on enhancing the quality and accessibility of spaces, restoring a sense of belonging, promoting life cycle thinking and circularity within industrial ecosystems, and reconnecting cities and people with nature through a multi-species, inclusive approach.

Taking inspiration from the Bauhaus experience, which lasted from 1919 to 1933 as a movement that had a profound influence on the future of architecture, design and the arts, the NEB aims to create a new movement to facilitate and steer the transformation of our living environments and societies according to three interconnected values: aesthetics (beautiful), sustainability (sustainable) and inclusion (together). *Beautiful* fosters creativity and social inclusion, emphasising collective experiences and values shaped by interactions between people and environments, including more-than-human perspectives and going beyond the functionality of places (von der Leyen 2020; Porta et al. 2016). *Sustainable* promotes minimizing environmental impact and regenerative design, which closes resource loops and fosters circular system through behavioural changes, education and participation (Gibbons 2020). *Together* emphasises the importance of collective action and cross-sector collaboration to design sustainable and inclusive environments, promoting social innovation and shared ownership of solutions by incorporating diverse perspectives of several groups (Rizzo et al. 2020; Giaccardi 2013). These values are operationalized through three guiding principles, which are shared with the EU Missions: participatory processes, multi-level engagement, and a transdisciplinary approach. *Participatory processes* and *transdisciplinary approaches* involve co-creation, empowering stakeholders to drive transformation through collective action and public sector reform (Voorberg et al. 2015; Puerari et al. 2017), where different actors contribute with their knowledge, capacities, and skills. *Multi-level engagement*, a key component of European policy, encourages collaboration across government and sector levels, fostering both horizontal and vertical cooperation between supranational, national, and sub-national levels, promoting partnerships and coordination (Hooghe and Marks 2001; Piattoni 2010). These principles guide the implementation of transformative NEB projects, aiming to foster inclusive and sustainable urban development (European Commission 2023). The following Section explores how the NEB programme has been implemented in its initial phase through different actions aimed at experimenting with the application of the aforementioned values and principles to improve the everyday lives of EU citizens while pursuing the key objectives of the Green Deal.

### 3 A Set of Initiatives Supporting the Implementation of the EU Green Deal and Missions

Throughout its implementation, the NEB programme has mobilized funds to support and promote innovative, transdisciplinary projects that embody its values and principles, contributing to the Green Deal through tangible demonstrators ([https://europa.eu/rapid/press-release\\_IP-21-111\\_en.htm](https://europa.eu/rapid/press-release_IP-21-111_en.htm)). The NEB was born directly from the political will of the Commission, when the future research and innovation programme was already set and thus had the need to find room within it and to connect research to more implementable initiatives with the aim of creating good practices and examples that could be followed. Therefore, the NEB has been advanced through the implementation of several projects under various EU funding calls that adopted a “marking and flagging approach”. This approach entails identifying and labeling calls for proposals or projects across different EU programmes to ensure alignment with the core principles of the NEB, with Horizon Europe (HE) and the European Regional Development Fund (ERDF) serving as its main pillars (<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/work-programmes>). In 2021 and 2022, over €100 million in dedicated calls were allocated to support the NEB ([https://new-european-bauhaus.europa.eu/index\\_en](https://new-european-bauhaus.europa.eu/index_en)). Under Horizon Europe, the NEB promotes green, fair urban development and affordable housing, integrating with EU Cohesion Funds (2021–2027) and regional Partnership Agreements. A second generation of projects under the European Urban Initiative builds on the first wave efforts to enhance local authorities’ transformation capacities. The NEB also fosters innovation in products, services and digital solutions, supporting small businesses through initiatives like the Worth Partnership Project II and the EIT Community NEB Booster, while cultural initiatives, such as the Culture Moves Europe and the European Year of Youth in 2022, embed NEB principles across Europe. Moreover, the NEB initiative has served as a connector, enhancing existing funding mechanisms and policy programmes ([https://new-european-bauhaus.europa.eu/about/progress-report\\_en](https://new-european-bauhaus.europa.eu/about/progress-report_en)), inspiring several local, regional and national actors to create their own initiatives. Most of these initiatives are reported in the NEB dashboard (<https://web.jrc.ec.europa.eu/dashboard/NEB/>), an evolving map of the NEB community. In this perspective, the reference to the original Bauhaus as a movement that was able to influence the future development of architecture and the arts, is intentional. The NEB’s use of “lighthouse projects”<sup>1</sup> to spearhead its efforts aligns with this vision.

Despite a wide range of initiatives, the “marking and flagging approach” described above risked being inadequate to sustain the NEB’s ambitious goals. In response, the European Commission in 2024 officially established the NEB Facility in 2024 (<https://ec.europa.eu/newsroom/neb/items/837583/en>). This cross-cutting, multi-year (2025–2027) initiative aims to integrate various funding instruments across the Commission. This programme provides a unique framework to revitalise European neighbourhoods by weaving Green Deal objectives with considerations

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<sup>1</sup> CULTUURCAMPUS, NEB-STAR, NEBourhoods, DESIRE, EHHUR and Bauhaus of the Seas Sails.

of sustainability, inclusion and aesthetics. The NEB Facility comprises two main components—Research & Innovation (R&I) in Horizon Europe and Roll-out ([https://new-european-bauhaus.europa.eu/new-european-bauhaus-facility\\_en](https://new-european-bauhaus.europa.eu/new-european-bauhaus-facility_en)). The R&I component focuses on researching, developing and testing innovative solutions to transform neighbourhoods through the NEB values. Supported by Horizon Europe, it is estimated to receive €120 million per year. The Roll-Out is dedicated to scaling, deploying and implementing the innovative solutions and business models developed under the R&I component. Its objectives include the delivery of NEB-inspired transformations by combining EU, public and private funding ([https://new-european-bauhaus.europa.eu/get-inspired/selection-your-contributions/com-mission-launches-consultations-2025-27-priorities-new-european-bauhaus-facility-2024-06-20\\_en](https://new-european-bauhaus.europa.eu/get-inspired/selection-your-contributions/com-mission-launches-consultations-2025-27-priorities-new-european-bauhaus-facility-2024-06-20_en)). The Roll-out component builds on existing collaborations and develops new ones by harnessing common policy objectives between the NEB Facility and other relevant EU funds. This effort builds upon the work accomplished so far whereby the NEB has already mobilised eight EU programmes other than Horizon Europe.<sup>2</sup> Through its integrated approach, the NEB Facility aims to become more systemic and systematic than what the initial “marking and flagging” approach allowed for. It presents a well-structured general framework of components while allowing for adjustments and the inclusion of diverse initiatives. However, to ensure it achieves a meaningful impact on people’s quality of life and a climate-neutral future, a few points of attention remain, which are addressed in the next Section.

#### **4 The New European Bauhaus Supporting Social Innovation for Climate Neutrality: Progresses and Remaining Challenges**

One of the key challenges for the NEB Facility is to be able to achieve its expected impacts while preserving an experimental approach and the capacity to build on the diversity of cultural backgrounds and institutional settings that can be found across Europe. In this perspective, the adoption of a portfolio-based approach emerges as a fundamental tool to develop diverse strategies to address transversal societal challenges in a variety of contextual conditions. Until now the ability to implement a portfolio-based approach has been limited due to the necessity of integrating NEB topics and calls into numerous existing programmes due to timing issues. This has resulted in a dilution of focus of the calls dedicated to the NEB, where resources and attention are spread too thinly across multiple areas, producing outcomes that risk being minimal. A portfolio-based approach would allow for a more cohesive and strategic allocation of resources, ensuring that each project receives the necessary attention and investment to maximise its potential. By focusing on a curated selection

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<sup>2</sup> ERDF, LIFE, Single Market Programme, COSME, Digital Europe, Erasmus+, Creative Europe, European Solidarity Corps.

of initiatives, there can be a more meaningful engagement with key topics, resulting in stronger, more concentrated outcomes.

Another relevant challenge for the NEB Facility is to preserve its focus on the transformation of living environments without interpreting it only in terms of physical spaces and infrastructures. While physical redevelopment often garners more attention due to its visible, tangible results, it is the social dimension that can ensure the sustainability and success of these transformations. The way in which people perceive the quality of their living environments is indeed bound to many intangible factors and components (services, interactions, experiences, etc.) that need to be considered as much as the tangible components to achieve a satisfactory transformation towards climate neutrality. In this perspective, social aspects are fundamental: they are not only relevant components of the contextual conditions in which the transformation should occur, but also direct objectives of the transformation. Often overlooked, social, cultural and behavioural change and innovation are the most important factors that can make the green transition desirable, or at least acceptable. They can dramatically reduce the conflicts that the transition inevitably brings about and also directly contribute to achieving some of its objectives. By incorporating both physical and social elements, it is possible to foster more inclusive and holistic development processes that meet the needs of communities, not just in terms of infrastructure, but also in social cohesion, equity, and participation. In particular, social innovation can be a powerful means for mobilising common citizens, marginalised groups and different kinds of stakeholders, engaging them in initiatives that tackle concrete challenges and have at the same time the capacity to change the way in which they see problems and, ultimately, perceive the transition. Reflecting on the progress achieved, we must recognise that certain NEB actions focus on enhancing the capacities of regional and local authorities to support the development of social innovation projects that integrate the NEB values. By focusing on social innovation “on the ground”, the NEB aligns with and exploits the concept of scaling deep, as described by Moore et al. (2015), where specific approaches are embedded within local contexts to create lasting change as a result of the operationalisation of the NEB values. Therefore, a more explicit reference to social innovation projects and initiatives could create environments that are not only physically improved but also socially enriched, supporting long-term positive change.

To conclude, it is essential to bring forward a reflection on the impact of the current approaches, methods and tools for monitoring, assessment and learning. With the transition from Horizon 2020 to Horizon Europe, the program logic recognised the difficulty of capturing the overall effects of small-scale initiatives and introduced the concept of “impact pathways”. These pathways are designed during the proposal phase of each project and are subsequently implemented and refined to enhance the initial vision as the projects evolve. To achieve this, projects have been developing tailored monitoring and assessment frameworks, often incorporating elements of social innovation, such as in the case of NZC (Bresciani et al. 2024), and aligning with the support guidelines outlined in the NEB Compass (European Commission 2023). However, while NZC serves as the Mission Platform, it is only one of several efforts implemented under the Mission “Climate Neutral and Smart Cities” to support

the Green Deal. A key question that remains is how to assess the cumulative impact of the European Commission's portfolio of actions under this Mission. Similarly, one of the most relevant challenges of the newly built NEB Facility lies in addressing the existing gap of a sufficiently wide range of evidence to convincingly demonstrate to EU policymakers across various levels of governance, as well as to the broader community of practitioners in the construction ecosystem, that the NEB's design values and principles are crucial for achieving the Green Deal's objectives, particularly in driving urban regeneration and transforming the built environment. For this, a specific action that aims at developing a monitoring and assessment framework tailored to the specific objectives of the NEB Facility is set to begin, with the twofold aim of informing the design of the pathways towards impact and the evaluation of the outcomes of the single projects, and the monitoring and assessment of the overall results and impacts of the whole programme.

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