

## NEB Facility: Scoping document

### I. The New European Bauhaus initiative: beautiful, sustainable, together

The [New European Bauhaus](#) (NEB) was established to translate the European Green Deal into tangible change on the ground and ensure that the green transformation is people-centric, putting societal needs first. To do so, the initiative fosters the development of innovative solutions for the transformation of living spaces that are sustainable, inclusive and affordable while also taking into account other aspects that increase their acceptability, such as cultural identity and heritage.

The initiative is based on three core intertwined values: **sustainability, aesthetics, and inclusion**. It aims to provide citizens with access to goods that are circular, less carbon-intensive, and supportive of nature regeneration and biodiversity protection. It also brings a cultural and creative dimension to the European Green Deal, enhancing sustainable innovation, technology, and economy. By emphasizing tangible experiences at the local level, it seeks to improve our daily lives.

The New European Bauhaus is being implemented as a **participatory project**, inviting citizens from different backgrounds and areas of expertise to think work and implement this concept collectively. In that spirit, it started out with a **co-design phase** in the first half of 2021 inviting interested individuals, organizations, institutions, and companies to collectively define the orientation and scope of the initiative. The co-creation process fed into the Communication on the New European Bauhaus<sup>1</sup> which set out the principles (combination of global and local dimension, participation and trans-disciplinarity) and the fundamental axes of the initiative:

- Reconnecting with nature: Fostering a stronger bond between humans and the natural environment.
- Regaining a sense of belonging: Enhancing community and social connections.
- Prioritising the places and people that need it the most: Addressing inequalities.
- The need for long-term, life-cycle thinking in the industrial ecosystem, promoting sustainability and digital transition.

The four cornerstones of the NEB are:

- **EU funded NEB projects:** The New European Bauhaus supports hundreds of initiatives across Europe, particularly through specialized calls and its annual NEB Prizes Prizes<sup>2</sup>, for projects embodying its principles and values.
- **The diverse and growing NEB Community** , with almost 1,400 registered members uniting non-profit organisations, businesses, public authorities, NEB project holders, National Contact Points, and members of the NEB High Level Roundtable. The NEB Community is spread over 39 countries, including all EU Member States and 12 countries outside the EU.
- **Tools to facilitate the implementation of NEB values and principles**, including the NEB Compass, an evaluation tool that allows project developers to check the application of the NEB principles to their projects, or the NEB Knowledge Management Platform, which streamlines existing construction standards around the three NEB dimensions.
- **Communication actions**, including the dedicated NEB website with 816,000 visitors and around 2.5 million page views; an own Instagram account with more than 37,000 followers; and the organization of one large key event per year: the first Festival of the New European Bauhaus (9-12 June 2022), the event "Radical yet possible future space solution" at the 18th International

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<sup>1</sup> COM/2021/573 final, September 2021.

Architecture Exhibition of La Biennale di Venezia (15-26 May 2023), and the second edition of the NEB Festival (9-13 April 2024).

In less than three years, the initiative has immensely grown<sup>2</sup> and now requires a dedicated stand-alone, visible and multiannual funding instrument to realise its potential.

## II. The NEB Facility

### **Objective**

Anchored in Horizon Europe<sup>3</sup>, the NEB Facility is a unique tool that aims to revitalise neighbourhoods through design for sustainability and inclusion. It is a multi-annual and cross-cutting tool that builds on and combines different funding instruments of the Commission and covers the full cycle of implementation of solutions – from research and innovation to deployment – through its two components:

- A research and innovation (R&I) component covering fundamental research, testing and demonstration and implemented as a cross-cluster issue in the Horizon Europe Work Programmes for the period 2025-2027, with an indicative budget of €120 million per year.
- A roll-out component which will be delivered through investments across different EU programmes to scale up, deploy and implement the innovative solutions, business models, etc., resulting from the R&I component as well as contributing to it through the identification of additional R&I needs. The roll out will also include all the actions delivered under different EU programmes contributing to the goals of the Facility and particularly the implementation of the New European Bauhaus values and principles at the neighbourhood level. The expectation is that the roll-out component leverages a similar level of investment as the R&I component.

The NEB Facility will offer a strategic and pioneering opportunity to transform and revitalise European neighbourhoods with design for sustainability and inclusion. To do so, it will:

- (1) Enhance social acceptance of the green transition and democratic processes at local level, bringing communities on board;
- (2) Provide solutions for the green transition in the built environment;
- (3) Explore new business models that maintain the competitiveness of the construction sector, while implementing NEB (and societal) compatible solutions.

By putting people, culture and cultural diversity at the heart of the transformation of neighbourhoods, the NEB Facility will connect people with the implementation of the green transition in their neighbourhoods and will contribute to the wider social acceptance of the innovative solutions developed, leading to faster pace of transformation.

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<sup>2</sup> Close to 500 NEB-inspired projects are taking place on the ground; nine EU programmes are supporting the NEB (Horizon Europe, ERDF, LIFE, Single Market Programme, COSME, Digital Europe, Creative Europe, Erasmus+, European Solidarity Corps); the NEB community currently includes around 1400 registered members from all EU Member States and beyond; an active network of NEB national contact points have been established in all Member States.

<sup>3</sup> See [Horizon Europe Strategic Plan 2025-2027](#), pages 24-25

## ***The R&I component***

Under its R&I component, the NEB Facility will focus its actions on the three following focus areas:

### **1. Focus area 1: Connecting the green transformation, social inclusion and local democracy**

Efforts to address socio-economic inequalities, environmental challenges, and improve transparency of public authorities must go hand in hand with engaging with and fostering an open dialogue to rebuild citizens' trust in local democracy. Culture, cultural diversity, and identities possess a key role and potential in this process. Re-establishing a strong connection between people and democratic institutions will be key to implement the changes required by the green transition.

This focus area will aim at increasing the trust of all citizens in the green transition and democracy through innovative participatory processes and governance models that balance public and private interests. Particular attention will be paid to vulnerable groups. This focus area could for instance research:

- Solutions to reinforce and rebuild people's trust, sense of ownership and belonging such as user-centric services and digital platforms or new models of organisation within a neighbourhood
- The transformative potential of participatory practices and governance models
- Strategies for meaningful community engagement in the design of buildings, public spaces and services in their neighbourhoods
- The potential of virtual worlds for creating social capital
- The role of emotions in the green transition

### **2. Focus area 2: Circular and regenerative approaches for the built environment**

The development of a European circular and regenerative ecosystem for the built environment is key to support the competitiveness of the sector and the EU's open strategic autonomy, and to achieve its climate ambitions. However, it is crucial to ensure citizens' acceptance and support of the necessary transformations.

This focus area aims to make the built environment more sustainable, circular, climate-friendly and climate resilient and less polluting through the development of innovative and regenerative designs, architecture, (bio-based) materials, and approaches that are adopted across the construction value chain and included into public and business decision-making. This focus area could for instance research:

- How to increase the adaptability, repurposing and recyclability of construction materials and building elements
- Designs for adaptable and multi-purposed buildings, de-construction, modularity, sufficiency and circularity of spaces
- Innovative bio-based regenerative construction materials for structural and exterior architecture (e.g. mycelium products)
- The potential of AI in making the regenerative construction process more affordable
- Methods and tools to facilitate the collaboration among architects, engineers, ecologists, artists, end-users and other stakeholders to develop and optimise integrated regenerative designs.

### 3. Focus area 3: Innovative funding and new business models for the transformation of neighbourhoods

The built environment has traditionally been resistant to change due to established norms, practices, and a conservative mind-set. For the sector to adapt towards greater circularity and sustainability, the demand and appropriate incentives must be ensured. New business models provide a framework to rethink how projects are conceived, planned, and executed for greater circularity and sustainability. Demonstrating their potential, feasibility, and benefits for society and the economy is key.

This focus area will aim to better understand the market (both demand and supply sides, as well as the related policy and regulatory aspects) and develop new business models and innovative funding to attract more capital and drive positive change in neighbourhoods while encouraging the uptake of new values, including social and aesthetic values.

This focus area could for instance research:

- Market incentives, risks and barriers that affect the adoption of sustainable building practices
- The development of innovative supply chains that transform waste materials into high-quality secondary construction materials
- The role of policy and regulatory frameworks in supporting and incentivizing regenerative design practices within the construction industry
- The social and economic value and investment returns associated with aesthetically pleasing, inclusive and sustainable built environment
- The role of standards, metrics and indicators to measure the impact of circular and regenerative approaches

#### ***The roll-out component***

Considering that Horizon Europe can only fund research and innovation up to TRL 8, the deployment of innovative solutions will be supported through other sources of funding including EU funds but also national or private ones. It will build upon the work accomplished so far whereby the New European Bauhaus has mobilised eight EU programmes other than Horizon Europe<sup>4</sup>. For instance:

- **Cohesion policy funds:** all EU Member States have included a reference to the New European Bauhaus in their Partnership Agreements or Operational Programmes for the Cohesion Policy. This opens the possibility for managing authorities in each Member State to support New European Bauhaus projects. In addition, Cohesion policy funded a capacity-building project for technical assistance to 20 smaller and medium-sized municipalities, as well as a dedicated New European Bauhaus call under the European Urban Initiative – Innovative Actions.
- **Single Market Programme** is funding a capacity-building project to establish a European Affordable Housing Consortium that is supporting 22 districts with tailored support for their renovation project. A follow-up call was published in 2024 to continue the work.
- **Digital Europe Programme** is funding a project exploring digital tools that could support the NEB initiative.
- **Erasmus+:** since 2021 the Annual Work Programme included reference to the New European Bauhaus initiative within the priority ‘Green’, one of the four overall priorities of Erasmus+.

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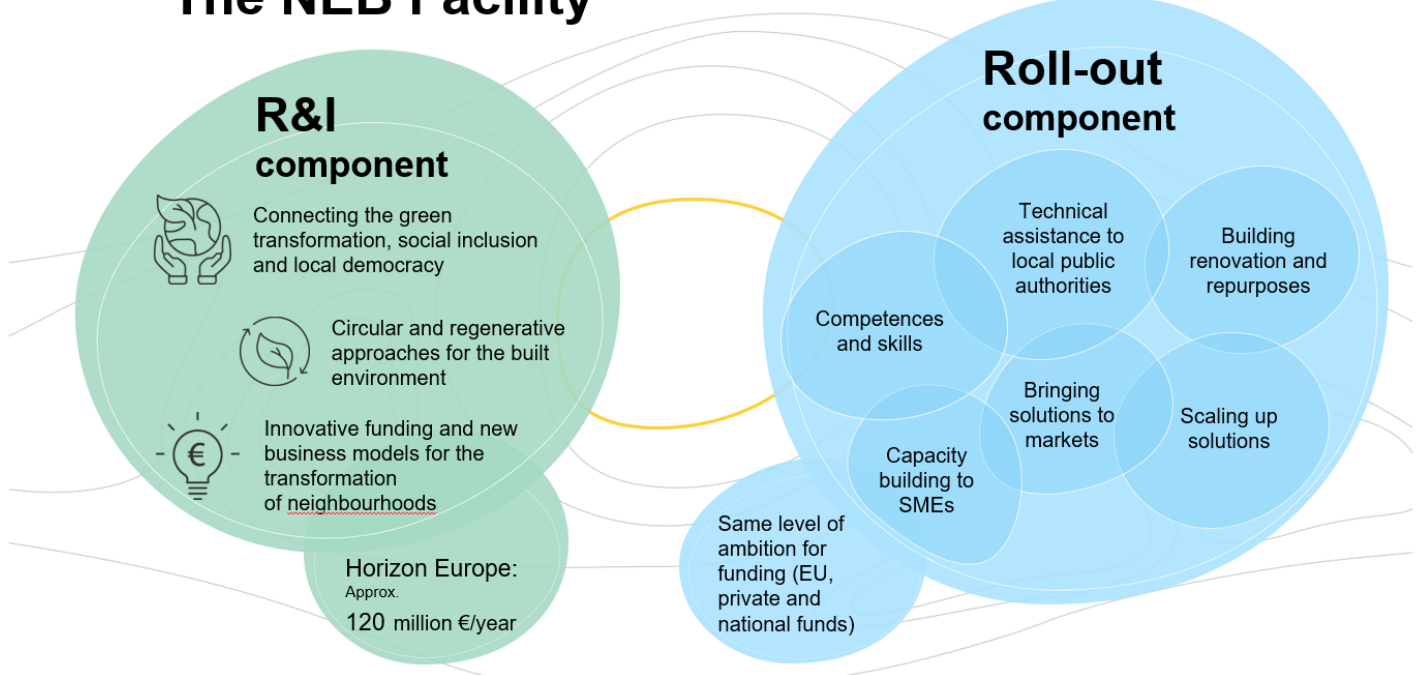
<sup>4</sup> ERDF, LIFE, Single Market Programme, COSME, Digital Europe, Erasmus+, Creative Europe, European Solidarity Corps.

- **LIFE:** in 2023 LIFE supported New European Bauhaus demonstrators, NEB Academy on skills for sustainable construction with a focus on bio-based materials and circularity, reconstruction of Ukraine following New European Bauhaus values and principles.

The roll-out component of the NEB Facility will build on and expand these existing collaborations, and develop new ones by harnessing common policy objectives between the NEB Facility and other relevant EU funds. This will allow to finance the scale up and deployment of innovative solutions, to support the education, re- and up-skilling, provide capacity building, and more in line with the New European Bauhaus' values and principles.

In addition, the roll-out aims to rely on other sources of funding (e.g. EU funds in shared management at the national/regional levels, private funding) to ensure the highest impact possible. It is thus key to identify what are the areas of convergence between the NEB Facility and your national priorities as well as possible funding opportunities at national, regional or local levels or from private sources.

## The NEB Facility



## Annex: The R&I dimension of the New European Bauhaus initiative

The New European Bauhaus (NEB) is an initiative launched by the European Commission to translate the European Green Deal into tangible change on the ground that improves our daily lives. It brings about sustainable solutions for transforming the built environment and lifestyles for the better under the green transition, matching sustainability with good design that needs less carbon. At the same time, it makes these solutions inclusive, accessible and affordable for all, while respecting the diversity of places, traditions, and cultures that we have in Europe and beyond.

The Commission implements the NEB in different ways:

- Supporting NEB projects and their financing;
- Working on the development, explanation and operationalization of NEB principles;
- Working with the NEB Community which can provide a rich network and facilitate knowledge exchange between members;
- Communicating through networks and platforms.

The NEB holds strong elements of R&I and there are clear policy links between the Horizon Europe programme and the NEB. Most of the NEB dedicated topics in Horizon Europe in the work programme 2021-2022 and 2022-2023 were innovation actions (IA) that produced plans or designs for new or improved products, processes or services, with a technology readiness level (TRL) between 6 (technology demonstrated in relevant environment) and 8 (system complete and qualified). Some of the NEB dedicated topics are research and innovation actions (RIA) that establish new knowledge or explore a new or improved technology, product, process, service or solution. They have a TRL level between 4 (technology validated in lab) and 6 (technology demonstrated in relevant environment). The topics in Horizon Europe work programmes 2021-2022 and 2023-2024 cover various research areas key to the development of the NEB and which, in parallel, benefit from the NEB innovative approach.

Below some R&I areas addressed so far by the NEB, illustrated with examples of projects

- 1) **Behavioural change** – Assessing what is needed to change people’s behaviour when it comes to energy efficiency, use of renewables, etc.
  - a. [ProLight](#) (social and affordable housing district demonstrator funded by a NEB dedicated call under Horizon Europe) envisages solutions for buildings that lead to finding suitable social responses for awareness creation, knowledge uptake, the establishment of behavioural changes regarding energy efficiency and the integration of renewables within an appropriate local political frame.
- 2) **Built environment and circularity** – Development of new renovation methodologies to improve the urban space, accessibility, and residents’ quality of life using smart and digital tools and ensuring the uptake of those solutions for a sustainable, human-centric, and high-quality built environment. Additionally, making the construction sector more renewable and circular especially for existing buildings by studying and exploring the use of wood and other bio-based materials in construction.
  - a. [TOVA](#) (NEB Prizes Winner 2023 ‘Shaping a circular industrial ecosystem and supporting life-cycle thinking’) is one of the world’s first architectural constructions to be built with a crane WASP 3D printer. It can be completed in just weeks using 100% local materials and labour, generating zero waste and close to zero carbon emissions. This system is replicable globally and showcases a promising response to the surge in housing emergencies. The project was developed by a team of students and researchers from the 3D Printing Architecture programme of IAAC.
  - b. [drOp](#) (social and affordable housing district demonstrator funded by a NEB dedicated call under Horizon Europe) is developing an integrated renovation methodology to transform social housing districts into inclusive smart neighbourhoods. The project intends to guide constructive, energy and digital updates to improve the urban space,

accessibility, and residents' quality of life and guarantee connectivity in physical, social and digital areas.

- 3) **Cultural heritage** – Development of innovative, inclusive architectural design solutions to preserve and promote Europe's cultural heritage while addressing challenges such as climate change, energy poverty and inequalities.
  - a. **HERITACT** (research and innovation action dedicated to the NEB under Horizon Europe) is a project to preserve and promote Europe's cultural heritage while addressing the challenges threatening Europe's cultural heritage such as climate change by developing innovative, inclusive design solutions and cultural-artistic practices.
- 4) **Energy** – Development of solutions to fight energy poverty and enhance buildings' energy efficiency.
  - a. **SUPERSHINE** (social and affordable housing district demonstrator funded by a NEB dedicated call under Horizon Europe) intends to contribute to the European Green Deal by tackling energy poverty. Its focus is on the renovation of social housing to assist households that have difficulty paying their energy bills.
  - b. **Biophotovoltaics** (BPV) for Nature and People (NEB Prizes Public Vote Winner Rising Star 2022) is a source of renewable energy that leverages plants' natural life cycles to generate electricity. It is designed for urban environments that it can help rehabilitate, by creating new activity and increasing local biodiversity, while producing energy.
- 5) **Urban, coastal, and rural development in line with the green transition** - Development of solutions and models to transform disadvantaged areas into sustainable, inclusive, living areas; development of architecture/artistic/local place-based approaches; development of new technologies for manufacturing processes; development of nature-based solutions for urban greening and re-naturing.
  - a. **CULTUURCAMPUS** (NEB lighthouse demonstrator funded by Horizon Europe) blends education, research, policy and culture and considers the lived experiences of residents to transform the disadvantaged urban area of Rotterdam South, the Netherlands.
  - b. **NEBourhoods** (NEB lighthouse demonstrator funded by Horizon Europe) was designed to implement 10 NEB actions tackling various challenges of urban development towards the European Green Deal which will transform Neuperlach (Germany) into a breeding ground for sustainable, inclusive and enriching urban life.
- 6) **Skills for sustainable construction** through the NEB Academy, a flagship initiative of the European Year of Skills, will offer high-quality, well promoted and accessible trainings to boost skills on sustainable construction and accelerate the fair and green transformation of the building sector. It supports the EU's ambition to upskill or reskill 25% of the European construction industry's workforce in the next five years (i.e. 3 million workers).
  - a. **NEBA Alliance** (project funded through a NEB dedicated call by the Circular Bio-based Europe Joint Undertaking) will, over the next two years, set up the governance and structure of the Academy and establish a network of hubs at EU level. This network will offer tailored training services in sustainable construction solutions through a digital platform.