EN

Horizon Europe

Work Programme 2025

13. New European Bauhaus Facility

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Introduction

The <u>New European Bauhaus</u> (NEB) was launched in 2021, striving to translate the European Green Deal¹ into tangible change on the ground. This policy and funding initiative was further strengthened in the political guidelines for the European Commission 2024-2029 under the goal *Supporting people, strengthening our societies and our social model*.

The political guidelines² highlight that the NEB can bring sustainability together with inclusion and affordability, and creativity with innovation. Challenges like the housing crisis or the green transformation are addressed by putting people's needs first, with the goal to improve their lives. The NEB also contributes to creating lead markets for the Clean Industrial Deal by considering embodied greenhouse gas emissions. To this end, the NEB fosters the development of innovative solutions in the built environment³ and beyond.

Against this backdrop, the NEB Facility is a multi-annual (2025-2027) and cross-cutting tool to revitalise European neighbourhoods with design for sustainability and inclusion. It will support projects on the sustainable transformation of the built environment. The NEB Facility aims to make the inhabitants of the built environment partners of change.

Activities under the NEB Facility should contribute to the wider social acceptance of the innovative solutions developed, accelerating the just green and digital transformation and strengthening and restoring citizens' trust in democracy. They should also explore the built environment's function in the conservation and restoration of natural ecosystems, its relation to historical urban, peri-urban or rural areas, the improvement of social cohesion as well as people's health and well-being. The NEB Facility is composed of a research and innovation (R&I) component and a roll-out component.

The R&I component will cover fundamental research, testing and demonstration. It will be implemented as a cross-cluster issue in the Horizon Europe Work Programmes with an indicative budget of \in 120 million per year for the period 2025-27. The roll-out component of the NEB Facility will seek to facilitate the uptake, further development and deployment of new knowledge, methods, approaches and technologies developed under the R&I component. The roll out component will also include all actions delivered under EU programmes that contribute to the goals of the Facility and particularly the implementation of the NEB values and principles ⁴ at the neighbourhood level. It will build further on the projects and experiences from the first three years of the NEB.

¹ The targets of the European Green Deal were established in the <u>European Climate Law</u> (Regulation 2021/1119), the <u>Renovation Wave</u> (COM/2020/662 final), the <u>EU's new circular economy action plan</u> (COM/2020/98 final), the <u>EU zero pollution action plan</u> (COM/2021/400 final), the <u>EU industrial strategy</u> (COM/2020/102 final), the <u>EU bioeconomy strategy</u> (COM/2018/673 final), and the <u>EU Bioeconomy Strategy Progress Report: Stocktaking and future developments</u>.

² European Commission: Directorate-General for Communication & Leyen, U. (2024). *Europe's choice : political guidelines for the next European Commission 2024–2029*, Publications Office of the European Union. <u>https://data.europa.eu/doi/10.2775/260104</u>

³ See definition in the glossary.

⁴ See definitions in the glossary.

The commitment and the support of innovative solutions are rooted in the three intertwined NEB values: **sustainable**, **inclusive** and **beautiful**.⁵ Sustainability is about prioritising the needs of all life forms and of the planet by ensuring that human activity does not exceed planetary boundaries⁶ which define a safe operating space for humanity based on the intrinsic biophysical processes that regulate the stability of the Earth system.⁷ Inclusion means granting and securing equal access to opportunities and resources for all and encouraging exchanges across cultures, genders, ages, and socioeconomic groups. Beautiful refers to projects that are genuinely attentive to their context which includes arts and culture, quality, diversity and heritage.

In addition to these three values, a NEB project should embrace three working principles: **participatory process**, **multi-level engagement** and **transdisciplinary approach**. All three working principles should foster co-creation and co-development. Participatory processes ensure that stakeholders have a voice in projects that affect them in addressing transformational change. Multi-level engagement implements an effective exchange between public and private peers and others who operate on a different scale, bridging the local and global dimension. Transdisciplinary approaches aim for higher integration of formal and informal knowledge and go beyond technical disciplines. They address in particular social, artistic and design expertise. They should ground scientific expertise in society by drawing on the knowledge of non-academics, the public, and public administrations. Architects or designers, for instance, can play a role of facilitators to integrate different actors and disciplines. Within the scientific field, the social sciences, arts and humanities (SSAH) will play an important role in the R&I component of the NEB Facility to emphasise the holistic nature.

In order to foster dialogue, collaboration, and creativity, bringing together different disciplines and different stakeholders, the NEB relies on **four thematic axes**⁸ which link the initiative to the people and their interests, needs and motivations. The first axis is about **reconnecting with nature** and going beyond a human-centred to a life-centred perspective. The second one is about regaining a **sense of belonging** and magnifying and linking collective and private experiences and building bridges between people. The third axis is about prioritising the **places and people most in need** and ensuring that beauty and sustainability are **affordable and accessible to all**. The fourth axis is about the need for **long-term, lifecycle thinking** in the circular economy and tackling unsustainable use of resources, including obsolete buildings or infrastructures, and waste.

⁵ See the definitions of the three NEB values in the glossary and, for more detailed information on the values, principles and axes, the and the <u>NEB Investment Guidelines.NEB Compass</u> and the <u>NEB Investment Guidelines</u>.

⁶ Bianchi, G., Pisiotis, U., & Cabrera Giraldez, M. (2022). *GreenComp. The European sustainability competence framework* (Y. Punie and M. Bacigalupo, Eds.). Publications Office of the European Union. https://doi.org/10.2760/13286

⁷ Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Bigggs, R., Carpenter, S. R., de Vries, W., de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). Planetary Boundaries: Guiding human development on a changing planet. *Science*, *347*(6223). <u>https://doi.org/10.1126/science.1259855</u>

⁸ See definition in the glossary.

By adopting the NEB's integrated approach, the NEB Facility seeks to contribute to new solutions and potentially new ways of policymaking: bottom-up and closer to people's needs. This approach fosters the active participation of inhabitants and the integration of arts and culture in transformation processes. The focus is on neighbourhoods, which are close to people's surroundings and daily experiences. Incorporating neighbourhood specificities in planning initiatives and decision-making processes helps to effectively address local-level problems.⁹

The knowledge produced by NEB projects, the NEB Community and other relevant NEB actions will be collected, centralised, managed and monitored in a New European Bauhaus Hub. This will give an overview of all the knowledge produced, the progress made, the challenges faced and the research gaps yet to overcome. Thereby, the Hub will contribute to informing the implementation of the NEB Facility and will help to increase its impact. In the upcoming years and following work programmes after 2025, the Hub will be essential to facilitate potential synergies and joint actions between the NEB Facility and other projects.

NEB Facility: R&I component

Activities under the NEB Facility's R&I component in this work programme will contribute to all Key Strategic Orientations (KSOs) defined by the Horizon Europe Strategic Plan 2025-2027:¹⁰

- *KSO 1: Green transition:* Horizon Europe R&I activities must support Europe to become the world's first climate-neutral continent by 2050 and to tackle biodiversity loss and pollution. At least 35% of Horizon Europe's resources are committed to be spent on climate action and 10% for 2025-2027 on biodiversity action.
- *KSO 2: Digital transition:* Investment in R&I in key digital technologies is crucial for improving Europe's competitiveness in the digital value chain. The green and digital transitions are intertwined and expected to mutually benefit each other. In 2021-2027, it is agreed to invest at least EUR 13 billion from Horizon Europe in core digital technologies.
- *KSO 3: A more resilient, competitive, inclusive, and democratic Europe:* Europe's social rights and democratic values and principles need a strong foundation so they can be promoted globally. Horizon Europe research activities will help provide this foundation. This includes research on civil security, on a fair and environmentally-friendly economic model, on health and wellbeing and on democratic participation.

To contribute to these programme-level KSOs, the NEB Facility's R&I component will deliver on several specific expected impacts as defined in the Horizon Europe Strategic Plan 2025-2027. In this part of the 'main' work programme 2025, each destination of the R&I

⁹ Baffoe, G. (2019). Understanding the Neighbourhood Concept and Its Evolution: A Review. *Environment and Urbanization ASIA*, *10*(2), 393-402. <u>https://doi.org/10.1177/0975425319859115</u>

¹⁰ European Commission, Directorate-General for Research and Innovation (2024). *Horizon Europe* strategic plan 2025-2027. Publications Office of the European Union. <u>https://data.europa.eu/doi/10.2777/092911</u>

component will deliver on three to four expected impacts as outlined in the list below. This destination-based work programme structure follows a thematic centre-of-gravity approach, but activities within a destination may be of cross-cutting nature and will often contribute to several expected impacts. The specific contribution to the overall expected impacts is explained in the introductory text of each destination, as well as now outlined below.

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 and fostering an open dialogue to rebuild citizens' trust in local democracy.

Reestablishing a strong connection between people and democratic institutions will be key to implement changes required by the green transition and avoid a "geography of discontent". Places that are stuck in a development trap and where inhabitants feel left behind are faced with disengagement and discontent in the long term.¹¹

This Destination especially embraces activities that address sustainability and inclusiveness, paying particular attention to vulnerable groups. It aims at increasing the trust of people in the green transition and democracy through innovative participatory processes and governance models that balance public and private interests. Culture, cultural diversity, and identities possess a key role and potential in this process by enabling the involvement and participation of all.

This Destination delivers on the expected impacts 8 *Realising the full potential of cultural heritage, arts, and cultural and creative sectors,* 10 *Boosting inclusive growth and reducing vulnerabilities,* 31 *Sustainably developing rural, urban and coastal areas,* and 32 *Developing innovative governance models and tools enabling sustainability and resilience* in the Strategic Plan 2025-2027.

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 reach our climate goals, support the competitiveness of the sector and the EU's strategic autonomy. At the same time, it is crucial to ensure peoples' acceptance of, support for, and active engagement in the necessary transformations.

This Destination aims to make the built environment more sustainable, circular, regenerative, climate-resilient and less polluting. To this end, innovative and regenerative designs¹², architecture, products, materials and approaches will be developed, considering also the role digital technologies can play. Efforts will be made to make solutions beautiful and respectful of the local perspectives and cultures, contributing to increase inhabitants' acceptance of the transformative innovations developed.

¹¹ Rodríguez-Pose, A., Dijkstra, L., & Poelman, H. (2023). The geography of EU discontent and the regional development trap. *Working Papers*, *3*. <u>https://doi.org/10.2776/164290</u>

¹² See definition in the glossary.

This Destination delivers on the expected impacts 2. Living and working in a healthpromoting environment, 15 Achieving global leadership in climate-neutral, circular and digitised industrial and digital value chains, 28 Putting biodiversity on a path to recovery, and protecting and restoring ecosystems and their services, and 31 Sustainably developing rural, urban and coastal areas in the Strategic Plan 2025-2027.

3. Innovative funding and new business models for the transformation of neighbourhoods

The built environment faces diverse challenges that hinder its transition towards greater sustainability, circularity, and social inclusion. For the sector to overcome established norms, practices, and conservative mindsets and adapt towards greater circularity and sustainability, the demand and appropriate incentives must be ensured. New business and funding models provide a framework to rethink how public and private projects are conceived, planned and executed for greater circularity and sustainability.

This Destination aims to better understand the market with its demand and supply sides as well as the related policy and regulatory aspects. Actions under this destination will develop new business and social economy models and innovative funding schemes (on different governance levels) to attract more capital and drive positive change in neighbourhoods. The uptake of new values, including social and aesthetic values, will be encouraged.

This Destination delivers on the expected impacts 8 *Realising the full potential of cultural heritage, arts, and cultural and creative sectors,* 9 *Strengthening social and economic resilience and sustainability, and 15 Achieving global leadership in climate-neutral, circular and digitised industrial and digital value chains in the Strategic Plan 2025-2027.*

Under the R&I component of the NEB Facility, applicants are encouraged to explore complementarities with topics and activities in Horizon Europe partnerships (in particular: Built4People, Circular Bio-based Europe and Driving Urban Transition, Forests and Forestry for a Sustainable Future, Innovative Materials for the EU, Processes4Planet, Resilient Cultural Heritage, Social Transformations and Resilience, and Textile of the Future), Missions (in particular the Climate-Neutral and Smart Cities Mission and the Adaptation to Climate Change Mission) and Clusters (in particular Cluster 2 on Culture, Creativity, and Inclusive Society, Cluster 3 on Civil Security for Society, Cluster 5 on Climate, Energy and Mobility, and Cluster 6 on Food, Bioeconomy, Natural Resources, Agriculture & Environment). Opportunities for collaboration and synergies should also be explored and, as appropriate, pursued with other relevant initiatives such as the innovation ecosystems or the Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT). Additionally, Horizon Europe grantees are invited to consider possible collaborations and cross-fertilisation between their project and other projects selected under the same or other relevant calls.

NEB Facility: roll-out component

The deployment of innovative solutions will be supported by the roll-out component of the NEB Facility through various sources of funding, including EU funds (except Horizon Europe), but also national or private ones. Applicants are encouraged to identify areas of convergence between the NEB Facility and national priorities, as well as possible funding opportunities at national, regional or local levels or from private sources, including philantropic. Applicants are also encouraged to develop new collaborations or to build on and expand existing collaborations under the roll-out component with other EU programmes, like the Cohesion policy funds, European Regional Development Fund (ERDF), European Social Fund (ESF+), the Just Transition Fund (JTF), Single Market Programme, Digital Europe Programme, Creative Europe, Erasmus+, European Solidarity Corps, Structural Reform Support Programme (SRSP), the Programme for the Environment and Climate Action (LIFE), the European Maritime, Fisheries and Aquaculture Fund (EMFAF). Applicants could enhance the reach and impact of their projects for instance through broader stakeholder cooperation and follow-on activities.

Glossary

Beautiful is one of the three core values of the NEB. Beautiful means aesthetically pleasing, emphasising the quality of experience, beyond mere functionality. Projects are in line with this value if they are genuinely attentive to their context, which includes arts and culture, quality, diversity and heritage. They contribute to people's physical and mental health and well-being, foster a sense of belonging and quality of individual and collective experience. These projects promote a high-quality living environment and activate the cultural, social and natural qualities of a place.

Bio-based products are wholly or partly derived from materials of biological origin (such as plants and trees, animals, enzymes, and microorganisms, including bacteria, fungi and yeast).¹³ For example, bio-based plastics, as defined by the European Union, are made from biomass. This biomass originates mainly from plants grown specifically to be used as feedstock to substitute fossil resources. Other sources are organic waste and by-products, such as used cooking oil, bagasse and tall oil.¹⁴

Bio-fabricated materials are made by growing living cells and microorganisms such as bacteria, yeast, and mycelium. There are two categories of bio-fabricated materials: the first are materials made with ingredients that are bio-fabricated. The ingredients are bio-fabricated but need further mechanical or chemical processing to make a macroscale material structure. The second are bio-assembled materials which are macroscale structures directly grown from living microorganisms, such as an acoustic panel that is entirely made of mycelium.¹⁵ Bio-fabricated materials have more specific requirements towards their production processes than bio-based products (see the respective entry in this glossary).

Built environment refers to human-made buildings and infrastructures that provide physical settings for human activities. This includes, but is not limited to, public and private buildings, streets, transport and energy infrastructure, common spaces, public places, and green open spaces¹⁶. The built environment plays an essential role in addressing the basic needs of society, such as having places to live, work, learn, consume, travel and entertain. The built environment can contribute to a more just society by accommodating the needs of different

¹³ <u>https://single-market-economy.ec.europa.eu/sectors/biotechnology/bio-based-products_en</u>

¹⁴ European Commission: Directorate-General for Environment (2022, November 30). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. EU policy framework on biobased, biodegradable and compostable plastics. COM/2022/682 final. <u>https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX:52022DC0682</u>

¹⁵ https://healthymaterialslab.org/blog/bio-definitions

¹⁶ Thompson, S. M., & Kent, J. L. (2017). Human Health and a Sustainable Built Environment. Encyclopedia of Sustainable Technologies, 2, 71-80. <u>http://dx.doi.org/10.1016/B978-0-12-409548-9.10178-2</u>

individuals and groups.¹⁷ It influences the physical health of inhabitants¹⁸ (e.g. by encouraging physical exercise) as well as their mental health (e.g. by helping reduce stress).

Circular economy is a business concept aiming to create a closed-loop system and maintain the value of products, materials, and resources for as long as possible by returning them into the product cycle at the end of their use, while minimising the generation of waste. In this economic system, 'waste' can become a feedstock source for another process or value chain.¹⁹ Resource value retention options (R-strategies) form one of the circular economy fundamental principles. The 10 R strategies can be classified with three clusters: 1. R-strategies closely related to consumer/customer alternatives (refuse, reduce, resell/reuse, repair); 2. R-strategies referring to various forms of upgrading used products on the side of users but dominantly carried out by business actors (refurbish, remanufacture, repurpose); 3. R-strategies referring to aggregate material flows, often resulting in downcycling (recycle, recover, re-mine).²⁰

Common spaces are spaces that are brought into being through common practices.²¹ These common practices are linked to a physical public, semi-public or private place that is accessible by all.²² This physical public place is demarcated by the built environment, which can facilitate or hinder social activities.

Community is a social unit. Interactions that occur in the built environment can foster a sense of community and belonging in many ways. ²³ Interaction enables people to build communities, commit themselves to each other, and knit the social fabric (see the respective entry in this glossary). The perception of being part of a collective²⁴ and locally-based social relationship beyond the household and family²⁵ are essential to define a coherent social group

¹⁷ Seyedrezaei, M., Becerik-Gerber, B., Awada, M., Contreras, S., & Boeing, G. (2023). Equity in the built environment: A systematic review. *Building and Environment*, 245, 1-19. https://doi.org/10.1016/j.buildenv.2023.110827

 ¹⁸ Roof, K., & Oleru, N. (2008). Public Health: Seattle and King County's Push for the Built Environment. *Journal of Environmental Health*, 71(1), 24–27. <u>http://www.jstor.org/stable/26327656</u>
¹⁹

Reike, D., Vermeulen, W.J.V., Witjes, S. (2022). Conceptualization of Circular Economy 3.0: Synthesizing the 10R Hierarchy of Value Retention Options. In: Alvarez-Risco, A., Rosen, M.A., Del-Aguila-Arcentales, S. (eds) Towards a Circular Economy. CSR, Sustainability, Ethics & Governance. Springer, Cham. <u>https://doi.org/10.1007/978-3-030-94293-9_3</u>

²¹ Cianciotto, L. M. (2020). Public Space, Common Space, and the Spaces In–Between: A Case Study of Philadelphia's LOVE Park. *City & Community*, *19*(3), 676-703. <u>https://doi.org/10.1111/cico.12454</u>

²² Zhang, X., & He, Y. (2020). What Makes Public Space Public? The Chaos of Public Space Definitions and a New Epistemological Approach. *Administration & Society*, 52(5), 749-770. <u>https://doi.org/10.1177/0095399719852897</u>

²³ Thompson, S. M., & Kent, J. L. (2017). Human Health and a Sustainable Built Environment. Encyclopedia of Sustainable Technologies, 2, 71-80. <u>http://dx.doi.org/10.1016/B978-0-12-409548-9.10178-2</u>

²⁴ Zanbar, L. (2020). Sense of Belonging and Commitment as Mediators of the Effect of Community Features on Active Involvement in the Community. *City & Community*, 19(3), 617-637. <u>https://doi.org/10.1111/cico.12420</u>

²⁵ Horak, M., & Vanhooren, S. (2024). Somebody to Lean On: Community Ties, Social Exchange, and Practical Help during the COVID-19 Pandemic. *City & Community*, 23(1), 3-25. <u>https://doi.org/10.1177/15356841231159370</u>

as a community. The coherence of a social unit, that is a community, includes the capacity to act, a shared social reality, and a relatively stable culture and identity.²⁶

Construction ecosystem covers contractors for building and infrastructure projects, construction product manufacturers, engineering and architectural services, urban planners, construction workers, engineers as well as other relevant actors and economic activities (e.g., rental and leasing of machinery and equipment, employment agencies)²⁷ involved in the design, construction, maintenance, refurbishment, and demolition of buildings and infrastructure. ²⁸²⁹

Green gentrification is defined as new or intensified urban socio-spatial inequities produced by urban greening agendas and interventions, such as greenways, parks, community gardens, ecological corridors, or green infrastructure.³⁰ While urban greening has diverse climate, health, and socio-economic benefits, it can under certain circumstances also contribute to green gentrification processes and thus to new social, racial, and health inequalities that eventually undermine climate equity and justice.³¹

Green transition is a concept of moving from a carbon-based economy to a more sustainable economy while transforming environmental challenges and climate related difficulties into prosperous opportunities that benefit everyone in society. The green transition fosters welfare and well-being through a new sustainable economic model, while ensuring socioeconomic systems remain within ecological planetary boundaries.

Inclusive is a core value of the NEB that revolves around the essential idea of granting and securing equal access to opportunities and resources for all and encouraging exchanges across cultures, genders and ages. The basic ambition addresses the physical, social and economic inclusion of all members of the society which also includes affordability for all and accessibility. The second level targets the broader concept of social justice, to be achieved not only by specific, temporary solutions at project level but through institutional setups, governance and business models, and structural safeguards. The third and highest level of ambition refers to fundamentally equitable societal models based on solidarity and cooperation. A part of these ideas and ambitions is directly linked to the physical characteristics of the built environment.

²⁶ Whitham, M. M. (2019). Community Entitativity and Civic Engagement. *City & Community, 18*(3), 896-914. <u>https://doi.org/10.1111/cico.12385</u>

²⁷ European Commission Annual Single Market Report (2021) (<u>https://commission.europa.eu/system/files/2021-05/swd-annual-single-market-report-2021 en.pdf</u>)

²⁸ Adner, R. (2017). Ecosystem as Structure: An Actionable Construct for Strategy. Journal of Management, 43(1), 39-58. <u>https://doi.org/10.1177/0149206316678451</u>

²⁹ Vigren, O. (2023). Ecosystems in construction management and urban development: a comprehensive review of conceptualizations and contributions. *Construction Management and Economics*, 42(2), 162– 181. https://doi.org/10.1080/01446193.2023.2247496

³⁰ Anguelovski, I., Connolly, J. J., Garcia-Lamarca, M., Cole, H., & Pearsall, H. (2019). New scholarly pathways on green gentrification: What does the urban 'green turn' mean and where is it going? Progress in Human Geography, 43(6), 1064-1086. <u>https://doi.org/10.1177/0309132518803799</u>

³¹ Anguelovski, I., Connolly, J.J.T., Cole, H. *et al.* Green gentrification in European and North American cities. *Nat Commun***13**, 3816 (2022).

Indigenous knowledge focuses on the plurality of ways of knowing the environment and explores the importance of understanding how knowledge production is tied to place and culture.³² Indigenous knowledge is locally developed over centuries and has been transmitted orally from generation to generation. Indigenous knowledge systems are fundamentally important to indigenous identity, culture, languages, heritage, and livelihoods.³³ Some issues of indigenous knowledge, such as a more-than-human approach, continue to intersect with questions about the authority of science and its representations of nature, about the politics of science and technology as interpreted by institutions and policymakers at all levels, and about the role of technology and development in the forging of a more equitable world.³⁴

Multi-level engagement refers to the implementation of an effective exchange between peers and others who operate on a different scale or level of governance, bridging the local, regional, federal, European and global dimension.

Nature-based solutions are inspired and supported by nature. They are cost-effective, simultaneously provide environmental, social and economic benefits and help improving building's resilience and climate adaptability. Implementing nature-based solutions such as green infrastructure, water-efficient landscaping, and erosion control will enhance soil, thus ecosystem stability, which will bring more and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.³⁵

NEB thematic axes³⁶ link the initiative to the people and their interests, needs and motivations in order to foster dialogue, collaboration, creativity, bringing together different disciplines and different stakeholders. The first axis is about reconnecting with nature and going beyond a human-centred to a life-centred perspective. This reflects widespread awareness and willingness to address climate change (mitigation and adaptation) and to reduce exposure to pollution. In this context, education and culture play a key role in the shift of paradigm towards new behaviours and values. The second axis is about regaining a sense of belonging and magnifying and linking collective and private experiences and building bridges between people. This path ranges from intergenerational solidarity over cultural heritage to proximity economy. The third axis is about prioritising the places and people that need it the most and ensuring that beauty and sustainability are affordable and accessible to all. Exclusion, segregation, or poverty are real threats in many built environments, which the NEB must encounter and help to overcome. The fourth axis is about the need for long-term, lifecycle thinking in the industrial ecosystem and tackling unsustainable use of resources, including obsolete buildings or infrastructures, and waste. NEB projects promote a thorough

³² Doolittle, A. A. (2010). The Politics of Indigeneity: Indigenous Strategies for Inclusion in Climate Change Negotiations. *Conservation and Society*, 8(4), 286–291. <u>http://www.jstor.org/stable/26393018</u>

³³ Malapane, O. L., Chanza, N., & Musakwa, W. (2024). Transmission of indigenous knowledge systems under changing landscapes within the vhavenda community, South Africa. *Environmental Science & Policy*, *161*, 1-9. <u>https://doi.org/10.1016/j.envsci.2024.103861</u>

³⁴ Philip, K. S. (2015). Indigenous Knowledge: Science and Technology Studies. In J. D. Wright (ed.), *International Encyclopedia of the Social & Behavioral Sciences* (2nd ed., pp. 779-783). Elsevier. <u>https://doi.org/10.1016/B978-0-08-097086-8.85012-6</u>

³⁵ <u>https://research-and-innovation.ec.europa.eu/research-area/environment/nature-based-solutions_en</u>

³⁶ For more detailed information, see the <u>NEB Compass</u> and the <u>NEB Investment Guidelines</u>.

circular economy mindset and address these challenges in terms of design, materials, technologies, processes and behaviours.

NEB core values: The commitment and the support of innovative solutions are rooted in the three intertwined NEB values **sustainable**, **inclusive** and **beautiful**³⁷. See their respective entries in this glossary.

NEB working principles are an addition to the three NEB core values. They describe the process through which a project should operate and work to achieve the highest level of ambition in the three core values. A NEB project should embrace three working principles: **participatory process, multi-level engagement** and **transdisciplinary approach**³⁸. See their respective entries in this glossary.

Neighbourhoods are understood as comprehensive residential systems in rural, peri-urban or urban areas with mixed functions. A neighbourhood ideally includes public and private functions and infrastructures such as education institutions (e.g. kindergartens, primary schools), cultural facilities, community centres, youth centres, retirement homes, post offices, banks, stores, parks, and workplaces. Neighbourhoods are where people live, socialise and find services to meet a substantial part of their daily needs. In contrast to communities, which are social units, neighbourhood refers to a physical unit where one can address local-level challenges pr through planning initiatives. For the purpose of the NEB Facility implementation, a neighbourhood will be understood as an area that either has a maximum of 25 km² or a maximum of 10,000 inhabitants. A neighbourhood should also be part of or represent the lowest level of a public administration or elected body such as a quarter, borough or district.

Participatory process consists of concrete steps and activities that are an integral part of a project's preparation and operation. Participatory processes ensure that stakeholders have a voice in projects that affect them in addressing transformational change. Participatory processes require a careful implementation in order to ensure that they are genuinely inclusive and impactful. Successful participatory processes strengthen social cohesion and foster a sense of co-ownership and co-responsibility.

Regenerative design aims to actively restore, revitalise and enhance ecosystems and create sustainable, thriving environments for local communities and nature.³⁹ It is based on a holistic worldview that sees humans and economies as an integral part of nature. It is about sustaining qualitative growth for the well-being of all life on Earth in cooperation with nature. Applied to the built environment and following regenerative design criteria,⁴⁰ regenerative design

³⁷ For more detailed information, see the <u>NEB Compass</u> and the <u>NEB Investment Guidelines</u>.

³⁸ For more detailed information, see the <u>NEB Compass</u> and the <u>NEB Investment Guidelines</u>.

³⁹ Tainter, J. A. (2012). Regenerative design in science and society. *Building Research & Information*, 40(3), 369–372. <u>https://doi.org/10.1080/09613218.2012.671998</u>

⁴⁰ European Commission: Directorate-General for Research and Innovation, Schellnhuber, H., Widera, B., Kutnar, A., Organschi, A., Hafner, A., Hillebrandt, A., Murphy, O., & Nakicenovic, N. (2022). *Horizon Europe and new European Bauhaus NEXUS report : conclusions of the High-Level Workshop on Research and Innovation for the New European Bauhaus', jointly organised by DG Research and*

offers pathways to develop construction and renovation methods and designs that go beyond conventional approaches. Regenerative designs will contribute to long-term ecosystem resilience and improved soil quality in urban and rural NEB neighbourhoods, creating a more harmonious coexistence between the built environment and nature, while saving and sustainably producing resources and making the built environment more resilient, sustainable, inclusive and beautiful.⁴¹

Social fabric is knitted through interactions between people and within communities (see the entry for *Community*). It is crucial for a sense of belonging. The interplay between economic and social factors drives the improvement or deterioration of the social fabric of a place. Therefore, social fabric requires actions to take place at local or community level, rather than regional or national level.⁴²

Social infrastructure refers to the institutional and spatial frameworks that support collective civic life, including community facilities and public spaces that foster social interaction, community development, and social cohesion.

Social sciences and humanities (SSH) conduct broader research on societies and the members and their interactions within societies. The sustainable societal impacts sought by policy makers often depend on the contributions of SSH researchers working in multi- and/or interdisciplinary scientific collaborations. SSH encompasses a broad range of disciplines such as sociology, economics, political sciences, anthropology, ethnology, philosophy, linguistics, psychology, communication sciences, law, the arts, history and more.⁴³ Within the scientific field, SSH will play an important role in the R&I component of the NEB Facility to emphasise the holistic nature of the initiative.

Street furniture refers to functional and beautiful objects and installations placed in common spaces (see the respective entry in this glossary), to support various activities and improve the quality of the public environment. Examples include benches, bus shelters, sun or rain shelters, trash bins, plant trough or signage but also small-scale energy infrastructure. Overall, elements of street furniture enhance functionality, comfort, inclusiveness and aesthetics in outdoor spaces.⁴⁴

Sufficiency is a set of policy measures and daily practices which avoid the demand for energy, materials, land, water, and other natural resources, while delivering wellbeing for all

Innovation and the Joint Research Centre, Publications Office of the European Union. https://data.europa.eu/doi/10.2777/49925

⁴¹ Arup (2020, February 6). Arup Explores Regenerative design [Report]. Arup.

⁴² Tanner, W., O'Shaughnessy, J., Krasniqi, F., & Blagden, J. (2020). *The State of our Social Fabric: Measuring the changing nature of community over time and geography* [online]. London: Onward. Available at: <u>https://www.ukonward.com/wp-content/uploads/2020/09/The-State-of-our-Social-Fabric.pdf</u>

⁴³ European Commission: Directorate-General for Research and Innovation. (2023). *Integration of social sciences and humanities in Horizon 2020 : participants, budgets and disciplines 2014 - 2020 : final monitoring report*. Publications Office of the European Union. https://data.europa.eu/doi/10.2777/075642

⁴⁴ Gehl, J. (2010). *Cities for People*. Island Press.; Lynch, K. (1975). *The Image of the City*. MIT Press.

within planetary boundaries.⁴⁵ Sufficiency measures applied to the built environment are designed to optimise the use of existing buildings, limiting their under-occupation rates and leading to the reduction of demand for new built floor space and, thereby, to the reduction of resource and land consumption and environmental impact by the built environment.⁴⁶ Applied to neighbourhoods, sufficiency measures should also be understood in terms of a high mix of functions, aiming to reduce the need for car trips or long-distance travel. This means ensuring that children can attend schools within or close to their neighbourhood, providing a certain number of jobs, and incorporating functions that meet the daily needs of residents (e.g. 15min-city approach).

Sustainable is a core value of the NEB. In alignment with the European GreenComp framework, sustainability is about prioritising the needs of all life forms and of the planet by ensuring that human activity does not exceed planetary boundaries⁴⁷ which define a safe operating space for humanity based on the intrinsic biophysical processes that regulate the stability of the Earth system.⁴⁸ Particularly, construction methods and materials that are resource-efficient and avoid damaging local soils, while using bio-fabricated materials or recycled components, minimizing waste and reducing the need for extracting raw resources, should be encouraged. The basic sustainability ambition is concerned with conventional features like the ability to preserve or prolong usability, and the next level considers the entire system of a project. The highest ambition is to regenerate and reconnect to nature (see additionally the entry for *regenerative design*).

Transdisciplinary approaches aim for higher integration of formal and informal knowledge and go beyond technical disciplines while addressing in particular social, artistic and design expertise. They should ground scientific expertise in society by drawing on the knowledge of non-academics, the public and public administrations. This contributes to the construction of knowledge and solution of social problems that go beyond disciplinary boundaries and provide a systemic, global and integrated perspective.⁴⁹ Within the scientific field, the social sciences and humanities (SSH) will play an important role in the R&I component of the NEB Facility to emphasise the holistic nature of the initiative.

⁴⁵ <u>https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf</u> (p. 31)

⁴⁶ See also:

⁴⁷ Bianchi, G., Pisiotis, U., & Cabrera Giraldez, M. (2022). *GreenComp. The European sustainability competence framework* (Y. Punie and M. Bacigalupo, Eds.). Publications Office of the European Union. <u>https://doi.org/10.2760/13286</u>

⁴⁸ Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Bigggs, R., Carpenter, S. R., de Vries, W., de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). Planetary Boundaries: Guiding human development on a changing planet. *Science*, *347*(6223). <u>https://doi.org/10.1126/science.1259855</u>

⁴⁹ Darbellay, F. (2015). Rethinking inter- and transdisciplinarity: Undisciplined knowledge and the emergence of a new thought style. *Futures*, 65, 163-174. <u>http://dx.doi.org/10.1016/j.futures.2014.10.009</u>

Calls

Call - A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods

HORIZON-NEB-2025-01

Overview of this call⁵⁰

Proposals are invited against the following Destinations and topic(s):

Topics	Type of Action	Budgets (EUR million) 2025	Expected EU contribution per project (EUR million) ⁵¹	Indicative number of projects expected to be funded
Opening: 06 Deadline(s): 1				
Destination - Connecting the green transformation			and local demo	cracy
HORIZON-NEB-2025-01-PARTICIPATION- 01: The impact of common space on neighbourhood communities	RIA	10.50	Around 3.50	3
HORIZON-NEB-2025-01-PARTICIPATION- 02: Fostering and maintaining the social fabric for the green transition in neighbourhoods	RIA	9.00	Around 3.00	3
HORIZON-NEB-2025-01-PARTICIPATION- 03: Beautiful, sustainable and inclusive street furniture for the transformation of neighbourhoods	IA	10.40	Around 5.20	2
HORIZON-NEB-2025-01-PARTICIPATION- 04: Network of neighbourhoods for innovative	CSA	2.50	Around 2.50	1

⁵⁰ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

All deadlines are at 17.00.00 Brussels local time.

The Director-General responsible may delay the deadline(s) by up to two months.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2025.

⁵¹ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

policies on gentrification				
Destination - Circular and regenerative approach	es for the	e built envi	ronment	
HORIZON-NEB-2025-01-REGEN-01: Applying regenerative design to the built environment in neighbourhoods	IA	16.00	Around 8.00	2
HORIZON-NEB-2025-01-REGEN-02: Bio- fabricated materials for sustainable and beautiful construction	RIA	10.00	Around 5.00	2
HORIZON-NEB-2025-01-REGEN-03: Sufficiency measures in the built environment	RIA	8.00	Around 4.00	2
HORIZON-NEB-2025-01-REGEN-04: Innovative approaches for sustainable, inclusive and beautiful social and affordable housing	IA	16.00	Around 8.00	2
Destination - Innovative funding and new I neighbourhoods	business	models fo	or the transfo	rmation of
HORIZON-NEB-2025-01-BUSINESS-01: Renovating the built environment through design for adaptability and disassembly.	IA	12.00	Around 6.00	2
HORIZON-NEB-2025-01-BUSINESS-02: Bottom-up social entrepreneurship for the co- creation of neighbourhoods in line with the New European Bauhaus	IA	12.00	Around 4.00	3
HORIZON-NEB-2025-01-BUSINESS-03: Reverse local construction supply chains for the beautiful re-assembly of reclaimed construction products	RIA	12.00	Around 4.00	3
Overall indicative budget		118.40		
General conditions relating to this call				
Admissibility conditions	The cor Annex A		re described	in General
<i>Eligibility conditions</i> The conditions are described in Generation Annex B.			in General	
<i>Financial and operational capacity and</i> The criteria are described in General Anne				

exclusion	C
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Destinations

Destination - Connecting the green transformation, social inclusion and local democracy

To make the green transition happen, social fairness needs to be at its heart. Inhabitants have to have the opportunity to influence the green transition and feel ownership of the measures to reach climate neutrality and circularity⁵², zero pollution and restore biodiversity. It is also important to better anticipate and manage climate-related risks across society, and to interact with inhabitants to build new concepts. All of this requires a closer understanding of people and how they experience their everyday lives. A recent Eurobarometer demonstrates that 88% of EU citizens think that the green transition should be fair and leave no one behind. Yet only 46% of Europeans are confident that by 2050 sustainable⁵³ energy, products and services will be affordable for everyone, including poorer people⁵⁴.

Vulnerable and marginalised groups are often more exposed to climate risks and pollution and affected by adverse impacts (e.g. health, energy poverty), while being least responsible and having lower capacity to adapt. The inclusion⁵⁵ of different types of ownership (e.g. private, social, retirement, student housing, etc.) as well as various building typologies (e.g. high-rise buildings, slab blocks, villa blocks, terraced houses, etc.) in the planning of new neighbourhoods ⁵⁶ or the transformation of existing ones can also facilitate a quicker integration of marginalized and vulnerable groups - particularly younger generations, which should have equal opportunities and conditions for education regardless of their background - and fosters higher social intelligence among privileged groups.

In Work Programme 2025, this Destination contributes to the following expected impacts set out on the Horizon Europe Strategic Plan 2025-2027:

- 8. Realising the full potential of cultural heritage, arts, and cultural and creative sectors
- 10. Boosting inclusive growth and reducing vulnerabilities effectively
- 31. Sustainably developing rural, urban and coastal areas.
- 32. Developing innovative governance models and tools enabling sustainability and resilience.

This Destination seeks to reinforce ownership and a sense of belonging through more active, engaged and inclusive communities⁵⁷ in neighbourhoods for the sustainable, inclusive, and

⁵² See definition in the Glossary section of the NEB part of the HE WP25.

⁵³ See definition in the Glossary section of the NEB part of the HE WP25.

⁵⁴ Fairness perceptions of the green transition - October 2022 - - Eurobarometer survey (europa.eu)

⁵⁵ See definition in the Glossary section of the NEB part of the HE WP25.

⁵⁶ See definition in the Glossary section of the NEB part of the HE WP25.

⁵⁷ See definition in the Glossary section of the NEB part of the HE WP25.

beautiful⁵⁸ transformation of neighbourhoods along the values⁵⁹ and principles⁶⁰ of the New European Bauhaus. This Destination will pay particular attention to the inclusion of different sociodemographic groups – such as families, women, children, youth, and older adults as well as vulnerable groups, including LGBTIQA+, people with physical and psychological functional variations, homeless, migrants and refugees, minorities, etc. – in design, creation and decision-making processes that affect them and the built environment⁶¹ they live in.

Cultural participation, cultural heritage, cultural and linguistic diversity, and the inclusion of indigenous⁶² and marginalised forms of knowledge can help enable this by offering a broader menu of interpretations and therefore different ways of making sense and assigning meaning to surroundings. The Destination will also foster social and ecological co-benefits to enable environmentally friendly, healthy and inclusive behaviours, and beautiful and environmentally friendly, healthy, inclusive environments.

More specifically, this Destination aims to:

- Understand how individual and collective mind-sets, habits and behaviours can change into more sustainable and inclusive ones in urban, peri-urban, and rural areas and how to promote interconnections between these diverse realities, turning the limitations and constraints stemming from the green and digital transitions into economic, cultural and social opportunities.
- Further explore the transformative potential of participatory practices and governance models (at local, national and regional levels), notably how culture, the arts and creative industry as well as the socio-cultural work sector can enhance transformation processes for the green transition, help address vulnerability and social equity concerns, and contribute to social inclusion, democracy, and sense of belonging in communities.

Proposals are invited against the following topic(s):

HORIZON-NEB-2025-01-PARTICIPATION-01: The impact of common space on neighbourhood communities

Call: A research agenda for a beautiful, inclusive and sustainable	e transformation of
neighbourhoods	
Specific conditions	

Expected EU
contribution perThe Commission estimates that an EU contribution of around EUR 3.50
million would allow these outcomes to be addressed appropriately.

⁵⁸ See definition in the Glossary section of the NEB part of the HE WP25.

⁵⁹ See the definitions of 'beautiful', 'inclusive' and 'sustainable' in the Glossary section of the NEB part of the HE WP25.

⁶⁰ See the definitions of 'multi-level engagnement', 'participatory process' and 'transdisciplinary approaches' in the Glossary section of the NEB part of the HE WP25.

⁶¹ See definition in the Glossary section of the NEB part of the HE WP25.

⁶² See definition in the Glossary section of the NEB part of the HE WP25.

project	Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 10.50 million.
Type of Action	Research and Innovation Actions
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ⁶³ .

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- Better understanding of the effects of the design, aesthetics and other features of common spaces⁶⁴ on inhabitants' behaviour (including e.g. their social interactions and recognition, civic participation, use of spaces and buildings), health, sense of belonging, diversity and inclusion, security, resilience, and opportunities to produce social, cultural and local economic value.
- Enhanced capacities of relevant stakeholders to integrate insights in policies, strategies, plans and measures for the regeneration of common spaces in neighbourhoods⁶⁵.

Scope:

One of the core NEB values⁶⁶ is inclusion⁶⁷. The regeneration of common spaces can facilitate inclusiveness and social interaction in neighbourhoods by providing a safe, accessible, and attractive environment. Attractive, well-designed, well-maintained, and secure common spaces can bring people together for commercial, cultural, and leisure activities. A safe environment can also create a sense of trust and community⁶⁸ among inhabitants. Recognising a neighbourhood's diversity "not only improves social and spatial cohesion but also

⁶³ This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: <u>https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-</u> <u>decision he en.pdf</u>

⁶⁴ See definition in the Glossary section of the NEB part of the HE WP25.

⁶⁵ See definition in the Glossary section of the NEB part of the HE WP25.

⁶⁶ See definition in the Glossary section of the NEB part of the HE WP25.

⁶⁷ See definition in the Glossary section of the NEB part of the HE WP25.

⁶⁸ See definition in the Glossary section of the NEB part of the HE WP25.

contributes to democratic, peaceful coexistence⁶⁹". Social, economic, and cultural services and amenities that reflect this diversity and allow for people to come together and interact, can have a particular impact on inclusion and can lead to new forms of collaboration, solidarity and social recognition.

Better knowledge of how common spaces affect social relations is required to scale up successful common space initiatives across Europe. This topic seeks to produce insights on the impacts of common spaces (new, redesigned or redeveloped) on neighbourhoods and their communities.

Proposals are expected to address all of the following:

- Study a range of common space projects in at least three EU Member States or Associated Countries, collecting data and drawing on evidence, to better understand:
 - o The medium and long-term impacts of common spaces on community cohesion, social interactions, active civic participation, resilience, diversity, as well as sense of security and belonging. This includes identifying if and to what extent these impacts vary in neighbourhoods with different characteristics, for example, in terms of social infrastructure, economy, housing ownership patterns, services, etc.
 - o How the design and maintenance of common spaces (including the process, for example relying on participatory approaches), the degradation of the bordering built environment, and the preservation of cultural heritage, influences the above identified effects of common space.
 - o How the integration of the three core NEB values in the design of common spaces impacts the above identified effects of common space.
 - o How the different groups of people (such as women, children, youth, older adults, people with disabilities, underrepresented, vulnerable and marginalised groups, LGBTIQA+) make use of and experience common spaces.
 - o How variations in the use of common spaces in different periods of the year influence community cohesion, social interactions, and civic participation.
- Based on the research evidence, provide recommendations for public administrations and other stakeholders involved in the regeneration of common spaces in neighbourhoods.

Proposals are expected to follow a participatory and transdisciplinary approach⁷⁰ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, cultural institutions, etc.) and disciplines (such as architecture or design, arts, (civil) engineering).

⁶⁹ Report of the EU Member State Expert Group 2021 Towards a shared culture of architecture investing in a high-quality living environment for everyone.

⁷⁰ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25

This topic requires the effective contribution of social sciences and humanities⁷¹ (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-PARTICIPATION-02: Fostering and maintaining the social fabric for the green transition in neighbourhoods

Call: A research a neighbourhoods	genda for a beautiful, inclusive and sustainable transformation of
Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 9.00 million.
Type of Action	Research and Innovation Actions
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ⁷² .

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

• Better evidence is made available to public authorities and not-for-profit organisations of the conditions under which cultural participation may reinforce the social fabric and

⁷¹ See definition in the Glossary section of the NEB part of the HE WP25

⁷² This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: <u>https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/lsdecision_he_en.pdf</u>

civic engagement in neighbourhoods and contribute to the green transition in neighbourhoods⁷³.

- Improved understanding of the role of cultural and creative sectors in contributing to participatory decision-making processes, community engagement strategies and activities for the green transition in neighbourhoods.
- Improved methods and strategies to increase neighbourhood inhabitants' sense of belonging as well as their collective engagement and ownership (and that of other stakeholders) in the green transition of neighbourhoods.

Scope:

Social connections and cultural participation are core features of individual well-being. Evidence shows a strong association between participation in cultural activities and civic behaviour (such as voting and volunteering), empathy, tolerance, security and social cohesion⁷⁴. Conversely, low interpersonal trust, heightened risk-taking, and disengaged civic attitudes are correlated with an increased sense of loneliness⁷⁵ – the lack of meaningful social interactions. Cultural organisations and artistic practices with a social purpose or dimension can help to better connect people, strengthen social fabric⁷⁶, and overcome social boundaries.

This topic aims to study the interplay between cultural participation, social connections and civic engagement. The resulting insights can be used to foster and maintain the social fabric of neighbourhoods and support their green transition while addressing other challenges such as the decline in social connections⁷⁷.

Proposals are expected to address all of the following:

- Study the conditions under which cultural participation may reinforce the social fabric and civic engagement in neighbourhoods and contribute to the green transition:
 - Review existing evidence and collect relevant data in a systematic, comparable way (at least in relation to some territories or dimensions) and identifying trends, gaps and correlations.
 - Explore the wider benefits of cultural participation for individuals and communities (including those feeling left behind, all risk groups vulnerable and/or marginalised, etc.). Where possible, establish correlations, causal links, detailed descriptions, etc., depending on the proposed methodology.

⁷³ See definition in the Glossary section of the NEB part of the HE WP25.

⁷⁴ New report: participation in cultural activities strengthens democracy and social cohesion | Culture and Creativity (europa.eu)

⁷⁵ https://publications.jrc.ec.europa.eu/repository/bitstream/JRC136823/JRC136823_01.pdf

⁷⁶ See definition in the Glossary section of the NEB part of the HE WP25.

⁷⁷ Robert D. Putnam described in his book Bowling Alone: The Collapse and Revival of American Community (2000) the decline in face-to-face social interactions in America, arguing that this weakens active civic engagement, which is strongly connected to democracy.

- o Provide a comprehensive analysis of relevant variables, such as socio-demographic characteristics, context-specific aspects, the presence (or absence) of meeting spaces / social infrastructure, digital literacy, local innovation capacity, polarisation, wellbeing and mental health, safety and crime, loneliness, etc.
- Propose at least three methods or strategies to foster and maintain the social fabric of neighbourhoods and support their green transition. These strategies, approaches or methodologies have to be guided by evidence. They are demonstrated and monitored in at least three neighbourhoods in different Member States or Associated Countries to analyse their effectiveness and their potential for sustained effects in time, in particular as regards community and civic engagement (in particular of the most marginalised and underrepresented).
- Based on the research evidence, propose recommendations for public authorities and not-for-profit organisations on how to facilitate cultural participation, including the skills, competencies and partnerships needed for their implementation.

Proposals are expected to follow a participatory and transdisciplinary approach⁷⁸ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, cultural operators, etc.) and disciplines.

This topic requires the effective contribution of social sciences and humanities⁷⁹ (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-PARTICIPATION-03: Beautiful, sustainable and inclusive street furniture for the transformation of neighbourhoods

Call: A research	agenda fo	or a	beautiful,	inclusive a	nd	sustainable	transformation	of
neighbourhoods								

Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 5.20 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 10.40 million.

 ⁷⁸ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25
⁷⁹ See definition in the Glossary section of the NEB part of the HE WP25.

Type of Action	Innovation Actions
Legal and financial set-up of the Grant	The rules are described in General Annex G. The following exceptions apply:
Agreements	Beneficiaries may provide financial support to third parties and can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 100 000 to allow for the prototyping and demonstration of the innovative designs.

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- Improved integration of public authorities (for compliance with regulations, strategies, etc.), social actors as well as the arts, especially cultural and creative sectors and industries (including local crafters and manufacturers), into the design and development of innovative street furniture⁸⁰.
- Better evidence on the uses of street furniture and the role of the co-creation in the design of street furniture informs procurement processes to improve quality of experience, safety, security⁸¹, sustainability⁸², resilience to the impact of climate change⁸³ and inclusiveness in neighbourhoods through street furniture.

Scope:

Infrastructural decay, unequal access to essential public amenities (e.g., seating elements, facilities for people with disabilities such as ramps and lifts, etc.) and safety concerns (e.g., related to insufficient lighting or hazardous spatial conditions) represent just some of the challenges that especially older and poorer European neighbourhoods face.

The design of street furniture in neighbourhoods can have a positive impact on people's lives by enhancing comfort, safety, well-being, health, and accessibility. It can also foster social interaction, cohesion, a sense of belonging, cultural identity and community⁸⁴, respect for common spaces⁸⁵, etc.⁸⁶

Furthermore, the attention to aesthetic values in the design of street furniture can contribute to local economies by attracting new visitors (e.g. developing creative tourism) and supporting

⁸⁰ See definition in the Glossary section of the NEB part of the HE WP25.

⁸¹ Action Plan to support the protection of public spaces, COM/2017/0612

⁸² See definition in the Glossary section of the NEB part of the HE WP25.

⁸³ See definition in the Glossary section of the NEB part of the HE WP25

⁸⁴ See definition in the Glossary section of the NEB part of the HE WP25.

⁸⁵ See definition in the Glossary section of the NEB part of the HE WP25.

 ⁸⁶ A discussed in several studies, such as: Mehta, V. (2014). Evaluating Public Space. Journal of Urban Design, 19(1), 53-88; Cozens, P. M., & Love, T. (2015). A Review and Current Status of Crime Prevention through Environmental Design (CPTED). Journal of Planning Literature, 30(4), 393-412; Gehl, J. (2011). Life Between Buildings: Using Public Space; Carmona, M. (2019). Principles for Public Space Design, Planning to Do Better. Urban Design International, 24(1), 47-59; Whyte, W. H. (1980). The Social Life of Small Urban Spaces.

local businesses, cultural and creative sectors and industries, and social economy entities and enterprises.

More prototyping and demonstration are essential to speed up the integration of innovative street furniture, that offer more attractive, sustainable, and inclusive design solutions for common spaces, following the values and principles of the New European Bauhaus⁸⁷.

Proposals are expected to address all of the following:

- Develop and demonstrate innovative designs for sets of street furniture which:
 - Contribute to a functional common space throughout the year that includes relevant features such as resilience to vandalism and weather, protection from the effects of climate change, consideration of local specificities (such as coastal areas), and low maintenance cost.
 - o Improve the environmental performance of street furniture and, where relevant, integrate nature-based solutions⁸⁸, and sustainable, secondary (bio-based), recycled or upcycled materials as well as a digital dimension.
 - o Strengthen the aesthetic and cultural integrity of the history of the common space and the neighbourhoods.
 - o Meet the needs of different population groups throughout time (through modular and adaptive designs, and considering age, gender, mobility, etc.) by improving comfort, safety, accessibility, social interaction and well-being.
- Apply participatory methods while co-designing and prototyping innovative street furniture.
- Based on the research insights, produce recommendations to inform procurement processes for street furniture.

To achieve this, project consortia may provide financial support to SMEs, education or research institutions, and other relevant actors (such as not-for profit entities) in the form of Financial Support to Third Parties (FSTP). Given the type of action and its level of ambition, the amount to be granted to each third party may be a maximum of EUR 100 000 to allow for the prototyping and demonstration of the innovative designs.

Proposals are expected to follow a participatory and transdisciplinary approach through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, actors from the cultural and creative sectors) and disciplines (such as architecture or design, arts and crafts, (civil) engineering, health).

⁸⁷ See definitions for NEB values and NEB working principles in the Glossary section of the NEB part of the HE WP25.

⁸⁸ See definition in the Glossary section of the NEB part of the HE WP25

This topic requires the effective contribution of social sciences and humanities⁸⁹ (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-PARTICIPATION-04: Network of neighbourhoods for innovative policies on gentrification

Call: A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods		
Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 2.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 2.50 million.	
Type of Action	Coordination and Support Actions	
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ⁹⁰ .	

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

⁸⁹ See definition in the Glossary section of the NEB part of the HE WP25.

⁹⁰ This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: <u>https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/lsdecision_he_en.pdf</u>

- Increased use of policies to mitigate the negative consequences of gentrification and enhance its positive impacts (e.g. revitalization, sustainable economic growth, diversity and integration) in urban, peri-urban, and rural neighbourhoods⁹¹.
- Increased capacity of local policymakers to anticipate and mitigate the negative consequences of gentrification when designing and implementing policies in alignment with the New European Bauhaus.
- Empowered local communities⁹² engaging in decision-making processes to mitigate the negative consequences of gentrification due to the regeneration of neighbourhoods.

Scope:

Strategies and interventions to regenerate neighbourhoods may lead to gentrification, a process that can bring revitalization, sustainable economic growth, diversity and integration but also segregation, insecurity, exclusion, displacement, loss of cultural identity, and socio-economic inequality. Mitigating the negative consequences of gentrification cannot be achieved without policy innovation.

This topic supports informal networking among neighbourhoods to exchange knowledge and experiences, build their capacity, facilitate innovation in policymaking to mitigate the negative consequences of gentrification – including green gentrification⁹³ – that may result from interventions aligned with the New European Bauhaus.

Proposals are expected to address all of the following:

- Create a bottom-up network of neighbourhoods with a (potential) risk of gentrification, to facilitate peer exchange among all relevant stakeholders. Proposals should aim for the participation of at least 15 neighbourhoods located in urban, peri-urban and rural areas from different Member States and Associated Countries.
- Map neighbourhoods' needs, challenges, trends and opportunities to inform policies and interventions that mitigate the negative consequences of gentrification and of integrating the New European Bauhaus values and principles⁹⁴.
- Identify, document, and disseminate current knowledge, evidence, policy design, tools, and best practices for tackling gentrification and translate the results into useful tools that address the identified needs, challenges and opportunities.
- Support local decision makers in better understanding:
 - o The main drivers of gentrification (such as overtourism, interim use and short term rental markets).

⁹¹ See definition in the Glossary section of the NEB part of the HE WP25.

⁹² See definition in the Glossary section of the NEB part of the HE WP25

⁹³ See definition in the Glossary section of the NEB part of the HE WP25.

⁹⁴ See definitions of NEB values and NEB working principles in the Glossary section of the NEB part of the HE WP25.

- o The effect of housing market speculation, rental agreements and (lack of) housing policies (e.g. fiscal measures, funding instruments, legislative measures) on gentrification.
- o The effects of gentrification on different socio-demographic groups, as well as on local identities and cultural heritage.
- o The interplay between urban, peri-urban and rural gentrification.
- Address the issue of gentrification in the participating neighbourhoods through at least one of the following actions:
 - o Develop or revise local policies (such as those on social/economic/urban development, housing, planning, mobility, green transition) to mitigate the negative consequences of gentrification.
 - o Develop neighbourhood regeneration strategies that include measures to mitigate the negative consequences of gentrification.

Proposals are expected to follow a participatory and transdisciplinary approach⁹⁵ through the integration of different actors (such as local or regional public authorities, local actors from the targeted neighbourhoods, civil society, private owners, cultural institutions, etc.) and disciplines (such as architecture, urban design, design, arts, (civil) engineering).

This topic requires the effective contribution of social sciences and humanities⁹⁶ (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

⁹⁵ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25 See definition in the Glossary section of the NEP part of the HE WP25

⁶ See definition in the Glossary section of the NEB part of the HE WP25.

Destination - Circular and regenerative approaches for the built environment

The development of a circular and regenerative European construction ecosystem⁹⁷ is key to support the sustainable competitiveness of the sector, and to achieve our climate, environmental and social ambitions. This implies more sustainable materials but also better use and re-purposing of existing buildings. However, this cannot be achieved without ensuring that people understand, accept and support the necessary transformations.

Although considerable research efforts are underway on this matter, there remain significant gaps. Innovation spreads slowly in the construction ecosystem in the context of construction materials, methods and approaches. For instance, renovations are still not correctly targeted, too expensive, too slow, and often of insufficient quality, resulting in renovation rates that are too low; buildings are inefficiently used and undermine people's well-being; a lack of awareness of sustainable⁹⁸, circular and innovative approaches amongst the different actors of the construction ecosystem; and a market that remains very attached to low costs in the short-term.

In Work Programme 2025, this Destination contributes to the following expected impacts set out in the Horizon Europe Strategic Plan 2025-2027:

- 2. Living and working in a health-promoting environment
- 15. Achieving global leadership in climate-neutral, circular and digitised industrial and digital value chains
- 28. Putting biodiversity on a path to recovery, and protecting and restoring ecosystems and their services
- 31. Sustainably developing rural, urban and coastal areas

The Destination aims to address certain gaps and make the construction ecosystem more sustainable, resilient, circular and regenerative, while also ensuring it is inclusive⁹⁹, accessible and contributes to the health and wellbeing of all living beings. The Destination aims to deliver on this objective by:

• Making buildings, building elements, construction materials and products more sustainable, adaptable, multi-purpose, durable and re-usable, increase their recycling rate and expand their lifespan, leading to a more circular construction ecosystem and a more efficient use of resources. This will contribute to limiting the extraction of new materials and waste generation in the construction ecosystem, thus strengthening the EU's strategic autonomy and contributing to the European Green Deal's objectives, the EU's Zero-Pollution vision for 2050, the new Circular Economy Action Plan, and intergenerational justice. Concepts and solutions that serve the above-mentioned

⁹⁷ See definition in the Glossary section of the NEB part of the HE WP25.

⁹⁸ See definition in the Glossary section of the NEB part of the HE WP25.

⁹⁹ See definition in the Glossary section of the NEB part of the HE WP25.

objectives such as, among others, sufficiency¹⁰⁰, regenerative design¹⁰¹, nature-based solutions¹⁰² or circular bio-fabricated materials¹⁰³ should be explored.

- Improving the climate adaptability¹⁰⁴ and resilience of private or public buildings and common spaces¹⁰⁵ through, for instance, regenerative designs and nature-based solutions that contribute to longevity, resource and energy efficiency, natural ecosystem restoration and overall climate resilience in the face of the environmental evolution.
- Collecting, processing and using data and making use of technologies such as Artificial intelligence (AI) in combination with Building Information Modelling (BIM) and digital fabrication to significantly reduce costs, optimise resource utilisation, and enhance efficiency of renovation and construction processes and make construction and renovation more sustainable, circular, regenerative, affordable and culturally sensitive.
- Ensuring that the solutions developed are user-centred and place-based, connect with local cultural identity, historical knowledge and cultural heritage, and answer the needs of and are accepted by people on the ground including minorities, vulnerable and underrepresented groups -, strengthening the sense of belonging and societal resilience.

This Destination considers neighbourhoods¹⁰⁶ in urban, peri-urban or rural environments.

Proposals are invited against the following topic(s):

HORIZON-NEB-2025-01-REGEN-01: Applying regenerative design to the built environment in neighbourhoods

Call: A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods Specific conditions		
Indicative budget	The total indicative budget for the topic is EUR 16.00 million.	
Type of Action	Innovation Actions	

¹⁰⁰ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁰¹ See definition in the Glossary section of the NEB part of the HE WP25. See definition in the Glossary section of the NEB part of the HE WP25.

¹⁰² See definition in the Glossary section of the NEB part of the HE WP25. See definition in the Glossary section of the NEB part of the HE WP25.

¹⁰³ See definition in the Glossary section of the NEB part of the HE WP25.

 ¹⁰⁴ See EU-level technical guidance on adapting buildings to climate change. Best practice guidance, March 2023 (<u>https://build-up.ec.europa.eu/en/resources-and-tools/publications/best-practice-guidance-buildings-adaptability-climate-change</u>).

¹⁰⁵ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁰⁶ See definition in the Glossary section of the NEB part of the HE WP25.

Technology Readiness Level	Activities are expected to achieve TRL 6-8 by the end of the project – see General Annex B. Activities may start at any TRL.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 60 000.

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- Tested and proven principles of regenerative design¹⁰⁷ in the design, construction and renovation of the built environment¹⁰⁸ are available to the actors from the construction ecosystem¹⁰⁹.
- Improved tools and technologies enable actors from the construction ecosystem to apply regenerative design to the built environment.
- The application of regenerative design to the built environment in neighbourhoods¹¹⁰ contributes to the regeneration of natural ecosystems and biodiversity while benefiting human health and well-being.

Scope:

Regenerative design ¹¹¹ aims to actively restore, revitalise and enhance ecosystems, contributing to both human and planetary health, in line also with the 'One Health' approach ¹¹². Regenerative design thus contributes to creating sustainable ¹¹³, thriving environments for local communities and ecosystems. This involves principles such as circularity, waste reduction, resource and energy efficiency, promoting biodiversity, and the use of carbon-storing materials.

Regenerative design offers pathways to develop construction and renovation methods and designs that go beyond conventional approaches. However, the potential and application of regenerative design in the built environment is still under-explored due to the novelty of the

¹⁰⁷ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁰⁸ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁰⁹ See definition in the Glossary section of the NEB part of the HE WP25.

¹¹⁰ See definition in the Glossary section of the NEB part of the HE WP25.

¹¹¹ See definition in the Glossary section of the NEB part of the HE WP25.

¹¹² Regenerative design and development: current theory and practice (https://www.tandfonline.com/doi/epdf/10.1080/09613218.2012.617516?needAccess=true); https://www.cdc.gov/one-health/about/index.html#:~:text=One%20Health%20is%20a%20collaborative,plants%2C%20and%20th eir%20shared%20environment.

¹¹³ See definition in the Glossary section of the NEB part of the HE WP25.

solutions, the complexity of inter-related factors, the limited understanding of their impacts, and insufficient knowledge exchange and technology transfer.

Proposals are expected to address all of the following:

- Analyse in depth the success factors, challenges, and impacts of at least 10 existing examples of regenerative designs applied to constructed or renovated buildings. Measure the restoration of the environment as well as sustainability performance of the building, using existing sustainable building assessment methods such as <u>Level(s)</u>, <u>the Living</u> <u>Community Challenge</u> and other third-party certification schemes or emerging methodologies such as the Carbon Removal and Carbon Farming (CRCF) in buildings certification. The selected buildings are expected to:
 - o Be located in contexts as diverse as possible (geographical, environmental, climate, social or economic).
 - o Generate renewable energy to meet the buildings' energy demand. The buildings can also employ, but are not limited to: nature-based solutions¹¹⁴; water collection, purification and reuse; water efficiency methods; building solutions achieving cleaner air; carbon-storing architecture and design; medium and long-term energy storage (e.g. using phase-change materials).
 - o Have used collaborative, inclusive approaches to engage local communities and inhabitants.
 - o Have overcome legislative and regulatory barriers, if any, thanks to active collaboration with different levels of government and public authorities.
- Develop and demonstrate at least one innovative solution (tool or technology) that facilitate the application of regenerative design to the built environment. The solution(s) is (are) expected to transform the construction and renovation processes at all stages, by adopting a lifecycle perspective, encouraging the use of natural resources, materials, products, processes and by considering the impact on people and nature. Proposers should reflect on the role of local/indigenous crafts and knowledge¹¹⁵ in the construction and renovation processes.
- Demonstrate the innovative solution(s) in at least three neighbourhoods from urban, periurban and rural areas located in at least three Member States or Associated Countries.

The topic includes the possibility to provide financial support to third parties to provide direct support for the development and implementation of the demonstrator. A maximum of EUR 60 000 per third party might be granted.

¹¹⁴ See definition in the Glossary section of the NEB part of the HE WP25.

¹¹⁵ See definition in the Glossary section of the NEB part of the HE WP25.

Proposals are expected to follow a participatory and transdisciplinary approach¹¹⁶ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, etc.) and disciplines (such as architecture, urban design, design, arts, (civil) engineering, health, etc.).

This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-REGEN-02: Bio-fabricated materials for sustainable and beautiful construction

Call: A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods

Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 10.00 million.	
Type of Action	Research and Innovation Actions	
Technology Readiness Level	Activities are expected to achieve TRL 5 by the end of the project – see General Annex B. Activities may start at any TRL.	

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- Bio-fabricated construction materials¹¹⁷ and their beneficial properties are better known and accepted by construction ecosystem¹¹⁸ professionals.
- Innovative, sustainably sourced, beautiful¹¹⁹ bio-fabricated construction materials can be produced at mass-scale at competitive costs.

¹¹⁶ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25

¹¹⁷ See definition in the Glossary section of the NEB part of the HE WP25.

¹¹⁸ See definition in the Glossary section of the NEB part of the HE WP25.

¹¹⁹ See definition in the Glossary section of the NEB part of the HE WP25.

Scope:

Along with the current paradigm shift towards a sustainable¹²⁰ and circular bioeconomy and the use of circular design principles in the built environment, new materials and innovative technologies are emerging to help reach zero-waste goals and the lowest environmental impact. Bio-fabricated materials open new avenues for reaching higher ambitions in terms of sustainability, especially if associated with high-technological solutions that can accelerate and simplify their manufacturing, retrofitting and renewal.

Bio-fabricated materials and their potential as an alternative to conventional materials are still underexplored. The widespread integration of bio-fabricated materials in the built environment ¹²¹ faces several barriers, from technical and regulatory hurdles to high production costs, limited knowledge and expertise among construction professionals, and low acceptance by the construction ecosystem. Bio-fabricated materials and their potential as an alternative to conventional materials are underexplored.

Research is required to investigate new ways to address the main technical challenges of biofabricated materials.

- Develop and test at least two innovative sustainable bio-fabricated construction materials that:
 - o Have innovative features compared to current materials on the market (such as, but not limited to, the capacity to self-repair, to adapt to an evolving environment, to store carbon or act as a carbon sink, to heat and/or cool buildings, extended lifespan, etc.).
 - o Can be used for interior, exterior or structural purposes.
 - o Comply with relevant EU standards and regulatory frameworks.
- For each material developed:
 - o Assess its properties, benefits, as well as design and construction applications. This should cover at least the structural, mechanical, thermal, acoustic, health-related, durability and aesthetic properties and take into consideration the variations within a changing environment (e.g. weather conditions).
 - o Study the feasibility for mass-scale production to increase production volumes and affordability. This should consider the use of high-technological manufacturing techniques and processes (such as 3D printing, robotics, building information modelling (BIM), parametric design, high-performance sensor, artificial intelligence (AI), etc.).

¹²⁰ See definition in the Glossary section of the NEB part of the HE WP25.

¹²¹ See definition in the Glossary section of the NEB part of the HE WP25.

- o Analyse the environmental footprint of the bio-fabricated materials following a life cycle assessment (LCA) approach to validate their contribution to the reduction of the whole life carbon emissions in the built environment.
- o Analyse the social and economic impacts throughout the material's whole life cycle, for example using social life-cycle assessment (SLCA) and life-cycle costing (LCC) approaches.

Proposals are expected to follow a participatory and transdisciplinary approach¹²² through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, etc.) and disciplines (such as architecture or design, arts, (civil) engineering, etc.).Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-REGEN-03: Sufficiency measures in the built environment

neighbourhoods	
Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 8.00 million.
Type of Action	Research and Innovation Actions
Technology Readiness Level	Activities are expected to achieve TRL 5 by the end of the project – see General Annex B. Activities may start at any TRL.

Call: A research agenda for a beautiful, inclusive and sustainable transformation of

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

• Vacant and under-utilised spaces in buildings and other physical spaces in the built environment¹²³ are easier to map, enabling better informed and effective decisionmaking in the built environment.

¹²² See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25. 123

See definition in the Glossary section of the NEB part of the HE WP25.

- Sufficiency measures¹²⁴, their non-technical barriers as well as their environmental, economic and social impacts are better understood by the built environment professionals such as real estate actors, urban planners or designers.
- Validated sufficiency measures, integrating circular economy¹²⁵ principles, lead to an absolute reduction in demand of the built environment for energy, raw materials, land, water, floor space, and other resources; while extending the lifecycle of spaces, buildings, and infrastructures.

Scope:

Sufficiency is a set of policy measures and practices which reduce the demand for energy, materials, land, water, and other natural resources, while delivering well-being for all within planetary boundaries¹²⁶. It represents an integrated approach to sustainability and circularity, acknowledging and balancing the interplay of decarbonisation and equity¹²⁷.

In the built environment, floor space is considered as a resource. Sufficiency measures seek to optimise the use of existing (vacant and under-utilised) spaces, buildings, and infrastructures¹²⁸. These measures lead to an absolute reduction in demand for new-built floor space¹²⁹, reducing resource consumption, embodied and operational carbon emissions, and other environmental impacts in the built environment¹³⁰. By alleviating strain on land resources, sufficiency measures can help address social issues, such as housing shortages, and reduce infrastructure costs for municipalities.

The potential of sufficiency measures in the built environment is yet under-explored due to data constraints, limited understanding of their impacts, and insufficient knowledge exchange.

- Test and validate an approach to map and quantify vacant and under-utilised spaces with high sufficiency potential in the built environment.
- Test and validate at least two sufficiency measures that optimise, repurpose, or expand the use and functionality of space. Proposals are expected to test the proposed

¹²⁴ This is unlike efficiency where resource reduction is relative to any output.

¹²⁵ See definition in the Glossary section of the NEB part of the HE WP25.

¹²⁶ Intergovernmental Panel on Climate Change (IPCC) 2022

¹²⁷ European Commission: Directorate-General for Environment, Le Den, X., Steinmann, J., Kovacs, A., Kockat, J. et al., *Supporting the development of a roadmap for the reduction of whole life carbon of buildings – Final technical report*, Publications Office of the European Union, 2024, <u>https://data.europa.eu/doi/10.2779/849252</u>

¹²⁸ According to Eurostat, 38% of buildings in the EU (28) are underoccupied, with a rate higher than 60% in 4, and higher than 50% in 7 Member States. (Eurostat (2018) <u>Overcrowded and under-occupied</u> <u>dwellings - Products Eurostat News - Eurostat (europa.eu)</u>)

¹²⁹ Unlike efficiency, the resource reduction achieved through sufficiency is absolute and not relative to any output.

¹³⁰ Muench, S., Stoermer, E., Jensen, K., Asikainen, T., Salvi, M. and Scapolo, F., Towards a green and digital future, EUR 31075 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-52451-9, doi:10.2760/977331, JRC129319.

sufficiency measures in at least three neighbourhoods¹³¹ in urban, peri-urban and rural areas located in at least three Member States or Associated Countries.

- Quantify the potential for the proposed sufficiency measures to contribute to an absolute reduction in demand for floor space and resources (including, as a minimum, energy, raw materials, land, and water) in the built environment.
- Propose and validate solutions to overcome non-technical barriers in the built environment towards sufficiency measures (e.g. regulatory barriers or acceptance).

Proposals are expected to follow a participatory and transdisciplinary approach¹³² through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, etc.) and disciplines (such as architecture or design, arts, (civil) engineering, etc.).

This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-REGEN-04: Innovative approaches for sustainable, inclusive and beautiful social and affordable housing

Call: A research age neighbourhoods	enda for a beautiful, inclusive and sustainable transformation of
Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 8.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 16.00 million.
Type of Action	Innovation Actions
Technology Readiness Level	Activities are expected to achieve TRL 6-8 by the end of the project – see General Annex B. Activities may start at any TRL.
Legal and financial	The rules are described in General Annex G. The following

¹³¹ See definition in the Glossary section of the NEB part of the HE WP25.

¹³² See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25.

set-up of the Grant	exceptions apply:
Agreements	Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants.
	The maximum amount to be granted to each third party is EUR 60 000.

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- Reduced costs for both the construction and renovation of social and affordable housing¹³³ without sacrificing quality.
- Increased availability and affordability of quality housing for diverse and vulnerable populations across Europe.
- Significantly reduced energy consumption, carbon emissions, and resource use in social and affordable housing as well as improved climate adaptability and resilience to climate change of social and affordable housing.
- Higher awareness of the construction ecosystem ¹³⁴ and the real estate sector of innovative approaches that increase affordability and sustainability of housing.

Scope:

An increasing number of new building technologies and construction methods became available on the market in recent years that can make construction and renovation more sustainable¹³⁹. Current policies and regulations set ambitious standards (e.g., in terms of energy efficiency and carbon footprint), which come with higher initial investment costs, making the provision of sustainable, high-quality social and affordable housing in many European neighbourhoods a challenge.

Innovative approaches are necessary to make the best use of available building technologies and construction methods to improve climate adaptability and resilience and reduce energy consumption, carbon emissions and resource use in social and affordable housing while delivering housing that is affordable, inclusive¹⁴³ and improves well-being, in line with the European Commission's Affordable Housing Initiative¹⁴⁴.

Proposals are expected to address all of the following:

• Develop innovative approaches for the construction of new buildings and the renovation or retrofitting of existing buildings in the social and affordable housing sector. These innovative approaches must relate to how construction and renovation services are defined, procured, delivered, financed and/or managed.

This topic also considers social care homes, elderly houses, and other form of inclusive housing with residential function complemented with social welfare as forms of social and affordable housing.
See definition in the Glossary section of the NEB part of the HE WP25.

- Define and implement in two social and affordable housing projects two ambitious packages of measures that comprise building technologies and construction methods already on the market. One package of measures must be applied to a new construction and the other to a building renovation or retrofitting. They will address all of the following:
 - o Use existing building technologies and construction methods that improve the efficiency and speed of construction and renovation or retrofitting (such as off-site construction, modular building systems, smart meters, big data analysis, sensors, and predictive maintenance).
 - o Use environmentally sustainable practices, such as nature-based solutions¹³⁵ or carbon-storing materials to reduce energy consumption, carbon footprint, pollution, and resource use throughout the building's life cycle while also possibly increasing buildings' resilience and adaptability to natural, including climate change-induced, and human-made hazards.
 - o Ensure that social and affordable housing is aesthetically pleasing and contributes positively to the landscape of the place where it is located, while also respecting local context and the architectural heritage.
 - o Improve the well-being, inclusion and general living conditions of all inhabitants.
 - o For renovations or retrofitting only: minimise and mitigate, where possible, disruptions for residents and improve accessibility of buildings.

Social care homes, elderly houses, and other forms of inclusive housing with residential function complemented with social welfare are also considered as eligible for development and testing of cross-cutting innovative solutions developed by the projects.

To achieve this, project consortia may provide financial support to SMEs and social housing actors in the form of Financial Support to Third Parties (FSTP). The amount to be granted to each third party may be a maximum of EUR 60 000.

Proposals are expected to follow a participatory and transdisciplinary approach¹³⁶ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, etc.) and disciplines (such as architecture or design, arts, (civil) engineering, health, etc.).

This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

¹³⁵ See definition in the Glossary section of the NEB part of the HE WP25.

¹³⁶ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP255.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

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Destination - Innovative funding and new business models for the transformation of neighbourhoods

The built environment¹³⁷ faces diverse challenges that hinder its transition towards greater sustainability¹³⁸, circularity¹³⁹, and social inclusion¹⁴⁰. It has traditionally been resistant to change due to established norms, practices, and a conservative mindset, especially regarding the renovation of existing buildings and infrastructures. For the built environment to change and adapt, appropriate market conditions and business demand and incentives must be in place.

New business models can disrupt the status quo by providing a framework to rethink how renovation projects are designed, planned, and executed and how they contribute to shaping and re-shaping neighbourhood¹⁴¹ structures and spaces and support initiatives such as the EU Renovation Wave¹⁴². Demonstrating their economic, environmental, societal, and cultural feasibility and benefits can drive the built environment and other related ecosystems (e.g. financial, insurance, social economy) towards circular and sustainable practices that are resilient to natural, including climate change-induced, and human-made hazards. At the same time, new business models can promote new values such as affordability, inclusion, diversity, functionality, and beauty¹⁴³.

Developing new business models and coupling them with innovative funding mechanisms is crucial to encourage the uptake of new practices and approaches that do not only ensure costeffectiveness and efficiency but align with and contribute to larger societal goals and values, driving positive cultural, social, and environmental change in the built environment and enhancing the ecosystem's long-term sustainability and competitiveness.

In Work Programme 2025, this Destination contributes to the following expected impacts set out in the Horizon Europe Strategic Plan 2025-2027:

- 8. Realising the full potential of cultural heritage, arts, and cultural and creative sectors
- 9. Strengthening social and economic resilience and sustainability
- 15. Achieving global leadership in climate-neutral, circular and digitized industrial and digital value chains

Proposals for topics under this Destination should set out a credible pathway to contributing to innovative funding and new business models for the transformation of neighbourhoods, and more specifically to one or several of the following impacts:

¹³⁷ See definition in the Glossary section of the NEB part of the HE WP25.

¹³⁸ See definition in the Glossary section of the NEB part of the HE WP25.

¹³⁹ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁴⁰ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁴¹ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁴² Additional information at: https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficientbuildings/renovation-wave_en

¹⁴³ See definition in the Glossary section of the NEB part of the HE WP25.

- Innovative supply chains and new incipient business models in the built environment are based on circular economy¹⁴⁴ principles, life cycle thinking, and sustainable practices and are economically attractive. They reclaim, reuse, and re-assemble construction products at local and regional scales, reducing resource consumption, waste and litter generation, environmental footprint, and reliance on resource-intensive, linear practices.
- Innovative processes, methods, and techniques for the renovation of buildings and infrastructures leverage design innovation, creativity, cultural heritage, economies of scale, and cost-effective technologies. They are economically attractive and affordable and contribute to the high-quality, sustainable, inclusive, and resilient revitalisation of neighbourhoods in urban, peri-urban and rural environments.
- Public authorities, investors, construction developers, inhabitants and community ¹⁴⁵ groups, and other relevant neighbourhood and built environment stakeholders overcome perceived barriers and risks (e.g. market demand, consumer preferences, and price sensitivity) associated with renovation projects in line with the New European Bauhaus. Incentives, including financial rewards, regulatory advantages, and positive public perception are in place and contribute to the wider adoption of innovative funding and new business models for the sustainable, inclusive and beautiful revitalisation of neighbourhoods.
- Inhabitants and other neighbourhood stakeholders, including marginalised and vulnerable groups, engage in public decision-making, co-create their neighbourhoods in response to local needs and specificities, and benefit from increased well-being and living conditions.
- Increased investment in neighbourhood transformation projects in line with the New European Bauhaus. Projects generate and investors receive returns beyond financial capital, including environmental, aesthetic, social, and cultural value.

This Destination considers neighbourhoods in urban, peri-urban, and rural environments.

Proposals are invited against the following topic(s):

HORIZON-NEB-2025-01-BUSINESS-01: Renovating the built environment through design for adaptability and disassembly.

Call: A research agenda	for a bea	utiful, inclusive	and sustain	nable transformation	of
neighbourhoods					

Specific conditions	
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Expected EU	The Commission estimates that an EU contribution of around EUR 6.00
contribution per	million would allow these outcomes to be addressed appropriately.

¹⁴⁴ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁴⁵ See definition in the Glossary section of the NEB part of the HE WP25.

project	Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 12.00 million.
Type of Action	Innovation Actions
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ¹⁴⁶ .

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- More sustainable¹⁴⁷ and inclusive¹⁴⁸ renovation of existing buildings and common spaces and/or infrastructures based on design for adaptability and disassembly.
- Processes, methods, and/or techniques are available for the modular adaptation and repurposing of existing buildings, common spaces, and infrastructures, drawing on historical knowledge and assessments of their past and present condition and functions to inform renovation strategies.
- Public authorities, investors, construction project owners, developers, architects, designers, and SSH actors have access to evidence of the economic, environmental, social, cultural, financial, and regulatory impacts and understand the business case for design for adaptability and disassembly-based renovation processes, methods, and/or techniques compared to conventional renovations.

Scope:

Design for adaptability and disassembly is a concept for the design of buildings, common spaces¹⁴⁹, and infrastructures integrating circular economy¹⁵⁰ principles for greater economic, environmental and social sustainability. It presents significant potential for the renovation of

¹⁴⁶ This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: <u>https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-</u> <u>decision he en.pdf</u>

¹⁴⁷ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁴⁸ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁴⁹ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁵⁰ See definition in the Glossary section of the NEB part of the HE WP25.

the built environment by allowing for easy adaptation of spaces and structures to changing needs and uses or technological advancements.

Renovating with modular components and elements that can be dis- and re-assembled and thereby repurposed across different applications further supports the long-term use, adaptation, and repurposing of buildings, common spaces, and infrastructures. This maximises their economic value (by retaining the embedded value of construction materials, components, and elements), improves their environmental performance (by reducing waste and the extraction of new raw materials and resources), and avoids their demolition as well as the construction of new structures.

The application of design for adaptability and disassembly has focused on new constructions. However, most structures and spaces in urban, peri-urban and rural areas have already been built and require adaptation and repurposing for new and updated uses and functions. Therefore, research should address design for adaptability and disassembly for the renovation of existing buildings, common spaces, and infrastructures.

- Develop at least two renovation processes, methods, and/or techniques based on design for adaptability and disassembly that enable the future adaptation and repurposing of buildings, common spaces, and infrastructures with minimal usage disruption.
- Demonstrate the developed solutions in at least two pilots in at least two Member States or Associated Countries. At least one of the pilots must target a building and at least one of the pilots must target a common space and/or an infrastructure.
- Assess the barriers (including economic, environmental, cultural, social (including related to human capital and skills), and regulatory) to the market uptake of the developed solutions compared to conventional renovation processes, methods, and techniques, and propose solutions to overcome them.
- Quantify, wherever feasible, the environmental (including whole life carbon assessments, carbon pricing, energy efficiency ¹⁵¹, ecosystem services), economic (including reduced resource consumption costs), social (including the response to changing neighbourhood ¹⁵² needs), cultural (including the regeneration of cultural meanings and heritage in neighbourhoods), financial and regulatory impacts of the processes, methods, and techniques, while considering the specificities of the local context.
- Use and build on indicators provided in the European framework for sustainable buildings 'Level(s)'¹⁵³.

¹⁵¹ Using tools or frameworks such as the <u>Energy Performance of Buildings Directive</u>.

¹⁵² See definition in the Glossary section of the NEB part of the HE WP25.

¹⁵³ For additional information: https://environment.ec.europa.eu/topics/circular-economy/levels_en

Proposals are expected to follow a participatory and transdisciplinary approach¹⁵⁴ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, construction project owners, developers, investors, etc.) and disciplines (such as architecture or design, (civil) engineering, etc.).

This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-BUSINESS-02: Bottom-up social entrepreneurship for the cocreation of neighbourhoods in line with the New European Bauhaus

Call: A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods		
Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 12.00 million.	
Type of Action	Innovation Actions	
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ¹⁵⁵ .	

Expected Outcome:

¹⁵⁴ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25. 155 This decision is available on the Funding and Tenders Portal, in the reference documents section for under 'Simplified Horizon costs decisions' through this link: Europe, or https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/lsdecision he en.pdf

Project results are expected to contribute to all of the following expected outcomes:

- New scientific evidence of how bottom-up social entrepreneurship shapes and contributes to the co-creation of neighbourhoods in line with the values of the New European Bauhaus¹⁵⁶.
- Inhabitants (including marginalised and vulnerable groups) and civil society actors share knowledge and experiences and have the capacity to cooperate and engage in bottom-up social entrepreneurship.
- Bottom-up social entrepreneurship increases inhabitants' quality of life and well-being, fosters social cohesion, and creates new economic impulses and employment opportunities in neighbourhoods.

Scope:

Bottom-up social entrepreneurship¹⁵⁷ can act as a key driver of sustainable¹⁵⁸ and inclusive¹⁵⁹ neighbourhood co-creation in line with the values of the New European Bauhaus. Bottom-up social entrepreneurship leverages local expertise to tackle local social and environmental challenges. It can generate local economic value, create new and inclusive employment opportunities, leverage cultural and creative industries, and address the segregation of different community and civil society groups, including marginalised and vulnerable inhabitants.

Research is required on the various aspects of using bottom-up social entrepreneurship for the co-creation of neighbourhoods.

- Deliver at least 3 bottom-up social entrepreneurship pilots in at least 3 Member States or Associated Countries to explore how bottom-up social entrepreneurship can shape and contribute to the co-creation of neighbourhoods in line with the values of the New European Bauhaus¹⁶⁰.
- Analyse for each pilot the local social, cultural, economic, financial, regulatory, and legal barriers and drivers and how they can shape the market uptake and competitiveness of bottom-up social enterprises and initiatives.
- Assess for each pilot the business case and the potential for bottom-up social entrepreneurship to create impact and attract (impact) investment opportunities.

¹⁵⁶ See definitions in the Glossary section of the NEB part of the HE WP25.

¹⁵⁷ Social entrepreneurship encompasses different formats and types of organisations such as small businesses, collectively owned companies, cooperatives, civil society and community-building initiatives, neighbourhood associations, grassroots initiatives, community land-trusts, etc.

See definition in the Glossary section of the NEB part of the HE WP25.
See definition in the Glossary section of the NEB part of the HE WP25

See definition in the Glossary section of the NEB part of the HE WP25.
See definition in the Glossary section of the NEB part of the HE WP25

¹⁶⁰ See definition in the Glossary section of the NEB part of the HE WP25.

- Demonstrate how cooperations between inhabitants and civil society actors can foster the exchange of knowledge and experiences and build their capacity to engage in bottom-up social entrepreneurship. These cooperations should take into consideration place-based specificities and be grounded in strong public-private partnerships including grassroots neighbourhoods associations, public authorities, local businesses, and the social economy, etc.
- Demonstrate how bottom-up social entrepreneurship can increase the quality of life and well-being of inhabitants, strengthen social cohesion, and foster a shared sense of belonging in neighbourhoods.
- Assess how the above may impact future co-creation and decision-making in the development of neighbourhoods in line with the New European Bauhaus.

Proposals are expected to follow a participatory and transdisciplinary approach¹⁶¹ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, including from the social economy and civil society, investors etc.) and disciplines (such as architecture or design, arts, business, economics, finance, etc.).

This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

HORIZON-NEB-2025-01-BUSINESS-03: Reverse local construction supply chains for the beautiful re-assembly of reclaimed construction products

Call: A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods		
Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 12.00 million.	
Type of Action	Research and Innovation Actions	
Legal and financial	The rules are described in General Annex G. The following exceptions	

See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25.

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set-up of the Grant	apply:
Agreements	Eligible costs will take the form of a lump sum as defined in the
	Decision of 7 July 2021 authorising the use of lump sum contributions
	under the Horizon Europe Programme – the Framework Programme for
	Research and Innovation (2021-2027) - and in actions under the
	Research and Training Programme of the European Atomic Energy
	Community (2021-2025) ¹⁶² .

Expected Outcome:

Project results are expected to contribute to all of the following expected outcomes:

- Innovative approaches, methods, and techniques for the safe and sustainable¹⁶³ reassembly of construction products in ways that increase the aesthetic and cultural value of the built environment in line with the New European Bauhaus.
- Increased re-assembly of construction products at neighbourhood¹⁶⁴, local, and regional level.
- New scientific evidence on the social, cultural, economic, and environmental (including reduced resource consumption, reduced waste and litter generation, including microplastic pollution, and carbon storage¹⁶⁵) benefits, on new business opportunities and models, and on value and revenue streams for the beautiful re-assembly of reclaimed construction products at neighbourhood, local, and regional level.

Scope:

The move towards increased renovation and the greater reuse of construction products in the built environment¹⁶⁶ has created a growing interest in new business models and approaches centred on modularity, adaptability, disassembly, and sufficiency¹⁶⁷. Whereas significant research and practice has focused on the disassembly, collection, sorting, and re-processing of construction products, less attention has been directed so far to their later re-assembly.

The re-assembly stage is key for the re-integration of increasing quantities of reclaimed¹⁶⁸ construction products into new applications. Concurrently, the endeavour to transform the

¹⁶² This <u>decision</u> is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: <u>https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-</u> <u>decision_he_en.pdf</u>

¹⁶³ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁶⁴ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁶⁵ Considering tools such as Carbon Removals and Carbon Farming (CRCF) certification for buildings.

¹⁶⁶ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁶⁷ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁶⁸ Reclaimed construction products are understood to include secondary ones that are auxiliary to the primary structural construction components, such as insulation, cladding, tiles, nails, bolts, decorative elements, etc.

built environment along the New European Bauhaus values¹⁶⁹ of sustainability, inclusion, and beauty creates opportunities to re-think how to re-assemble reclaimed construction products safely and creatively in ways that increase the aesthetic and cultural value of buildings and infrastructures, enhancing inhabitants' well-being and living conditions.

The re-assembly of safe and sustainable reclaimed construction products requires solid knowledge of their historical uses and characteristics as well as traceability of their condition and displacement. Digital tools and technologies such as Digital Product Passports and reverse construction supply chains¹⁷⁰, following the circular economy's¹⁷¹ cascading principle for bio-based materials¹⁷² and 10R-Strategies (refuse, reduce, resell/reuse, repair, refurbish, remanufacture, repurpose, recycle, recover, re-mine)¹⁷³ for non-biobased materials, are key for the effective management, movement and reuse of safe reclaimed construction products.

Local reverse construction supply chains that re-circulate safe construction products as locally as possible have the potential to maximise economic value and resource utilisation, reduce waste, pollution, energy use, procurement costs, and the environmental footprint of construction and renovation activities, and foster creativity and innovation towards greater circularity and the regeneration of social and cultural meanings in the built environment.

Proposals are expected to address all of the following:

- Explore at least one innovative approach, method, or technique to re-assemble construction products in ways that increase their embedded economic and environmental value and the aesthetic value of buildings and building ensembles by exploring existing aesthetic and cultural standards in the built environment.
- The proposed innovative solution(s) should consider the reassembled construction products' environmental footprint and the availability of reclaimed construction materials and components at neighbourhood, local or regional level. Proposals should build, where possible, on existing circular construction product pooling networks and platforms, construction logistics hubs as well as informal markets for reused construction products.
- Validate how the proposed innovative solution(s) create new value, revenue streams and business opportunities, building, wherever possible, upon existing research on related business models in the field.

Proposals are expected to follow a participatory and transdisciplinary approach¹⁷⁴ through the integration of different actors (such as public authorities, local actors from the targeted neighbourhoods, civil society, private owners, material suppliers, etc.) and disciplines (such

¹⁶⁹ See definition in the Glossary section of the NEB part of the HE WP25.

Additional information at: https://www.sciencedirect.com/science/article/pii/S1877705817360265

¹⁷¹ See definition in the Glossary section of the NEB part of the HE WP25.

¹⁷² See <u>Guidance on cascading use of biomass with selected good practice examples on woody biomass</u>

¹⁷³ See Chapter 3 "Conceptualization of Circular Economy 3.0: Synthesizing the 10R Hierarchy of Value Retention Options" in

¹⁷⁴ See definition on NEB working principles in the Glossary section of the NEB part of the HE WP25.

as architecture, urban design, design, arts, (civil) engineering, economics, finance, business, etc.).

Proposals are expected to dedicate at least 0.2% of their total budget to share their intermediate and final results and findings with the Coordination and Support Action 'New European Bauhaus hub for results and impact' (HORIZON-MISS-2024-NEB-01-03).

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Other actions not subject to calls for proposals

1. Commission expert group for advice on the NEB Facility

Objective and scope:

The members of the Commission expert group for the New European Bauhaus¹⁷⁵ provide advice to support the work of the European Commission in the implementation phase of the research and innovation and roll-out components of the NEB Facility.

The members of the Commission expert group are required to provide advice based on deep knowledge in fields corresponding to the implementation of the NEB Facility such as business, public administration, science, climate change mitigation and adaptation, research and innovation, arts, culture, citizen engagement, and integrated urban development, and expertise in cross-sector/cross-border collaboration, governance, etc. It includes advice on achieving synergies between Horizon Europe and other EU programmes and policy areas as well as with national initiatives.

Considering the advisory role of the expert group, conflict of interest must be prevented and confidentiality must be respected notably when pertaining to work programme and other EU initiatives it will work on and to evaluation aspects.

The expert group provides high-level advice to the Commission of such a nature that, without their input, the implementation the NEB Facility would not achieve the desired large scale and breadth of impact. In light of this, and as highly qualified, specialised, independent experts, it is justified that the members of the expert groups are remunerated for the services they offer pursuant to Article 21 of the Commission's horizontal rules on expert groups ('the horizontal rules')¹⁷⁶.

A special allowance of 450 EUR /day will be paid to the members of the expert group appointed in their personal capacity who act independently and in the public interest. This amount is considered to be proportionate to the specific tasks to be assigned to the experts, including the number of meetings to be attended and possible preparatory work¹⁷⁷.

Form of Funding: Other budget implementation instruments

<u>Type of Action</u>: Expert contract action

Indicative timetable: 2nd Quarter 2025

Indicative budget: EUR 0.28 million from the 2025 budget¹⁷⁸

¹⁷⁵ <u>Register of Commission expert groups and other similar entities (europa.eu)</u>

¹⁷⁶ C(2016) 3301

¹⁷⁷ C(2016) 3301

¹⁷⁸ The contribution from each Cluster to the NEB Facility for the year 2025 is the following: EUR 23 549 608 for Cluster 1, EUR 3 063 844 for Cluster 2, EUR 2 099 596 for Cluster 3, EUR 18 376 009 for Cluster 4, EUR 43 620 527 for Cluster 5 and EUR 27 971 031 for Cluster 6.

Form of Funding: Other budget implementation instruments

Type of Action: Expert contract action

Indicative budget: EUR 0.28 million from the 2025 budget

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Budget¹⁷⁹ 180

	2025 Budget (EUR million)
Calls	
HORIZON-NEB-2025-01	118.40
Other actions	
Expert contract action	0.28
Estimated total budget	118.68

¹⁷⁹ The budget figures given in this table are rounded to two decimal places. The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2025.

¹⁸⁰ The contribution from each Cluster to the New European Bauhaus Facility work programme part for the year 2025 is the following: EUR 23.55 million for Cluster 1, EUR 3.06 million for Cluster 2, EUR 2.10 million for Cluster 3, EUR 18.38 million for Cluster 4, EUR 43.62 million for Cluster 5 and EUR 27.97 million for Cluster 6.