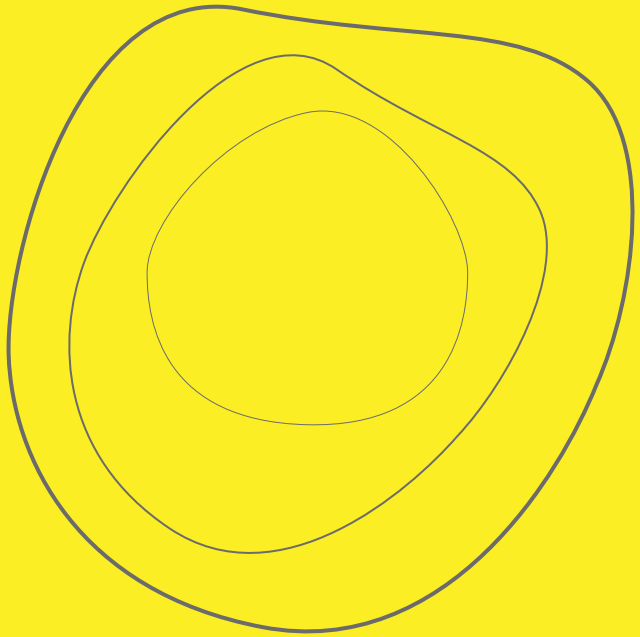

Destination 2

Circular and regenerative approaches for the built environment

New European Bauhaus

Destination 2: Circular and regenerative approaches for the built environment

Topic identifier	Topic title
HORIZON-NEB-2025-01-REGEN-01	Applying regenerative design to the built environment in neighbourhoods
HORIZON-NEB-2025-01-REGEN-02	Bio-fabricated materials for sustainable and beautiful construction
HORIZON-NEB-2025-01-REGEN-03	Sufficiency measures in the built environment
HORIZON-NEB-2025-01-REGEN-04	Innovative approaches for sustainable, inclusive and beautiful social and affordable housing

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

- **Type of action**: Research and innovation action
- **Indicative budget**: €8 million
- **Number of expected projects to be funded**: 2
- **Deadline:** 12 November 2025
- **Technology Readiness Level:** TRL 6-8 by the end of the project
- **Legal and financial set-up:** Financial Support to Third Parties (maximum EUR 60 000 per third party)

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

Expected outcomes

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

Scope

- **In-depth analysis** (success factors, challenges, impacts) of at least 10 existing examples of regenerative designs applied to constructed or renovated buildings.
- **Develop and demonstrate at least one innovative solution** facilitating the application of regenerative design to the built environment.
- Demonstrate the innovative solution(s) in **at least three neighbourhoods.**

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

- **Type of action**: Research and innovation action
- **Indicative budget**: €10 million
- **Number of expected projects to be funded**: 2
- **Deadline:** 12 November 2025
- **Technology Readiness Level:** TRL 5 by the end of the project

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

Expected outcomes

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

Scope

- Develop and test **at least two innovative sustainable bio-fabricated construction materials** that have innovative features, can be used for interior, exterior or structural purposes, and comply with relevant EU standards and regulatory frameworks.
- For each material developed:
    - Assess its **properties, benefits, as well as design and construction applications**;
    - Study the **feasibility for mass-scale production** to increase production volumes and affordability;
    - Analyse its **environmental footprint** through a LCA
    - Analyse the **social and economic impacts** throughout the material's whole life cycle

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

- **Type of action**: Research and innovation action
- **Indicative budget**: €8 million
- **Number of expected projects to be funded**: 2
- **Deadline:** 12 November 2025
- **Technology Readiness Level:** TRL 5 by the end of the project

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

Expected outcomes

- Vacant and under-utilised spaces in buildings and other physical spaces in the built environment are **easier to map**.
- Sufficiency measures , their non-technical barriers as well as their environmental, economic and social impacts are **better understood by the built environment professionals.**
- Validated sufficiency measures lead to an **absolute reduction in demand** of the built environment for resources while **extending the lifecycle** of spaces, buildings, and infrastructures.

Scope

- Test and validate an **approach to map and quantify vacant and under-utilised spaces** with high sufficiency potential.
- **Test and validate** in at least three neighourhoods **at least two sufficiency measures.**
- **Quantify** how much the measures can contribute to an **absolute reduction in demand for floor space and resources** in the built environment.
- Propose and validate solutions to **overcome non-technical barriers**.

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

- **Type of action**: Innovation action
- **Indicative budget**: €16 million (FSTP possible)
- **Number of expected projects to be funded**: 2
- **Deadline:** 12 November 2025
- **Technology Readiness Level:** TRL 6-8 by the end of the project
- **Legal and financial set-up:** Financial Support to Third Parties (maximum EUR 60 000 per third party)

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

Expected outcomes

- **Reduced costs** for the construction and renovation of social and affordable housing.
- **Increased availability and affordability** of quality housing for diverse and vulnerable populations.
- **Reduced resource use and carbon emissions and improved climate adaptability and resilience** of social and affordable housing
- **Higher awareness** of the construction ecosystem and the real estate sector of innovative approaches that increase affordability and sustainability of housing.

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

Scope

- **Develop innovative approaches** for the construction of new buildings and the renovation or retrofitting of existing buildings in the social and affordable housing sector.
- **Define and implement** in two social and affordable housing projects **two ambitious packages of measures** that:
    - Use existing technologies and methods that **improve the efficiency and speed** of construction and renovation or retrofitting;
    - Use **environmentally sustainable** practices;
    - Ensure that social and affordable housing is **aesthetically pleasing**;
    - **Improve the general living conditions** of inhabitants;
    - **Minimise and mitigate disruptions** (when renovating and retrofitting)