



Innovaders accelerating the circular transition through Living Labs

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Living Labs accelerate the circular manufacturing industry

In early 2022, VLAIO launched a call for “Living Labs” with the aim of achieving systemic breakthroughs in the circular manufacturing industry. The initiative focuses not only on research but especially on collaboration across the value chain: companies, knowledge institutions, sector organisations, and public authorities are working together intensively for three years to test and share solutions. This call resulted in 22 Living Labs that received a total of €18.4 million in support. Most projects began in 2023 and will run until the end of 2025.

Innovaders as a driving force

Among these 22 Living Labs, members of Innovaders: the collaborative network of Belgian collective research centres and knowledge institutions, play a prominent role. With their technical expertise and strong industrial roots, they drive impactful experiments that accelerate the circular transition. Below is an overview of the Living Labs in which Innovaders partners are currently

involved.

1. Buildwise

[Buildwise](#) is the collective knowledge centre for the construction sector in Belgium. It supports companies with practical research, technical expertise and digital tools to strengthen innovation, quality and sustainability in construction projects.

A. Living Lab Digital4CircularConstruction

Digitalisation is a major lever for circular construction. This project develops a framework and use cases that enable data exchange, for example through material and building passports.



Buildwise plays a central role by translating theoretical concepts into practical tools and protocols that can be tested by companies and research partners. By making data available in the right way and place, the circular construction sector becomes more efficient and transparent.

[More info](#)

B. Living Lab Circular Concrete

Concrete is the most widely used building material worldwide, but also a major source of CO₂ emissions and resource consumption. This Living Lab aims to accelerate the transition to circular concrete in Flanders. Through collaboration between pioneers and system players, it works on increasing supply and demand, removing technical and non-technical barriers, and strengthening the ecosystem. The goal is to anchor circularity in both the sector and policy frameworks.

Efforts focus on developing tools that build confidence in new technologies, provide designers and contractors with instruments to integrate circular concrete into their projects, and create a digital platform where stakeholders can connect.

[More info](#)



C. VL Living Lab SloopTeams

This project aims to make Flanders a true urban mining region by maximising material recovery during demolition projects. Instead of fragmented processes focused on lowest cost, this Living Lab promotes integrated demolition teams built on trust, dialogue, and circular reuse.



Through demonstration projects and co-creation sessions, new methods are developed and tested. The results include a Knowledge Platform and a Guide for Cooperative Demolition, giving the construction sector concrete tools to implement circular demolition on a large scale.

[More info](#)

D. Living Lab BRUG

Circular innovations often reach construction companies too slowly. BRUG seeks to bring that knowledge to practice faster through new collaboration models and tools. Buildwise contributes by translating research results into applicable techniques and methods. The Living Lab aims to close the gap between innovation and implementation.

[More info](#)



E. Living Lab “From Earth to Worth: Application of Clay Bricks”



Clay bricks are an ecological building material with great circular potential. This Living Lab explores how clay bricks can be more widely applied, technically validated, and commercially scaled up. Buildwise provides expertise and practical case studies. The project aims to offer a feasible alternative to conventional building materials.

[More info](#)

2. Centexbel

[Centexbel](#) is the collective knowledge centre for the textile and plastics processing industry in Belgium. It helps companies innovate through research, testing and advice on materials, recycling, the circular economy and sustainable product development.

A. Living Lab CARPET

This project develops circular business models for the carpet industry, where reuse, repair, and remanufacturing are still rare.



Centexbel supports the development of new processes and material testing. Together with companies, it designs solutions for refurbishing, reusing, and repairing carpets. The result: longer product lifetimes and drastically reduced waste.

[More info](#)

B. Living Lab Textile Understreams

Collected clothing and household textiles unsuitable for reuse form the “understream” of which only 1% is currently recycled into high-value products. This project aims to raise that number significantly and build a sustainable, transparent, and locally anchored approach.

This enables us to prepare textile flows that are no longer suitable for reuse for high-quality recycling. Centexbel analyses and valorises material flows, explores local processing techniques, and searches for new applications. The goal is to avoid waste while developing new circular business cases.

[More info](#)



C. Living Lab Plastics

In Belgium, a large portion of collected plastic waste is still incinerated. This Living Lab seeks to close the plastics loop by making recycling the last resort.



Through ten sub-experiments, it explores how plastics can be circularly designed and applied, and how new value chains can emerge. Each case results in a feasibility analysis for scaling up, with the aim of embedding reuse and repair structurally in the plastics sector.

[More info](#)

3. Sirris

[Sirris](#) is the collective centre of and for the technological industry in Belgium. We help companies accelerate and sustain their innovation, from idea to industrial application, with expertise in digitisation, production, circular economy and new materials.

A. Living Lab Circular Machine Building

The machinery sector faces major challenges in terms of circularity. This Living Lab explores the applicability of new business models such as product-as-a-service and design for reuse and repair.

Sirris provides technological expertise and helps companies experiment with concrete applications, preparing the machinery industry for a future where circularity is the norm.

[More info](#)



B. Living Lab RemanuMaat

In the circular manufacturing industry, social enterprises often play an underused key role. RemanuMaat brings together manufacturing companies, knowledge partners, and social enterprises to develop new collaboration models around Re-use, Re-pair, Re-manufacture, and Re-furbish, collectively referred to as ReX.



By connecting the expertise and flexibility of social enterprises with industrial needs, circular value chains emerge that are both economically viable and socially inclusive. Sirris supports the Living Lab with technological expertise and helps companies test and scale ReX applications so these models can be embedded in industrial practice.

[More info](#)

4. WOOD.BE

[WOOD.BE](#) is the collective knowledge centre for the wood and furniture industry in Belgium. It supports companies with technological expertise, testing, certification and advice to strengthen innovation, safety and sustainability in the sector.

A. Living Lab Circular Wood Cluster Grensland

Wood stores CO₂, and through circular design, cascading, and collaboration, that storage period can be significantly extended. This Living Lab explores how flooring, cladding, decking, and furniture can be made circular based on the 9R strategies.

Within the Grensland business park, experiments are carried out around collaboration on wood residues and recycling, with the goal of scaling up to the entire Flemish wood sector. Companies, research centres, and government work together to achieve high-value reuse and a circular wood ecosystem.

[More info](#)



Stronger together toward a circular manufacturing industry

Thanks to the involvement of Innovaders, the Living Labs above are built on a solid scientific and technological foundation. Their combined knowledge and networks ensure that solutions do not remain confined to single projects but are widely shared and applied

throughout the Flemish manufacturing industry. Running until the end of 2025, these projects contribute to the much-needed circular transition while enhancing the competitiveness of our companies.

Want to learn more about Innovaders? Or are you looking for support with your own innovation journey?

[Contact us](#)

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