

#### LEUVEN CIRCULAR

Design & Development: City of Leuven

Year: 2020

Location: Leuven, Belgium

More info: https://roadmap.leuven2030.be/

Scales: City

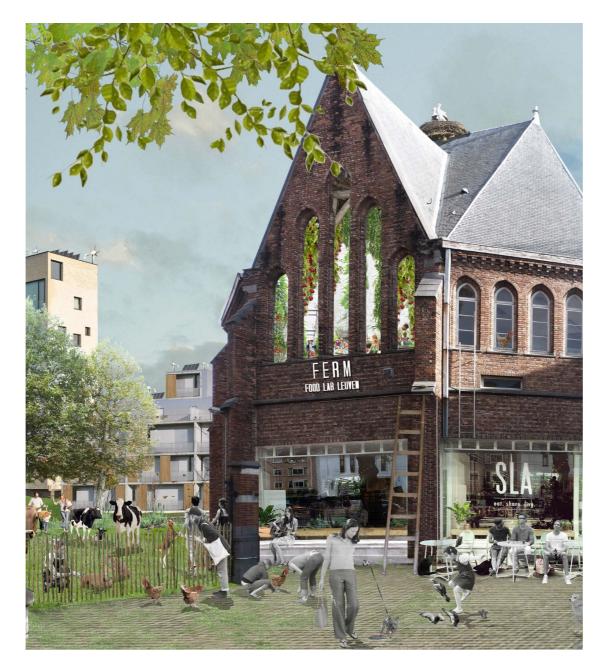
Resources: Water, Reclaimed Materials

Design Approaches: Regenerative design

R-Strategies: Recycle, Refurbish, Remanufacture

Aspects: Resource Flows, Stakeholders, Economy





The city of Leuven, in Flanders, is initiating systemic change in the city and society to achieve circularity and climate neutrality by 2050. In 2019 Leuven started to follow a <u>Roadmap for 2025, 2035 and 2050</u>, with 13 specific programmes, which will transform this unique plan into concrete actions and impact on the field. One of these programmes focuses on circularity, and it is named Leuven Circular Strategy. The Circular Economy Programme is structured around several strategic objectives: circular entrepreneurship; circular construction; recovery, sharing and reuse; sustainable and circular consumption; and developing knowledge and policy. Each objective was defined in close collaboration with key stakeholders, united in the Leuven Circular platform. Leuven municipality pioneers a new governance model of "radical participation". This aims to accelerate and scale circular action started from the existing circular initiatives and further develops a systemic collaboration between educational institutions at all levels, research centres, NGOs, circular businesses and citizen associations. This promotes partnerships between bottom-up and top-down initiatives.

## 1. Conceptualization of Circularity

What is the circular idea, theory and approach behind this project? What is the aim and purpose of it?

To achieve circularity, Leuven municipality developed the Leuven Circular Strategy. In this project, at the city level, circularity is seen as an approach to achieving a climateneutral city by establishing new types of economic activities and employment opportunities. This strategy is based on generating a coalition with existing circular initiatives to achieve a climate-neutral future. This is because the municipality believes that different areas require circular principles. According to Alderman for Climate and Sustainability David Dessers. "Leuven already has many civic initiatives that encourage residents to repair as many things as possible instead of throwing them away. In addition, at the beginning of this year, we opened the Materials Bank. where we sell recovered building materials. These are just a few initiatives launched in recent years to work towards this circular city. This counter for circular and inclusive entrepreneurship, specifically aimed at entrepreneurs, is a good addition to them. We hope that with this office, we can put many Leuven entrepreneurs on the road to circular entrepreneurship. After all, circular entrepreneurship is future-oriented, efficient and resilient."

Leuven City aims to reduce raw material buildings, Green Deal project, etc.). It also consumption by every means available. strives to prepare a strategic project for a especially in the construction sector. municipal materials bank. Businesses should be encouraged to find different ways to use resources, innovative Sustainable circular consumption [fashion ways to build sustainable textile initiatives and food]. Here they encourage original and offer services instead of products. sustainable consumption campaigns Leuven considers the possibilities endless and support best practices in local trade, if they move to a circular policy. But, especially in the clothing and food industry reducing material consumption and being (fair style, slow fashion, circular fashion, more conscious of the planet's limits is a etc.). Simultaneously, the city aims to challenge that calls for no short measure of develop a charter and specify actions to creativity and cooperation. Leuven's circular raise awareness and identify the obstacles strategy aims to connect research done encountered by traders and members of the by the local university with local innovative public en route to a culture of sustainable businesses, its social economy and its consumption. citizens to push hard for that circular future.

#### 2. The Sectoral Dimension

On which economic areas is the circularity focusing? What kind of system, supply chain, and flows is the project addressing?

Although Leuven Municipality aims to achieve circularity across different sectors and levels of the city, The Circular Leuven Strategy focuses on four primary sectors and activities existing before the beginning of the 2020 plan. These sectors are:

• Strengthening circular enterprises. It wants to do this by integrating know-how on the circular economy and networking within the Leuven business community. Moreover, this integration allows the city to map material flows, provide other economic opportunities, and offer new circular prospects in areas of precarious employment (role of social economy, opportunities for low-skilled workers, etc.). Lastly, including circular principles in the choice and organization of enterprises will reflect on land and spaces.

 Construction sector. Following the previous point, Leuven's Circular strategy aims to unite the players in Leuven's construction industry and offer support in circular construction principles. For instance, building or supporting a loop for the reclamation or reuse of construction materials in the Leuven region (by creating conditions for better 'urban mining' by devising a 'harvest map' and altering the procedures and tools already in place). It also aims to set up or design proof-ofconcept schemes for circular construction (such as material passports, adaptable and modular construction, repurposing of buildings, Green Deal project, etc.). It also strives to prepare a strategic project for a municipal materials bank.

• Learning. Establishing a platform from which several strategic projects can be



launched, maximum information can be provided, and the parties concerned can be brought in touch. Initiatives such as the *European Pop-Machina* project are hoped to enable them to expand and inform the circular ecosystem fully, as well as establishing a monitoring system.

#### 3. Sustainability Framework & Transition Concepts

What is the context of the project? What is the socio-economic, legal, and political structure established to develop the project?

Leuven's Circular strategy is a part of the city's ambition of embracing the European Green Deal, adopted by the EU in early 2020, in the new policy plan named in 2016 as Leuven 2030. The city government leads the development of the circular transition plan with knowledge institutions, civil society organizations, sector organizations, large companies located in the city, and citizens. The primary mission of *Leuven 2030* is to develop a climate-neutral city, in the broadest sense, by 2050. To achieve this ambition, an elaborated Roadmap was launched in the spring of 2019, consisting of 13 programs subdivided into 80 projects. Among these projects, the more 'traditional' elements of reducing traffic and increasing building insulation, Leuven's circular city ambition is explicitly positioned as a crucial lever: one of the programs fully embodies Leuven's strategy, launched at the beginning of 2020 by the Platform Leuven Circulair, focusing on four sectoral dimensions, previously explained. Key to the strategy is that it builds on an existing community ecosystem of repairing and making, local social economies, and civil society organizations such as repair cafés with the ambition to reinforce and stimulate current and new initiatives in a strategic framework. The strategy additionally encourages circular entrepreneurship by supporting circular start-ups and industrial symbioses.

Lastly the Circular strategy is embedded in a regional ambition, therefore the municipality collaborates with its academic and research institutions (KU Leuven) Circular Flanders, Flanders Circular Knowledge Network and hosts the Circular Economy for the Government of Flanders research centers at KU Leuven. At the city level, the municipality has signed the Circular City Declaration,

and transitioning towards a circular built environment is one of the priorities within the <u>Road Map Leuven 2030</u>.

#### 4. The Social Dimension

Is this project bottom-up or top-down in its approach, and what role do local inhabitants, stakeholders, and circular innovators play? Does it have a flagship / pioneering character for others? Does this project view people as consumers, users, or pro-sumers in the context of a circular economy? Does it have a pioneering role, with impact beyond its region?

### In the Leuven roadmap towards circularity, circular and social dimensions often overlap.

In the Leuven Circular strategy, the social aspect is also part of developing a circular environment. The city government must design and build strategically to support society's adaptation to a more circular lifestyle. In Leuven, this is achieved in two ways: by developing circular knowledge throughout research projects in higher education institutions and research centers, in local schools, and through public initiative. Secondly, the municipality aims to share, develop and connect bottom-up activities and businesses like SPIT (the most extensive reuse center in Flanders) and Velo (the recycling shop for secondhand bikes). Moreover, these activities aim to introduce disadvantaged people into a working environment.

# 5. The Territorial & Spatial Dimension

What is the scale of the project? Are urban planning policies design strategies cross scale? If yes, how and which flows are involved? What is the role of space and territory in this circular project?

By being initiated by the Leuven city government, the strategy focuses mainly on upscaling and systemically connecting ongoing smaller initiatives within the administrative city boundaries. The city is seen as a physical as well as economic and political ecosystem.

On a territorial dimension, Leuven focuses on upscaling to generate maximal impact by facilitating new local value chains in a systemic approach while engaging citizens to be actively involved in the transition. Developing the Circular Economy monitor and leveraging the city's own policies, such as procurement and building regulations, remain high on the agenda. Until today the spatial implications of a circular transition are overlooked.

#### 6. Assessment & Monitoring

How are strategies and policies monitored and evaluated? How is the qualitative and quantitative success of a project evaluated?

Within the circular strategy, a monitoring platform (Platform Leuven Circulair) has been created to guard the political management, implementation and monitoring of the Leuven 2030 vision, its circular ambitions and project management at all levels. The platform connects the city government, relevant departments, Leuven 2030. local repair networks, knowledge institutions, and circular businesses. It organizes interactions between the involved actors and exchanges relevant initiatives to create synergy. It streamlines questions to the different city departments. Hence, the platform focuses on the strategy and the individual political responsibilities, while the perspective of the roadmap program is more dynamic, focusing on effectively implementing, building partnerships, and supporting communities.

While there is a significant overlap between a circular and a climate-neutral city. climate neutrality can be considered the 'more measurable' ambition (even if there are different ways of measuring it) compared to circularity. However, the definition of the platform's explicitly measurable goals and indicators have yet to be stated in Leuven's circular city strategy. Until today, the monitoring platform has considered the broader effects on the city regarding inclusiveness and a local and resilient economy operating within its respective planetary boundaries, and it is aiming to develop a monitoring tool. However, developing a complete monitoring tool at the city level will require time and effort, given the ambitions and ongoing character of the project described in the previous paragraphs. Although a significant advantage for the city is the spatial proximity between the involved actors, increasing opportunities for bottom-up data collection.

#### Colophon

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References & further reading:

Circular Cities Declaration. (n.d.). *Leuven, Belgium.* <u>https://circularcitiesdeclaration.eu/</u> <u>cities/leuven</u>

City of Leuven. (n.d.). City of Leuven: Intelligent City Transformation Overview. The European Commission's Intelligent Cities Challenge. <u>https://www.</u> intelligentcitieschallenge.eu/sites/default/ files/2023-04/ICC\_Final%20deliverable\_ Leuven.pdf

European Commision. (2023). *Leuven.* <u>https://circular-cities-and-regions.ec.europa.</u> <u>eu/fellows/leuven</u>

Marin, J.; Alaerts, L.; Van Acker, K. A. (2020). Materials Bank for Circular Leuven: How to Monitor 'Messy' Circular City Transition Projects. *Sustainability*, 12(24). <u>https://www.mdpi.com/2071-</u> 1050/12/24/10351

Mertens, J.; Pauwels, H.; Van Couwenberghe, J. (2020). *Circular Leuven*. Dessers, D. City of Leuven. <u>https://roadmapen.leuven2030.be/pdf/Circular\_Leuven.pdf</u>