

Circular economy country profile 2024 - Belgium



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Introduction

The European Commission requested the EEA to produce EU country profiles that offer an updated view of the following elements:

- what circular economy policies are being implemented at a national level with a particular focus on elements that go beyond EU mandatory elements, and
- what are best practices with a focus on policy innovation.

With the EU Circular Economy Action Plan (CEAP 2020) "the Commission [...] encourages Member States to adopt or update their national circular economy strategies, plans and measures in the light of its ambition".

These country profiles originate in the work leading to the EEA More from less report (2016)¹, that presented an overview of approaches to material resource efficiency and to circular economy in thirty-two European countries. The More from Less report was followed by the 2019 EEA Report 'Resource efficiency and the circular economy in Europe 2019 – even more from less: An overview of the policies, approaches and targets of 32 European countries'².

It presented an updated and extended assessment of approaches and identified trends, similarities and new directions taken by countries in the connected policy areas of resource efficiency and the circular economy.

These reports, comprising a compilation of extensive survey responses from countries, were accompanied by 32 country profiles.

In the second quarter of 2022 a new survey with questions and guidelines was launched. Based on information reported by the Eionet network, in particular, the Eionet Group on Circular Economy and Resource Use, and after review and editing by the European Topic Centre on Circular economy and resource use (ETC CE), the 30 2022 CE country profiles³ were published alongside the EEA report 'Circular Economy policy innovation and good practice in Member States'⁴ (2022).

These 2024 CE country profiles are an update of the 2022 ones and based on the responses of 29 countries to the survey questions and guidelines that were launched in March 2024. The information in the countries' responses was again reviewed and edited by the European Topic Centre on Circular economy and resource use. A selection of Eurostat data was made to further complement these country profiles.

The main objectives of these assessments and its updates are to: • stimulate exchange of information and share good practice examples among country experts; • support policymakers in Eionet countries, the European institutions and international organisations by providing an updated catalogue of circular economy actions being undertaken in European countries.

This circular economy country profile is based on information reported by the Eionet network and, in particular, the Eionet Group members on Resource Efficiency and Circular Economy in the second quarter of 2024. Proposals for the further development or amendment of policies represent the view of the reporting country. For Belgium, all input for Flanders was provided by the public waste agency of Flanders (OVAM) and Circular Flanders and for the Walloon Region by the Walloon public service Agriculture, natural resources and environment and the Circular Wallonia coordination unit. The information was reviewed and edited by the European Topic Centre on Circular economy and resource use. A selection of Eurostat data was made to further complement this country profile.

¹ [More from less – material resource efficiency in Europe – European Environment Agency \(europa.eu\)](https://www.euro.pecd.europa.eu/More-from-less-material-resource-efficiency-in-Europe)



² [Resource efficiency and the circular economy in Europe 2019 – European Environment Agency \(europa.eu\)](https://www.euro.pecd.europa.eu/Resource-efficiency-and-the-circular-economy-in-Europe-2019)

³ [Country profiles on Circular Economy in Europe – Eionet Portal \(europa.eu\)](https://www.eionet.europa.eu/portal/en/circular-economy/country-profiles)

⁴ [draft-report-for-dg-env_final.pdf \(europa.eu\)](#)

The information is current as of September 2024, when members of Eionet verified the content of this profile.

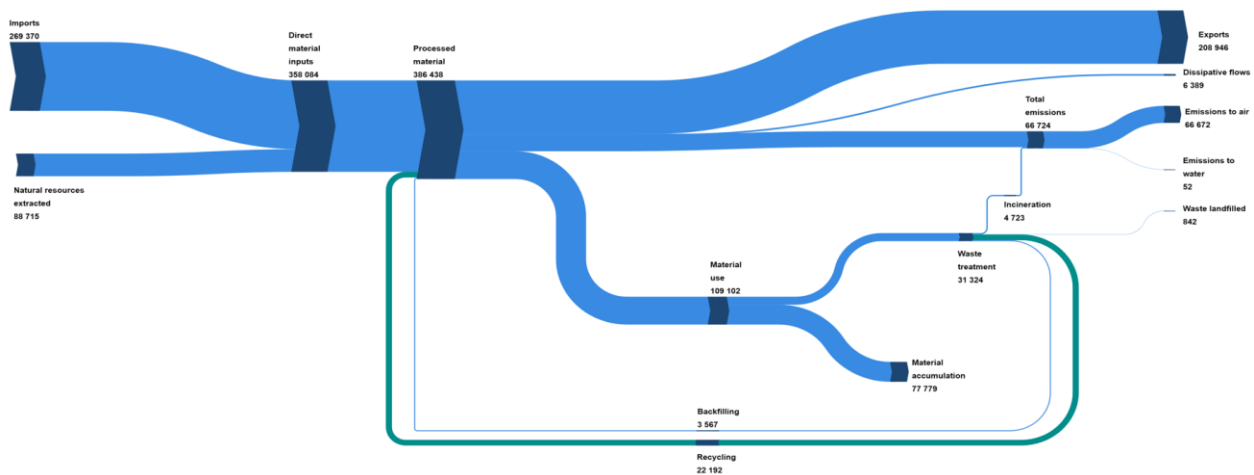
Belgium – facts and figures

 	GDP: EUR 584.7 billion (3.4 % of EU27 total in 2023)
	GDP per person: EUR 49,720 in 2023 (purchasing power standard) (117.3 % of EU27 (from 2020) total per person)
	Use of materials (domestic material consumption (DMC)) 149.1 million tonnes DMC (2.3 % of EU27 total in 2022) 12.8 tonnes DMC/person (89.7 % of EU27 average per person in 2022)
	Structure of the economy (2023): Agriculture: 0.9 % Industry: 20.5 % Services: 78.6 %
	Employment in circular sectors: 63,868 people employed in CE sectors (1.5 % of EU total in 2021) People employed expressed as a percentage of total employment: 1.3 % (compared to 2.1 % for EU average in 2021)
	Surface area: 30,528 square kilometres (0.7 % of EU27 total)
Population: 11,742,796 (2.6 % of EU27 total in 2023)	

Note: all definitions and metadata used in this profile are taken, as shown, from Eurostat

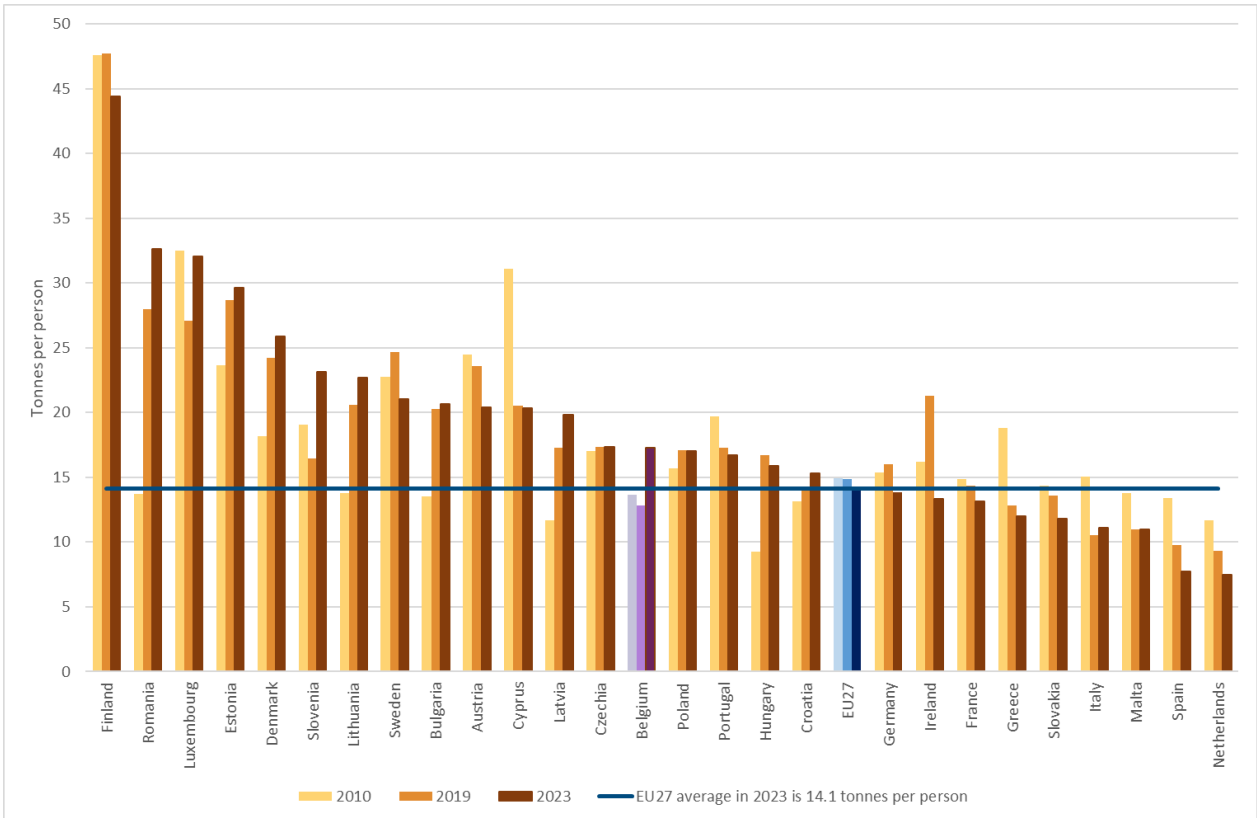
Source: Eurostat datasets, EU27 2021 EU27 2022 and EU27 2023 (accessed 21 August 2024)

Figure 1 Material flow diagram for Belgium in 2022, thousand tonnes



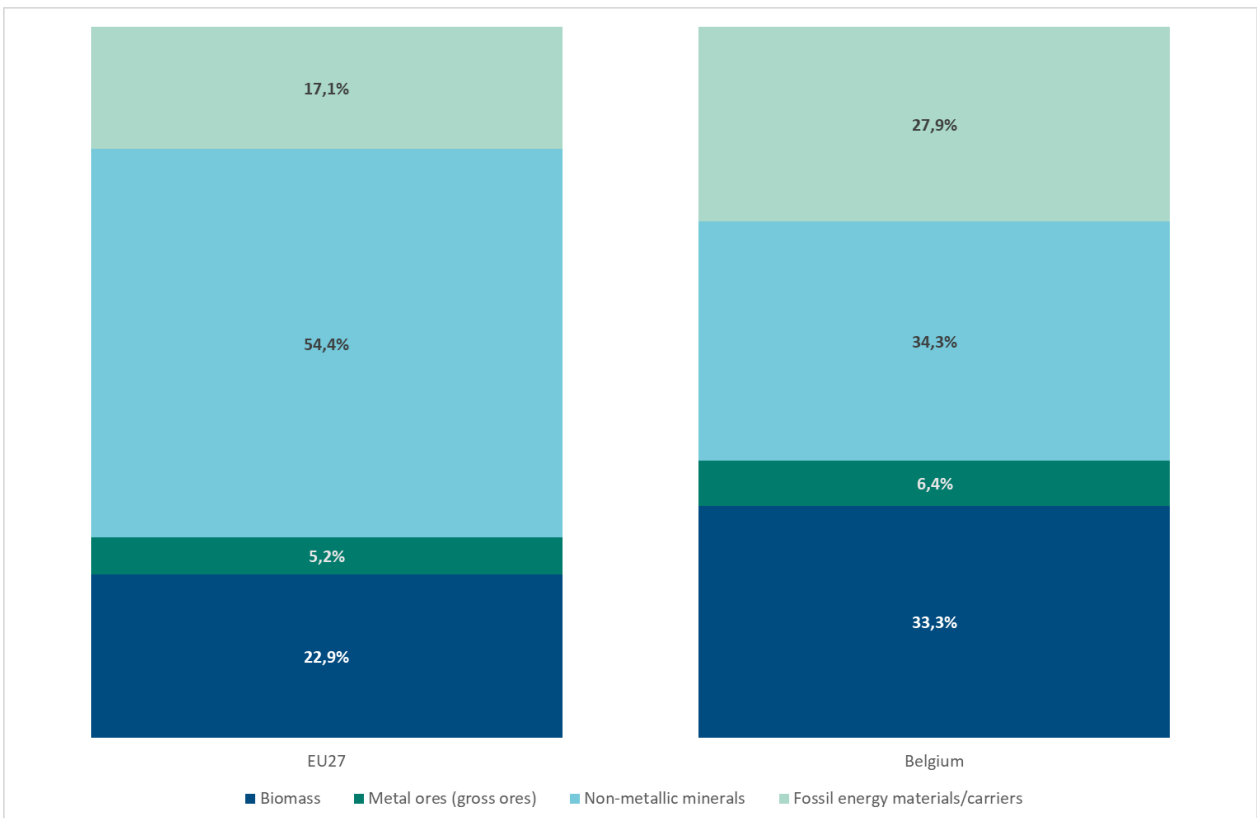
Source: Eurostat (2024) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 21 August 2024)

Figure 2 Material footprint (raw material consumption), 2010,2019 and 2023, tonnes per person



Source: Eurostat (2024) [env_ac_rme] (accessed 21 August 2024)

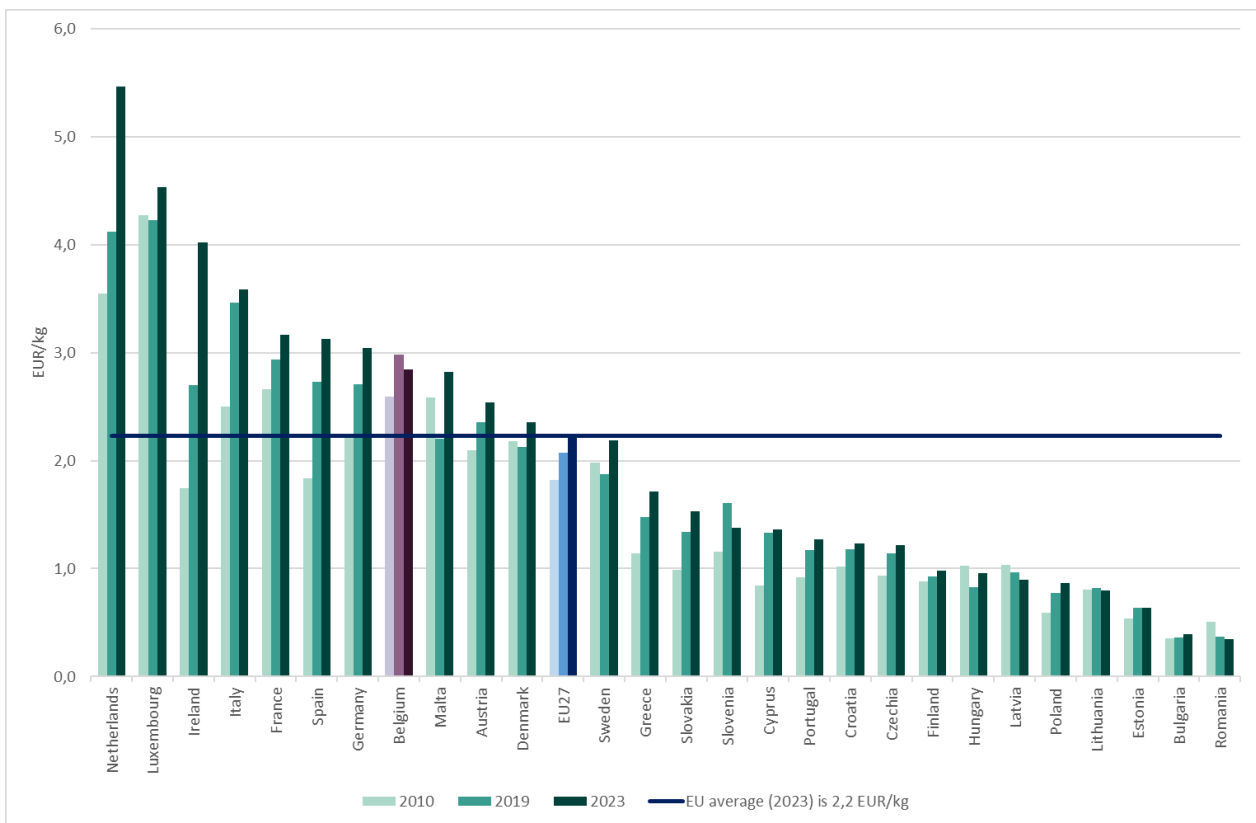
Figure 3 Domestic material consumption by selected material category, EU and Belgium, 2023, per cent



Note: totals may not sum to 100 % due to rounding

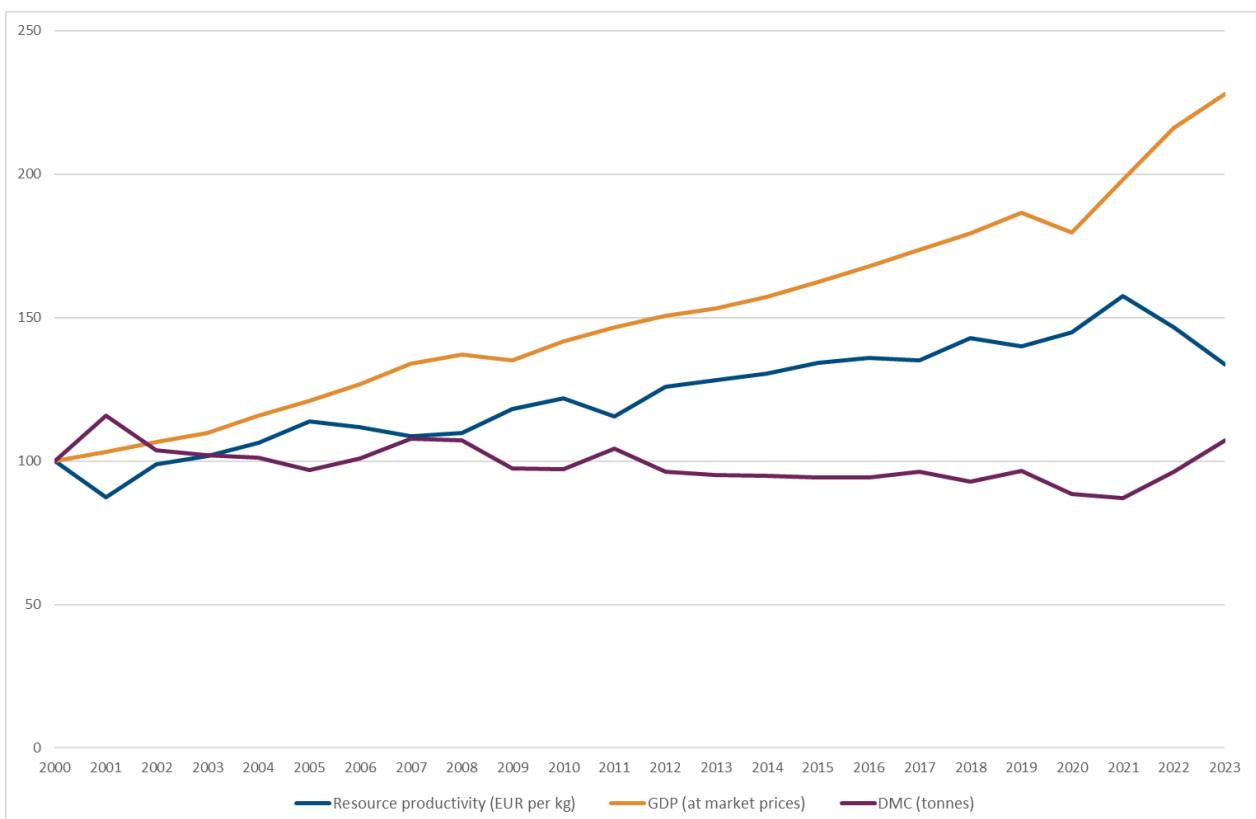
Source: Eurostat (2024) [env_ac_mfa] (accessed 21 August 2024)

Figure 4 Resource productivity (gross domestic product/domestic material consumption), EU27, 2010, 2019 and 2023, EUR per kilogramme



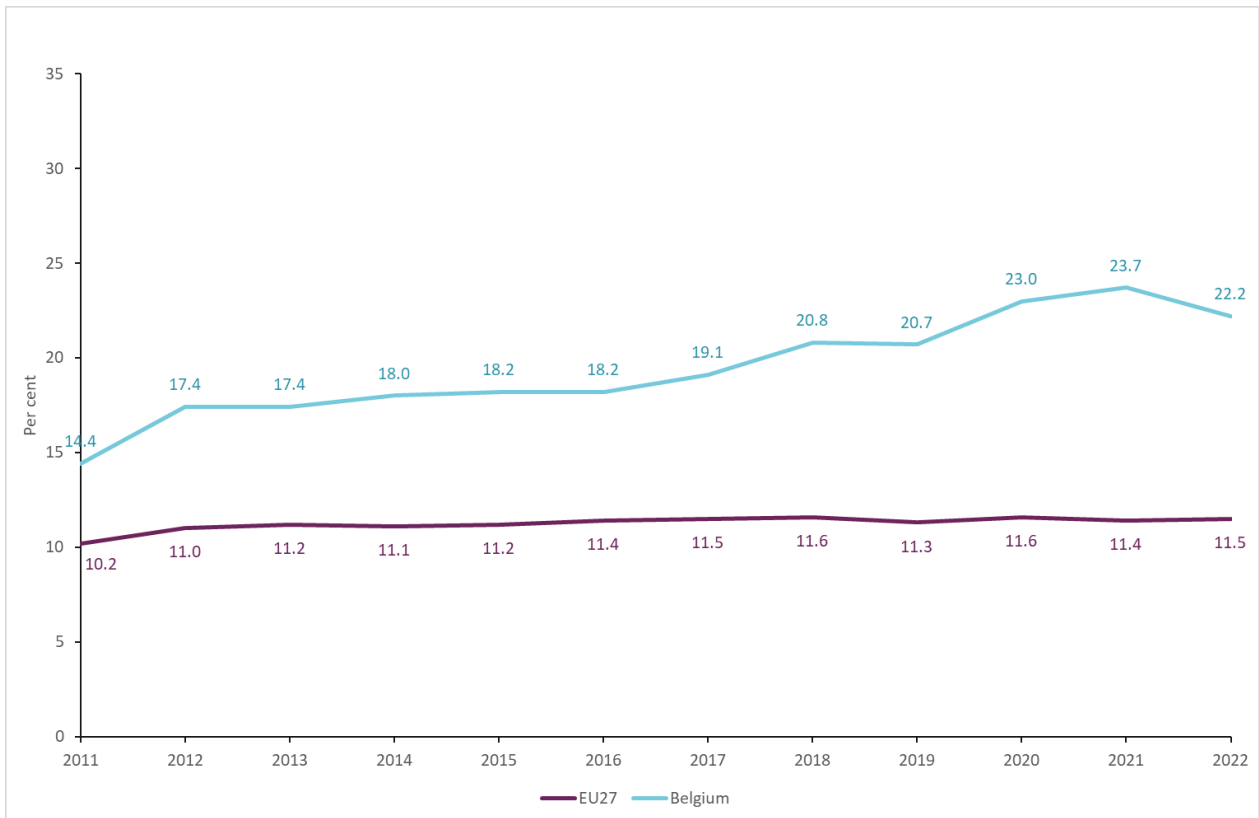
Source: Eurostat (2024) [env_ac_rp] (accessed 21 August 2024)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Belgium, 2000–2023, index (2000=100)



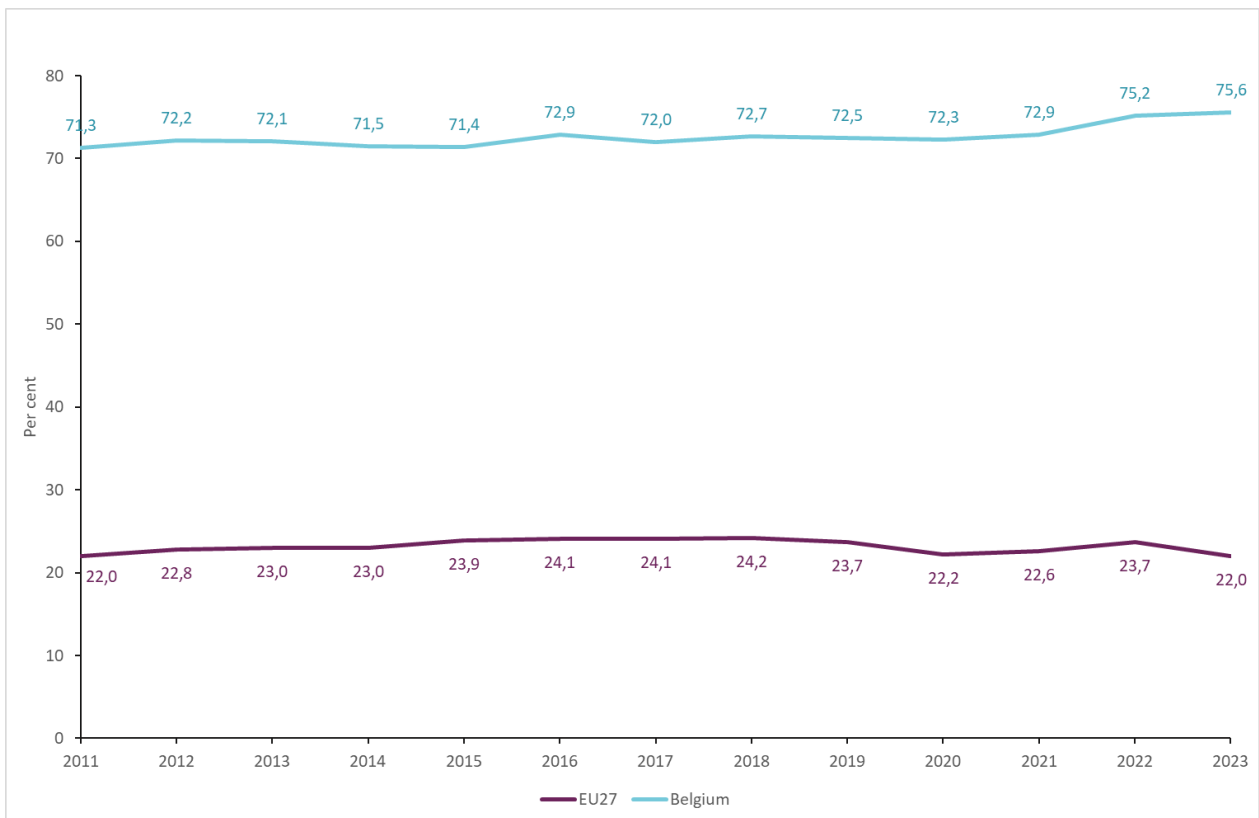
Source: Eurostat (2024) [env_ac_mfa], [env_ac_rp] & [nama_10_gdp] (accessed 21 August 2024)

Figure 6 Circular material use rate in Belgium, 2011–2022, per cent



Source: Eurostat (2024) [env_ac_cur] (accessed 21 August 2024)

Figure 7 Material import dependency in Belgium, 2011-2023, per cent



Source: Eurostat (2024) [cei_gsr030] (accessed 21 August 2024)

Existing policy framework

Dedicated national and/or regional and/or local strategy, roadmap or action plan for circular economy

*Flanders*⁵

On 25th of March 2016, the Government of Flanders approved the transversal policy framework “**Vision 2050**”, a long-term strategy for Flanders. It provides the targeted society of the future: an open, social, resilient and international region, that combines prosperity and wellbeing in a smart, innovative and sustainable manner, leaving no one behind. To realize this, **seven transition priorities were defined, the circular economy being one of them**, and explicitly enlisted⁽⁶⁾.

Shortly after, Circular Flanders⁽⁷⁾ (Vlaanderen Circulair), the hub and inspirator for the circular economy was created in 2017 as part of OVAM, in the operational form of a partnership between government, the private sector, civil organisations and knowledge institutions, to implement and adopt the CE in the Flemish region. The current Government of Flanders confirmed this objective and voiced its ambition to transform Flanders into a circular trendsetter in Europe by 2030. To do that, it aims to decouple the material footprint of the Flemish consumption from economic growth and reduce that footprint with 30% by 2030.

In 2022, Circular Flanders published a roadmap⁽⁸⁾ on how to reach the vision 2050.

In 2023, The annual report of Circular Flanders of 2023 was published ⁽⁹⁾.

On the 18th of March 2024, the Flemish parliament organised in the context of the BE EU Presidency, an interparliamentary conference on circular economy. During this conference, the Flemish parliament presented a **Proposal of resolution on the promotion and future of the circular economy in Flanders and Europe**⁽¹⁰⁾.

The proposal of resolution ⁽¹⁰⁾ contains a wide range of objectives on which the Flemish Government should focus in the field of the circular economy. The resolution was approved on 9/5/2024.

⁵ Belgium does not have a dedicated national resource efficiency or circular economy strategy/action plan, mainly due to its constitutional set-up. The issue of material resource efficiency and circular economy, as it is typically cross-cutting, involves several domains and policy levels. This means that the Belgian regions (Wallonia, Flanders and Brussels) and the federal level are all concerned, each taking care of its own competences. Generally speaking, the Belgian Federal State is competent for matters whose technical and economic indivisibility requires equal treatment at the national level. For instance, major environmental issues such as water, air quality, biodiversity, climate change, etc., are dealt with mainly by the regions. On the other hand, the federal government is competent when it comes to acting on these issues through products or services including polluting product emissions, energy consumption, product design, chemical substances in products, labelling, and the provision of information on the product or service, etc. Product policy is therefore an exclusively federal responsibility. The federal government is also responsible for some areas of taxation such as VAT, part of personal income tax, customs and excise duties, etc.; consumer protection as a whole including legal guarantees, product and service safety; patents and some aspects of energy policy such as pricing policy, management of major energy production, storage and transport infrastructures and security of supply. Support for business innovation, some taxes, for example, vehicle taxation, agriculture, etc. are areas for which the regions are almost fully responsible (Source: Eionet Report - ETC/WMGE 2019/4 – Belgium, Resource efficiency and circular economy in Europe – even more from less; An overview of policies, approaches and targets of Belgium in 2018 available at: [b-country-profile-belgium_finalised.pdf](#))

⁶ <https://publicaties.vlaanderen.be/view-file/23784>

⁷ <https://vlaanderen-circulair.be/en>

⁸ [Toekomstbeelden VC 2050.pdf \(vlaanderen-circulair.be\)](#) (In Dutch)

⁹ [vlaanderen-circulair.be/src/Frontend/Files/userfiles/files/OVAM-23-002_OVAM-F_v03_240320-FINAL.pdf](#)

¹⁰ <https://docs.vlaamsparlement.be/pfile?id=2056238> (in Dutch) ; [Voorstel van resolutie 2100 \(2023-2024\) nr.1 | Vlaams Parlement](#) (in Dutch)

For more info on the approach and the governance structure of Circular Flanders, please look on the website of Circular Flanders⁽¹¹⁾.

Circular Cities

Circular Flanders is one of the 12 Pilots involved in the CCRI. As a Pilot, Circular Flanders represents and bridges the gap between cities and regions in Flanders and the CCRI platform. The Flemish city Leuven is registered as a Fellow in CCRI.

In the context of the CCRI, Circular Flanders has defined a challenge (a "Circular Systemic Solution") to work on in the next two years, regarding the interlinkages between climate policy and circular economy and how to make that link tangible on a local level.

Parallel to the CCRI involvement, Circular Flanders is support partner of the ICLEI Circular Cities Declaration. So far, 7 Flemish cities have signed the Circular Cities Declaration, showing their commitment to sustainable and circular policies and practices.

In general, there is a growing awareness and strong uptake by local authorities in the CE. In 2022, it was analysed to what extent circular economy is included in the political agenda of cities. On slide 5⁽¹²⁾, you can see **that 56% of the respondents are actually engaging in the transition to a circular economy**, of which 26% has labeled it as a strategic priority, elaborated in plans and actions. 24% is actively exploring the topic, and around 20% has not included anything on circular economy in their local policy yet.

In the past three years, **Circular Flanders has accelerated the support** for strategic policymaking, capacity-building, awareness raising and project implementation on a local level. Initiatives include:

- Setting up a Flemish network for cities and municipalities, facilitating exchange and collaboration;
- Provide one-on-one support with targeted consultancy to help cities develop, implement, and monitor circular economy strategies;
- Connection with European projects and networks developing tools and knowledge for cities, such as Interreg EU projects KARMA (circular economy in the construction sector)⁽¹³⁾, CEO (Circular Economy Office)⁽¹⁴⁾ and the Circular Cities and Regions Initiative;
- Bank of resources and case studies;
- Support for the creation of 12 social-circular economy hubs⁽¹⁵⁾.

Wallonia⁽¹⁶⁾

Context

The Walloon region adopted a regional strategy dedicated to the circular economy: **Circular Wallonia⁽¹⁷⁾**. This was established in 2020 through a collaborative and participatory process that involved about 100 organisations from different levels of civil society (private, public, institutional, academic, research and associated sectors).

¹¹ <https://vlaanderen-circulair.be/en/approach>

¹² [Lokale besturen en de CE in Vlaanderen.pdf \(vlaanderen-circulair.be\)](#) (in Dutch)

¹³ [KARMA - Circular Economy in the Construction Sector - Acting Today for a Better Future | Interreg Europe - Sharing solutions for better policy](#)

¹⁴ [CIRCULAR ECONOMY OFFICE \(CEO\) CEO | Interreg North Sea](#)

¹⁵ [Home | Circular work\(s\) \(circulairwerkt.be\)](#)

¹⁶ See footnote 5 on institutional set-up and division of competences in Belgium

¹⁷ [Stratégie Circular Wallonia.pdf \(wallonie.be\)](#) (in French)

Circular Wallonia is a strategy divided into five main axes:

1. Supply and production of circular goods and services;
2. Consumption and demand of circular goods and services;
3. Stakeholder engagement;
4. Waste and resource management;
5. Priority value chains.

As 2022 was the year Circular Wallonia reached cruising speed in terms of the implementation of projects, 2023 was the year of the continuum and the strengthening of this implementation.

The implementation report of the Circular Wallonia Strategy was published in September 2024 ⁽¹⁸⁾.

This report provides an overview of the implementation of the circular economy deployment Strategy in Wallonia, Circular Wallonia, from its approval by the Walloon government on 4 February 2021 up until 31 December 2023.

Support

More than 700 organisations were supported in their circular transition through various schemes, including “Chèques-Entreprises⁽¹⁹⁾”, a network of Low Carbon/Circular Economy advisers⁽²⁰⁾, calls for projects, a network of sustainable and circular construction and renovation facilitators, a network of 6 industrial symbiosis facilitators and “Innovation Pathways”.

The network of low-carbon/circular-economy advisers is made up of advisers who will carry out a low-carbon/circular-economy diagnosis for businesses, very often within their province. The diagnosis provides an inventory of the company's incoming and outgoing flows (water, energy, materials or resources in general) as well as an assessment of its circular economy potential. An action plan is then drawn up, but no support is offered to implement it.

“**Chèques-entreprises**” are used, sometimes following a low-carbon diagnosis or at the request of a business, to receive public financial support (in the form of a voucher) to carry out feasibility studies, market studies or other services. These services are partly funded by the Walloon Region to support businesses in their circular economy initiatives.

Funding

In Wallonia, there are two ways of financing a circular economy project, either through the financial tools of ‘**Wallonie entrepreneur**’ (notably via subordinated loans, equity stakes in the company's capital, etc.), or via a **direct public subsidy**. 69 companies have been financed by Wallonie entrepreneur. 76 received public funding, via calls for projects such as:

- Go Circular⁽²¹⁾: 40 projects funded;
- Circular building sites and services ⁽²²⁾ (dedicated to the construction sector): 21 projects funded;
- Digital for Circularity ⁽²³⁾: 15 projects funded.

¹⁸ [Rapport de mise en oeuvre Circular Wallonia - 2021-2023.pdf \(wallonie.be\)](#) (in French)

¹⁹ [Economie circulaire - Chèques-entreprises \(cheques-entreprises.be\)](#)

²⁰ [Envie de rendre votre entreprise plus verte ? Découvrez nos solutions d'évaluation du potentiel de transition énergétique et circulaire pour votre entreprise. \(wallonie-entreprendre.be\)](#)

²¹ <https://economiecirculaire.wallonie.be/en/node/121>

²² <https://economiecirculaire.wallonie.be/fr/articles/actualite/appel-projets-construction-circulaire-3e-edition> (in French)

²³ <https://www.digitalwallonia.be/fr/publications/implement-it-4-circularity-2023-laureats/> (in French)

The **Circular ecosystem** ⁽²⁴⁾ endeavours to raise the profile of circular economy initiatives in the Walloon Region **through a digital tool**. It seeks to make information on these initiatives available and accessible to encourage the development of innovation ecosystems. The focus is on the six priority value chains ⁽²⁵⁾. This digital tool is designed to be evolving, making it possible to bring together the whole array of circular initiatives and dynamically present the main stakeholders, the collaborative projects as well as publications/ reports, press articles, support schemes and events underway in a unified form for Wallonia.

Awareness raising

More than 150,000 people made aware of the circular economy concept through various **events** such as:

- the “Quinzaine de l'économie circulaire”: two weeks dedicated to the circular economy with activities planned throughout Wallonia, including events, company visits, online webinars, networking and communication campaigns around the themes of the circular economy. The target audience is mainly businesses, but over the years, the “Quinzaine de l'EC” has increasingly opened up to citizens.
- “Rencontre de l'économie circulaire” (webinars): 4 online meetings were organized by the Circular Wallonia coordination unit to raise awareness and inform businesses and public actors about circular economy concepts such as waste, circular design, social economy and reuse, digital for circularity, etc.
- 2 editions of the Circular Wallonia Days (2022 and 2023)

Next to these events Circular Wallonia has a **newsletter** and maintains an online presence with a regularly **updated website** ⁽²⁶⁾, part of which is translated into English, and a **LinkedIn page** with over 5,000 followers.

Since 2020, Wallonia has been **granting increased aid to municipalities implementing a "zero waste" approach** that meets the conditions set out in the regulations (Walloon Government Decree of 17 July 2018, amended on 18 July 2019⁽²⁷⁾). In 2024, 86 of Wallonia's 262 municipalities were implementing a Zero Waste approach, covering more than 53% of the Walloon population.

Circular economy policy elements included in other policies

Flanders

Circular economy policy element	Included in policy
Waste management	Local Materials Plan 2023-2030 (In Dutch, English brochure available)
Food loss	Action Plan for Circular food loss and biomass (residual) flows (2021-2025)
Plastics	Plastics implementation plan
Construction	The setting up of standards for the construction industry Beleidsprogramma Op weg naar circulair bouwen 2022 - 2030 (in Dutch)
Materials: Reuse and repair	Support the establishment of reuse and repair centres
Water	Platform Circular Water (In Dutch, public private partnership)

²⁴ <https://ecosysteme-economiecirculaire.wallonie.be/en/>

²⁵ Construction and buildings; plastics; textiles; industry and food systems; water; metallurgy (including rare/critical metals and batteries)

²⁶ <https://economiecirculaire.wallonie.be/en/circular-wallonia>

²⁷ <https://wallex.wallonie.be/eli/loi-decret/2018/07/17/2018070048/2021/03/04>

	Blue deal Bundle of challenges (in Dutch)
Bio-economy	Policy plan bio-economy (in Dutch) Ambitions bio-economy (in Dutch) English brochure Flemish bio economy
Energy and climate	Flemish Energy and Climate Plan 2021-2030: update (in Dutch)
Food	Food strategy (in Dutch)

The **Local Materials Plan** is the title of the new implementation plan (prevention program and waste management plan) for household waste and similar industrial waste and runs from 2023 to 2030. The Local Materials Plan was ultimately approved by the Government of Flanders on 26 May 2023. **It is a follow-up to the Implementation Plan for household waste and similar industrial waste for 2016-2022.** It builds upon the work done in the previous period, while also introducing some major innovations. With this implementation plan, we are taking another step towards an **integrated policy for the circular economy**, by paying more attention to **prevention and reuse and by further closing material circuits**. In addition, the plan also continues to shape the basis of waste policy. Indeed, also in the area of selective collection and recycling, there are still some major steps to be taken. Finally, the incineration and landfilling of waste and avoiding litter and fly-tipping also remain major policy issues.

The Local Materials Plan has particular regard to the local level and the **role of local governments**, especially for household waste management. The plan provides the **framework** within which local authorities can assume that role. It contains the vision and policy actions at the Flemish level, a number of ideas and tools and also a number of obligations for local governments. This way, we will continue to chart a course together towards a circular society.

Wallonia

Circular economy policy element	Included in policy
Waste management	PWD-R Waste prevention and waste management as resources (in French, non-technical summary in English)
Smart specialisation strategy (S3)	SIA (Strategic Innovation Area) ^(OBJ) – Circular Materials (in French) #S3Wallonne (wallonie.be) (in French)
Climate & Energy	Walloon plan air, climate & Energy (in French)

Waste Management

The Walloon Government adopted a **program to combat food loss and waste**, commonly called **the REGAL Plan (Reducing Food Waste in Wallonia)**⁽²⁸⁾, (revised version 2.0) with the objective of reducing food loss and waste by 30% by 2025 compared to 2015 at different levels of the food chain, in accordance with the recommendations of the United Nations and the European Commission. The essential actions of the REGAL 2.0 plan were also integrated into the Walloon Waste-Resources Plan (PWD-R)²⁹, adopted by the Walloon Government on March 22, 2018.

The REGAL 2.0 plan is **structured around 5 axes and is broken down into 17 measures**. These include

²⁸ <http://environnement.wallonie.be/regal/17ACTIONS-Brochure-presentation-REGAL2-0-V1.pdf>

²⁹ Non-technical summary: <https://sol.environnement.wallonie.be/files/PWDR/WWRP-NTS-EN.pdf> - The PWD-R is currently being evaluated. The document resulting of the evaluation will be published soon.

specific actions aimed at reducing food loss and waste at the different stages of the food chain (production, processing, distribution, consumption), as well as various cross-cutting actions such as the development of donations to aid associations.

The progress of the implementation of the REGAL Plan measures is regularly evaluated by the Soil and Waste Department of the SPW (Walloon Public service) Agriculture, Natural Resources and Environment (SPW ARNE), which has developed a monitoring tool allowing the necessary information to be updated.

Smart Specialisation Strategy (S3)

The **Strategic Innovation Area (SIA) 'Circular Materials'** brings together innovative activities related to the "circularization" of materials aimed **at reducing resource consumption, increasing regional autonomy, and developing new market opportunities**. Circular materials are inert or bio-based materials that can be processed at various stages to delay their future waste status or completely avoid it.

To achieve this, the economic activity clusters requiring innovation support include **ecodesign, industrial symbiosis, stimulating the economy of reuse and repair of these materials, as well as innovation in the recycling sector**. These activities build upon the strong regional technological expertise in advanced materials processing (metals) as well as the presence of valuable natural resources. The Walloon expertise in recycling is also recognized.

An innovative approach to logistics, particularly through **reverse logistics**, serves as a cross-cutting support lever for all these activities. Thus, this Strategic Innovation Area addresses the challenges of:

- Resource optimization;
- The climate crisis and biodiversity loss;
- Indirectly, the challenge of energy transition.

Monitoring and targets

Assessment of circular economy performance

The European Commission has set up a [monitoring framework](#) to keep track of progress towards a circular economy. This framework provides a holistic view as it:

- measures direct and indirect benefits of 'becoming circular' and
- values the contribution of a circular economy in living well within the limits of the planet
- addresses energy and material supply risks.

It consists of **5 thematic sections** with a total of **11 statistical indicators**, some of which have additional sub-indicators. In some cases policy targets exist which should be achieved in the future, and the indicators monitor progress towards these targets. The current monitoring framework is a revision of the original framework which was set up in 2018.

This section elaborates on the assessment of Belgium its progress in terms of observed trends over the last 5 years and what country characteristics or policy actions may explain differences between the country its performance and the average EU performance.

Flanders

It is difficult for OVAM to assess the Belgian figures and evolutions and to evaluate the effect of policy measures on these figures and evolutions. Environmental policy is the full competence of the regional level, whereas EUROSTAT has Belgian statistics that cannot split up easily in three regional indicator values.

In order to measure the Circular economy in Flanders (Flemish region of Belgium) the OVAM together with the Circular Economy Policy Research Center⁽³⁰⁾ (CE Center) have developed a Flemish CE Monitor⁽³¹⁾.

In the **Flemish CE monitor** you can find several indicators at Flemish level for monitoring the circular economy. Many indicators are similar or comparable to the indicators used in the EUROSTAT circular economy Monitoring Framework. In the Flemish monitor evolutions are shown and explained if there is a policy-wise explanation. Benchmarks with the European indicators are foreseen if the indicators are similar.

An analysis on how circular the Flemish economy is can be found in the CE monitor ⁽³²⁾.

Some highlights are (data accurate for the situation in March 2024):

Domestic material consumption (DMC, Domestic Material Consumption) amounts to 164 million tons and shows a slight decrease in the longer term.

If the consumption of materials outside Flanders for our consumption is also included, it is called **Raw Material Consumption** (RMC). That is the actual footprint of our consumption: the figure in 2021 is 196 million tons, which is 29.5 tons per inhabitant. That figure is slightly lower than in 2010. After an increase, a decline has been noticeable in recent years: we see the corona crisis partly affecting the figures. This decline still needs to be further confirmed. Flanders has the ambition to achieve a decrease of 30% by 2030 compared to 2010.

A sharp decrease in total household waste in Flanders is seen, from 522 kg per inhabitant in 2013 to 416 kg per inhabitant in 2022. Within this number, residual waste amounts to 128 kg per inhabitant in 2022, overperforming the target for that year of 138 kg. The Flemish government wants to **further reduce** this quantity to 100 kg per inhabitant by 2030.

Waste production is relatively high in companies due to the large production for export. Their waste production moves with the evolution of the economy and we see that **industrial residual waste** has decreased by 5% in 2021 compared to 2013 after correction for employment.

In recent decades, Flanders has focused heavily on selective waste collection and the development of a recycling industry. The **recycling rate** (excl. construction and demolition waste) is 65.6% in 2022 and has increased by a few percent in recent years. 67% of industrial waste is given a second life. That becomes 78% if the recycling and reuse of construction and demolition waste is added. These figures have increased over the past ten years. The production of secondary raw materials, with a volume of 25.8 million tons in 2020, also shows such an increase.

Expressed as a comprehensive figure, the **circular use of materials** in Flanders amounts to 16%. This figure shows how many tonnes of material in the total processed materials are of secondary origin.

At the same time, the circular economy is much more than recycling. The total **reuse** of products such as white goods, electrical equipment, household goods, textiles, furniture, etc. by households – not recycling them (converting them into raw materials) but reusing them in their entirety through formal and informal channels – has increased to 35.5 kg per inhabitant in 2022, or 238,000 tons. The total size of **repair** in Flanders is around 10 million repair actions in 2023.

³⁰ [Home - Summa \(vlaanderen-circulair.be\)](https://www.vlaanderen-circulair.be/)

³¹ [CE monitor](#)

³² <https://cemonitor.be/en/how-circular-is-the-flemish-economy-v2024/>

The Flemish economy is an extensive system that directly consumes 341 million tons of materials annually. This **Direct Material Input** includes everything that passes 'through the hands' of Flemish companies and increases over the years. We also include production for export. 85% (292 million tons) of those 341 million tons of materials are imported. About a third of the DMI consists of fossil raw materials for energy production or further industrial processing. If looking at the raw materials consumed abroad to run our entire economy, we see that the figure, the **Raw Material Input**, increased from 500 to 562 million tons between 2012 and 2021.

The ratio between the size of the economy and the total consumption of materials can also be expressed as **material productivity**, as a measure of the efficiency with which the entire Flemish economy creates added value from materials. This efficiency of the entire Flemish economy has remained constant over recent years. Increasing it, as previously achieved for labor and energy productivity, is a central challenge for the circular economy. At the same time, a number of circular sectors have shown a growth in **employment**⁽³³⁾ over the years that is steeper than the growth of Flemish employment. The **turnover of reuse centers** shows spectacular growth.

Wallonia

Circular Wallonia is the first CE strategy in Wallonia. Before the launch in 2021, macroeconomic data on the state of play in Wallonia was collected. The data was very focused on waste. Today, a new framework for monitoring the evolution of the CE in Wallonia is being developed. This new framework is being developed with the identification of a set of European and Belgian indicators to be used to better assess the progress of the EC. Currently, this dashboard is not yet available, it will be released by September and allow us to identify the first indicators to collect to ensure the monitoring of the CE in Wallonia.

Given the lack of a dashboard currently in Wallonia dedicated to monitoring and evaluating the CE, a whole series of data and indicators are lacking. The figures available are not yet sufficient to give an overall view of Wallonia's progress in this area. There is a need to work on a common methodology for collecting, analysing and evaluating CE indicators in partnership with colleagues from different Belgian regions. Some data are therefore difficult to aggregate at the national level not reflecting the reality of the field.

As this work has not been updated since 2020 in Wallonia, the figures are very outdated. Work on data about employment in the CE will also be carried out in the development of Wallonia's circular economy dashboard.

Circular economy monitoring frameworks and their indicators beyond the ones from Eurostat

Flanders

An academic Circular Economy policy research center – named “CE Center”⁽³⁴⁾- was launched in 2021, supporting the transition to CE by providing policy-relevant research in the field of CE. It builds on the research results of the previous Circular Economy research center that was active from 2017 to 2021. The CE center brings together researchers from KULeuven, UGent, UAntwerpen, UHasselt and VITO. The CE

³³ Several studies on employment and CE:

<https://ce-center.vlaanderen-circulair.be/nl/publicaties/publicatie-2/7-modelling-job-creation-in-the-circular-economy-in-flanders>

<https://ce-center.vlaanderen-circulair.be/nl/publicaties/publicatie-2/3-employment-impact-of-the-transition-to-a-circular-economy-literature-study>

<https://ce-center.vlaanderen-circulair.be/nl/blog/post/circulaire-economie-is-groemotor-voor-jobs-in-vlaanderen> (In Dutch) ; [MICHELLE](#) (Modelling the Impact of a Circular Holistic Economy on the Labour market and Lifelong Learning) — [HIVA \(kuleuven.be\)](#)

³⁴ [Home - Summa \(vlaanderen-circulair.be\)](#)

monitor has been updated in March 2024 and uses more than 100 indicators to answer the question how circular the Flemish economy is.

The **CE monitor**⁽³⁵⁾ is an **extensive multi-layered CE monitoring framework**. It provides indicators on macro- and intermediate level as well as figures for specific product groups, showing progress to a CE economy for the Flemish region. The macro level indicators provide insight into Flemish consumption of materials, water, soil and space, and the emissions this produces. On the intermediate level, the CE monitor measures four 'systems of need' that the economy needs: housing, food & water, consumer goods and mobility. Finally, the macro- and intermediate layers are complemented with figures for specific product groups or services. The CE monitor includes a number of socio-economic indicators ⁽³⁶⁾ like employment in the CE, employment in the reuse shops and employment in the repair sector.

All indicators are marketed in a visually attractive way, and publicly consultable ⁽³⁷⁾. Each indicator has been carefully selected and substantiated in scientific analyses by the CE Center. Results have been systematically published in both academic publications as well as disclosure to the general public ⁽³⁸⁾.

Wallonia

A new framework for monitoring the evolution of the CE in Wallonia is under development. This new framework is being developed starting from the identification of a set of European and Belgian indicators to be used to better assess the progress of the CE. The dashboard is currently only for internal use and will allow the identification and collection of data for the first indicators to ensure the monitoring of the CE.

Wallonia plans to develop a set of indicators based on the one provided by Eurostat that identify 5 main areas. However, these 5 main areas do not give a complete vision of the evolution of the CE. Wallonia therefore wishes to develop complementary indicators to consider the CE as a whole. These indicators will be comparable to those developed in Flanders and Brussels to promote the aggregation of data at the Belgian national level. Other indicators could be developed if the need arose.

Currently, work is underway, and no data has yet been released. This will be the subject of an official statement to stakeholders and public authorities once it is finalized.

Circular economy targets

Flanders

Local Materials Plan:

1. Prevention:

Flanders aims to achieve **an absolute decoupling between the total amount of waste on the one hand and economic growth and population growth on the other**. This means that the total amount of waste is certainly not growing – even as the economy or population grows. This is true not only for household waste, but also for similar industrial waste and for the sum of the two. Thus, the total Flemish amount of waste will remain at least stable at 2,376,000 tons of household waste and 1,956,000 tons of similar industrial waste by 2030. Preferably, an absolute decrease will be achieved. In addition to these general targets, Flanders also aims to **reduce (the waste from) a number of specific product groups** by 2030:

³⁵ <https://cemonitor.be/en/home-english/>

³⁶ [Socio-economic – CE monitor](#)

³⁷ [Indicators – CE monitor](#)

³⁸ <https://ce-center.vlaanderen-circulair.be/en/publications>

- the quantity of single-use plastic food packaging placed on the market that serves food products intended for immediate consumption;
- the quantity of single-use household packaging placed on the market (932,000 tons in 2020 for Belgium);
- the quantity of single-use industrial packaging placed on the market (907,000 tons in 2020 for Belgium);
- household textile waste.

Reuse is one specific prevention strategy. This is where the reuse centres play a major role. **By 2030, Flanders aims to achieve 8 kg of reuse per resident via the reuse centres.** But in addition to reuse centres, there are a great many initiatives in Flanders that encourage reuse, both formally and informally. This is also why the broader reuse of consumer goods through these various initiatives is monitored.

2. Residual Waste:

The overall **target for household residual waste is 100 kg per capita by 2030** (30% decrease compared to 2018-2020), as set out in the Flemish Energy and Climate Plan. This is translated into a target for each municipality. As in the previous implementation plan, this municipal target will depend upon the profile of the municipality, based on the cluster classification of municipalities by the Belfius bank.

For comparable industrial waste the **target is also set at 30% less residual waste by 2030** compared to the 2018-2020 period.

3. Littering:

The **total amount of litter cleaned up must decrease by 20% by 2030** and the number of items of litter must also decrease by 20% for a number of specific types of environments.

Please check the English brochure of total waste plan (in Dutch) to find all the measures that are taken to reach these targets ⁽³⁹⁾ as well as the ex-post evaluation of the predecessor of the Local Materials Plan ⁽⁴⁰⁾:

Flemish strategy sustainable development:

The Flemish Sustainable Development Strategy also focuses regionally on fostering a sustainable society. It comprises three main components: Vision 2030, Vision 2050, and seven transition priorities. In its Vision 2050, the Flemish Government delineates its long-term aspirations for Flanders: a resilient, socially inclusive, open, and internationally engaged community that fosters prosperity and well-being through smart, innovative, and sustainable practices, ensuring inclusivity for all. This long-term strategy anticipates and accelerates societal transitions necessary to seize emerging opportunities and tackle challenges (see also the section “Dedicated national and/or regional and/or local strategy, roadmap or action plan for circular economy”. Building on this forward-looking vision, a clear ambition for Flanders was articulated in the 2019-2024 governmental agreement, wherein circular economy was approached as a cross-cutting theme. The aim is to reduce the material footprint by 30% by 2030, while simultaneously fostering job creation, addressing water scarcity, and optimizing the utilization of natural resources through closed-loop systems and mindful consumption.

The second component, Vision 2030, serves as the Flemish interpretation of the UN Sustainable Development Goals.

³⁹ <https://ovam.vlaanderen.be/lokaal-materialenplan-2023-2030> (in Dutch) ; [2023 - Summary Brochure - Local Materials Plan 2023-2030.pdf](#)

⁴⁰ <https://ovam.vlaanderen.be/uitvoeringsplan-huishoudelijk-gelijkaardig-bedrijfsafval-2022> (in Dutch)

Lastly, seven transition priorities were identified toward achieving a sustainable society, with circular economy being one of them. These priorities serve as robust mechanisms to realize the objectives outlined in Vision 2030 and Vision 2050.

The transition priority of Circular Economy aims to facilitate the transition towards a circular economy in Flanders. It operates through a steering group, overseeing the public-private partnership known as 'Flanders Circular'. This partnership embodies a quintuple-helix approach, encompassing knowledge institutions, governmental bodies, businesses, civil society, and the financial sector.

Climate:

Flemish Energy and Climate Plan 2021-2030 (update 2023)⁽⁴¹⁾:

- Decrease Flemish Material Footprint by 30% in 2030
- Decrease residual waste production in households from 146kg/inhabitant towards 100kg/inhabitant in 2030
- Realizing a comparable reduction of residual waste production in companies by 2030

Wallonia

Wallonia's strategy (Circular Wallonia⁴²) aims to achieve several targets in the coming years. All these targets have a tight link to the CE. Those strategic objectives are then divided into operational objectives and then measures, action and projects.

- Replace fossil or unsustainably produced resources with renewable and widely available ones wherever possible by 2050;
- Increase resource productivity, the ratio of gross domestic product to domestic consumption of resources in Wallonia, by 25 % between 2020 and 2035, which implies an absolute decoupling of the evolution of GDP and raw material consumption;
- Decrease the direct material demand (DMI) and the internal material consumption (DMC) of Wallonia by 25 % by 2030 compared to 2013;
- Increase Walloon jobs contributing directly and indirectly to the CE by 20 % by 2025, i.e., an evolution from 6.8 % in 2017 to 8.2 % in 2025;
- Double the number of Walloon companies with CE practices by 2025;
- Reduce the average annual production of gross household waste in Wallonia to less 100 kg per person by 2025;
- Reduce the waste of electrical and electronic equipment by 2 kg per person by 2025, i.e. from 22.5 kg to 20.5 kg per person, thanks to repair services and the economy of functionality;
- To reach a minimum quantity of reused goods of 8 kg per person per year by 2025;
- Collect and recycle at least 95 % of household packaging waste by 2025;
- For household and industrial packaging materials, recycle more than 90 % by weight for glass, paper/cardboard, beverage cartons and ferrous metals, 75 % by weight for aluminium and 80 % by weight for wood by 2025;
- By 2030 to recycle a minimum of 70 % by weight of plastic packaging waste from households and 65 % by weight of plastic packaging waste from industry;
- Reaching a recovery rate for end-of-life vehicles of more than 95 % by 2025;
- Use at least 30 % of recycled aggregates in public works;

⁴¹ [Homepage - National Energy and Climate Plan - National Energy and Climate Plan \(nationalenergyclimateplan.be\)](https://nationalenergyclimateplan.be/)

⁴² [Stratégie Circular Wallonia.pdf \(wallonie.be\)](https://wallonie.be/) (in French)

- Reduce waste incineration by at least 50 % between 2019 and 2027.

Wallonia is currently working on a dashboard of socio-economic and environmental indicators linked to circular economy. The objective is that it covers as best as possible the different targets. It should be finished by September 2024. That dashboard will allow for following the evolution of Wallonia according to these targets.

It will be difficult to link the targets to the indicators and some of these targets are too ambitious and might have to be redefined. When the strategy was launched, there was little or no metric of circularity in Wallonia. The strategic objectives set out in the strategy have therefore been defined based on regional ambitions, but these are not always linked to Eurostat's CE monitoring framework. Wallonia's mission is to create a set of indicators to assess the circular economy as a whole and to enable the new Walloon government to set SMART targets based on collectable indicators. For example, it is almost impossible to determine to what extent the actions of the strategy have made it possible to improve Walloon employment, halt the decline in biodiversity or reduce GHG emissions in Wallonia. The strategic objectives were not all consistent with the operationalization of the Circular Wallonia strategy, due to lack of knowledge on indicators of circularity.

There are currently no legal targets for circular material use (CMU). A CMU indicator will be developed in the dashboard of indicators and Wallonia might set a legal target based on it in the future.

Examples of public policy initiatives

Flanders

- ➔ *Good practice example: Product-related policies, including on the R-strategies (repair, reuse, remanufacturing, etc)*

The decree of the Flemish government VLAREMA has recently (December 2023) included **use bans for a number of products if they are not produced with a certain amount of recycled material**, as of a certain date ⁽⁴³⁾. More specifically, the following categories of plastic products are involved: compost barrels and compost bins, roll cages for waste, nursery pots and plant trays, furniture for public outdoor spaces, noise barriers, pipes for rain and wastewater, cover plates for cables, gas lines and other utilities, and window systems, when tendered by a government.

- ➔ *Good practice example: Change in consumption patterns and consumer behaviour*

Single use catering material

In 2020, legislation was introduced prohibiting the serving of drinks in any type of single-use recipient (single use cups, single use PET bottle, single use cans, ...) by governments at own organised events and within their daily operations. Since 2022 the prohibition for governments has been expanded to the serving of drinks and prepared food in single-use catering material ⁽⁴⁴⁾.

For events not organised by governments it is also prohibited to use single use cups, but they can still serve drinks in disposable PET-bottles and single use cans if there is a system in place that guarantees 95 % separate collection for recycling.

⁴³ [Beslissingen van de Vlaamse Regering | Vlaanderen.be](#) see articles 68-75

⁴⁴ <https://ovam.vlaanderen.be/praktijkvoorbeelden-wetgeving-cateringmateriaal> (in Dutch)

→ *Good practice example: Public-private partnerships*

On March 15, 2023, the **Green Deal Sustainable Care⁽⁴⁵⁾** was launched, which includes amongst other things a focus on waste and material use. It is a commitment in which the broad healthcare sector will set to work over the next three years with concrete actions to make healthcare in Flanders more sustainable. Just under 150 organizations responded to the call.

Wallonia

→ *Good practice example: Product-related policies, including on the R-strategies (repair, reuse, remanufacturing, etc)*

In terms of **repair**, the development of [repair cafés](#) is promoted by the **Repair Together Association**: 167 Repair Cafés were active in Wallonia in 2023. A mobile repair café has also been established to travel around Wallonia and develop the repair spirit and skills.

→ *Good practice example: Producer /supplier responsibility*

Given that the individual implementation of an EPR (extended producer responsibility) would represent a colossal amount of work for producers and importers both organizationally and financially, a certain number of companies and the Fedustria sectoral federations (textile industry, wood and furniture), Comeos (commerce and services) and Navem (furniture traders) have created a management body, **the non-profit organization Valumat**.

Valumat is the management organization for extended producer responsibility (EPR) for used mattresses. Created and financed by the sector, its mission is to collect all used mattresses efficiently (and profitably) and treat them sustainably. Through a “designed for circularity” working group, Valumat is funding the search for collective solutions for the sector aimed at fulfilling its mission. Valumat its ambition is to encourage eco-design so that ultimately, all materials from used mattresses can be reused and thus close the materials cycle within the circular economy.

→ *Good practice example: Research & innovation*

Via Wallonia's specialization strategy ⁽⁴⁶⁾ and the strategic innovation area (SIA) linked to circular materials, the approach of focusing on specific specialized technological areas or sectors, prioritizes and concentrates investments and the various existing classic “Research & Development & Innovation” means in order to optimize the economic benefits. There are **five areas of strategic innovation** in Wallonia:

- Circular materials
- Innovations for a stronger health
- Innovations for agile and safe design and production
- Energy systems and sustainable housing
- Food chains of the future and innovative environmental management

These areas are obviously highly correlated with the Circular Wallonia strategy.

In addition, new programs to support technological and non-technological circular innovation have been deployed and tested: Digital4Circular Wallonia (Proof Of Concept promoting the deployment of digital technologies promoting to the benefit of circularity), POC in the agri-food sector, POC in the field circular design of metals and batteries, support for circular design in a non-technological logic, etc.

⁴⁵ [Green Deal Duurzame zorg start officieel | Departement \(vlaanderen.be\)](#) (In Dutch)

⁴⁶ <https://s3.wallonie.be/home.html#> (in French)

→ *Good practice example: Green/Circular/Sustainable public procurement*

The theme of public procurement proves to be a crucial area of action for Wallonia, as public contracts constitute a significant lever of influence on the development of our region towards sustainable and circular transition. Wallonia aims to encourage every public actor to adopt, at their level, a policy of responsible and circular procurement⁽⁴⁷⁾.

As part of the Recovery Plan, the Walloon Government has adopted a Responsible Public Procurement Strategy⁽⁴⁸⁾. This Strategy, which revolves around 4 objectives and 12 concrete projects, aims to facilitate better access for businesses to public contracts and to strengthen the dynamics of responsible public procurement in Wallonia⁽⁴⁹⁾.

To support public authorities in implementing a policy of responsible and circular procurement, several measures are in place:

- The Network of Responsible Public Buyers: The development and communication of tools and best practices are carried out through a newsletter, meetings, and workshops;
- The Network of Social Clause Facilitators: Within this network, a meeting between public buyers and the social economy took place on April 11, 2024, bringing together 200 people to discuss the integration of responsible clauses in public contracts with public buyers and social economy enterprises;
- The Network of Sustainable and Circular Construction/Renovation Facilitators: it is a network of experts in the construction sector who can help the Walloon public authorities, project authors or building professionals to write circular clauses in a public contract or to answer questions about circular construction.

Additionally, the Walloon Region launched a call for applications in March 2024 to accompany and support contracting authorities in rethinking their procurement policy to incorporate more circular considerations⁽⁵⁰⁾. The call will close on November 19, 2024. These public authorities will be supported until December 2025, according to their level of maturity. Tools, meetings, and capacity-building workshops will complement this initiative to maximize the promotion of circular transition in public procurement. A meeting between buyers and suppliers of circular offers will take place on November 19, 2024, to foster dialogue between the public and private sectors.

→ *Good practice example: Industrial symbiosis*

The deployment of industrial symbiosis in Wallonia requires context. In June 2022, a call for projects for territorial development agencies was issued. Territorial development agencies received grants starting from October 2022 and up to June 30, 2025. Territorial development agencies are public bodies that help local infrastructure development, financing local activities or businesses. They are more rooted in specific territories in Wallonia (mainly depending on the Belgian Walloon provinces).

The 2022 call for projects aimed to **support Territorial Development Agencies in their actions promoting the development of industrial, collaborative and structuring of symbiosis projects through the establishment of facilitators**. The mission of the facilitators is to foster collaborative dynamics with the objective of leading to concrete, shared and multi-stakeholder actions aimed at the introduction of

⁴⁷ [L'économie circulaire pour les pouvoirs publics | Circular Wallonia \(wallonie.be\) \(in French\) - A Circular Economy for Public Authorities | Circular Wallonia \(wallonie.be\)](#)

⁴⁸ <https://developpementdurable.wallonie.be/thematiques/achats-publics-responsables> (in French)

⁴⁹ [Achats publics responsables | Développement Durable \(wallonie.be\) \(in French\)](#)

⁵⁰ [Vers des marchés publics circulaires : bénéficiez d'un accompagnement gratuit pour votre organisation | Circular Wallonia \(wallonie.be\) \(in French\)](#)

virtuous circles for the economic actors of a territory. The facilitators of symbiosis play the role of intermediary between the various stakeholders, in particular industry.

Industrial symbiosis concerns all types of industrial activities and requires the collaboration of private and public actors to establish effective synergies. This measure aims to develop economic opportunities for businesses:

- Lower costs, economies of scale (materials, goods, energy, water, equipment, management, waste, emissions, etc.);
- Income or income from the sale of materials, energy or services;
- Reduction in the consumption of raw materials, water and energy during production;
- Better control of the supply chain;
- Improvement of company image.

Industrial symbiosis facilitators have several roles:

- They raise awareness and support companies through meetings (individual and collective);
- They analyse the potential of creating an industrial symbiosis of the company and its ecosystem (by mapping the company's flows, for example);
- They allow meetings and collaborations between companies of the same business park;
- They play the role of intermediary between different actors
- They develop a climate of trust to promote exchanges and meet the needs of the company.

It's an innovative approach because industrial symbiosis facilitators work on specific business parks. Concrete examples of industrial symbiosis will be known soon and updates will be published by Circular Wallonia⁵¹.

Examples of private policy initiatives (sectoral)

Flanders

➔ *Good practice example: New business models*

A good award-winning example is [Juunoo](#); product as a service + MASCO (⁵²)

A MASCO is a kind of hub that brings circular materials into circulation, even after several life cycles. Circular materials have a high reuse value, so MASCO can enable a new type of investment model for those materials. Through a MASCO model, building owners can invest more cheaply in building materials, provided they remain in circulation after use.

Similar to ESCOs (=Energy Service Companies), this lowers the investment threshold and could make buildings much more independent of primary raw materials in the future. The financial sector finds in this new model an answer to the growing demand for sustainable investment products. Such a model does not yet exist in Flanders and requires insights from different disciplines.

A diverse partnership of frontrunners wants to establish a first for Flanders in this living lab: financial, legal digital and circularity experts do targeted research together on the basis of two 'pure' circular materials: office walls and office furniture. Answers to organisational, financial and legal questions should convince the rest of the construction and financial sector of the financial and ecological benefits for the building sector.

⁵¹ Info and updates on industrial symbiosis in Wallonia can be found here: (in French)

<https://economiecirculaire.wallonie.be/fr/articles/actualite/laureats-appel-projets-facilitateurs-en-symbiose-industrielle-sont-selectionnes>

⁵² [MASCO = Material Service Companies](#)

The founder of the office walls company, is also one of the initiators of the Circular Value Institute ⁽⁵³⁾.

Emergence: Support from public policy initiatives has been a key component in the emergence of this initiative. For example, the office wall company⁽⁵⁴⁾. Every year there is a call for a different theme (construction, procurement, healthcare, food chain, ...) [Circulair \(vlaanderen-circulair.be\)](https://www.circulair.vlaanderen-circulair.be). Every year there is a call for a different theme (construction, procurement, healthcare, food chain, ...)

Benefits at scalable level are for the example of Juunoo attained by scaling up through living lab projects of VLAIO Living lab projects area grant programme for multi-stakeholder multi-level collaborations on particular themes within the circular economy ⁽⁵⁵⁾.

An **impact assessment** ⁽⁵⁶⁾ was conducted in 2020, regarding the calls.

A summary:

Why?

- Starting point;
- Learning (Circular Flanders/OVAM);
- Strategy determination (Circular Flanders/OVAM);
- Prove impact (Circular Flanders/politics/Ministers);
- Justify budget (Circular Flanders/politics/Ministers).

The Impact assessment concluded that without subsidy, projects would not have taken place, or only partially/less ambitious. Additionally, Partnerships would have been less broad, which affects the degree of innovation in the projects. Barriers (e.g. financial) are overcome by the subsidy scheme and breakthroughs are realised: predefined results are achieved, ambitious projects are carried out.

Lastly, the subsidy allowed for lessons learned to be absorbed and widely disseminated, as well as for continuation and scale-up of the initiatives. The IA offered several recommendations: Focus, more guidance, differentiation in grant. Based on this impact assessment it was decided to switch from open calls to focused calls.

An overview of circular business models in Flanders was also published⁽⁵⁷⁾.

→ *Good practice example for other sector/value chain*

Circular Ports ⁽⁵⁸⁾

Circular Ports aims to create a context for learning, experimenting and finding actionable solutions in the port sector. Circular Ports was created as a curated platform for sharing and learning, it is accompanied by a newsletter and LinkedIn-page.

A few examples of actions:

- November 14th 2023 - inspiration session Circular Ship Design ⁽⁵⁹⁾;
- Addition of a chapter on circular economy to the Port Economics, Management and Policy handbook ⁽⁶⁰⁾;

⁵³ <https://www.circularvalueinstitute.com/>

⁵⁴ [JuuNoo - Detail - Vlaanderen Circulair \(vlaanderen-circulair.be\)](https://www.circulair.vlaanderen-circulair.be)

⁵⁵ [Living labs circulaire economie | VLAIO ; Doeners in Vlaanderen - Vlaanderen Circulair \(vlaanderen-circulair.be\)](https://www.circulair.vlaanderen-circulair.be)
(filter for "living labs" under Subsidies)

⁵⁶ This Impact assessment is currently not publicly available

⁵⁷ [Cases - Vlaanderen Circulair \(vlaanderen-circulair.be\)](https://www.circulair.vlaanderen-circulair.be)

⁵⁸ <https://circularports.vlaanderen-circulair.be/>

⁵⁹ <https://vimeo.com/889378301/8fd493eac6>

⁶⁰ <https://circularports.vlaanderen-circulair.be/publication/port-economics-management-and-policy/>

- Sponsorship Circular Port Monitoring Chair VUB ⁽⁶¹⁾ and Flemish Sea Ports;
- Participation in Flemish Port Strategy committee.

Wallonia

→ *Good practice example for batteries and vehicles*

Metallurgy, batteries & Transport

Pôle Mecatech ⁽⁶²⁾, a Walloon competitiveness cluster dedicated to the metallurgy sector, coordinates the support to the circular design of companies by raising awareness, training and support for the implementation of projects. Thanks to the CIRCO ⁽⁶³⁾ methodology in particular, companies are encouraged to develop a business opportunity supported by a circular design strategy.

The circular economy represents an important challenge for the metal industry in Wallonia. This sector is based on extensive industrial, technological and scientific expertise as well as diverse skills. It relies on a network of companies (suppliers, subcontractors, customers) that has enabled the creation and development of basic and processing industries "from ore to finished or semi-finished products". This expertise is now applied to the reverse process, from the recovery of used finished products to the creation of new raw materials, which in turn become the ore of our processing industries. This is '**reverse metallurgy**'.

→ *Good practice example for plastics*

A circular design support program has been set up for companies in the plastics industry. This program is led by Plastiwin⁽⁶⁴⁾, a cluster dedicated to plastics processing in Wallonia, in collaboration with other Walloon actors active in the sector (Greenwin, Denuo, Essenscia or Canopea). This approach is an opportunity for the plastics industry to move towards a more circular economy, using all the sector's resources. The aim is to **enable companies involved in the production, mixing, conversion, use and recycling of plastics and composites to meet their eco-design challenges** - or Circular Design - **while maintaining or improving their competitiveness**. There are three types of support available: diagnostics, one-off assistance and short or long-term support depending on the company's needs.

A budget of 1.6 million has been allocated by the Walloon government to this programme throughout a 5-year period.

→ *Good practice example for textiles*

Inventory of textiles

Coordinated by Centexbel, an **inventory of the existing economic and industrial fabric** in the Walloon Region concerning the extension of the lifespan of products containing textiles or leather, is being performed. This study makes an inventory of companies active in the repair of textile products. Moreover, two additional actions focusing on recycling preparation are being carried out. This approach aims to **address the issue of the very large number of end-of-life textiles that end up in our territory and are mostly exported for treatment**. The project's idea is to promote the development of recycling channels through preparation for recycling and identification of the most common materials in the territory. The aim is also to prepare local stakeholders for possible changes imposed by the European Commission (such as the EU Strategy for Sustainable Textiles).

⁶¹ <https://circularports.vlaanderen-circulair.be/new-chair-centered-on-monitoring-the-circular-economy-impact-in-flemish-sea-ports/>

⁶² <https://www.polemecatech.be/en>

⁶³ <https://circulareconomy.europa.eu/platform/en/education/circo-training-programme-creating-business-through-circular-design>

⁶⁴ <https://clusters.wallonie.be/plastiwin/en>

The action is developed into two sub-actions:

1. **Preparation of companies active in the collection, sorting, and resale of end-of-life textiles (in collaboration with Terre asbl):** Addition of two extra steps for non-recoverable textiles:
 - Material sorting step (a specific infrared technology will be used);
 - Delisting step (a phase aimed at removing accessories such as buttons, zippers, etc.).

This will allow workers to train for these new steps, companies to plan for new staff members, and to have a clearer idea of the most common textile fibers in order to engage with recycling companies for the development of potential recycling channels.

2. Flow analysis:

- Analysis of the different textile fibers present in our territory by examining:
 - Unsold items and returns;
 - Production scraps;
 - Professional clothing;
 - Floor coverings;
 - Technical textiles

By flow, identification of: quantities, components, quality, flow, transport modes, current treatment channels. The goal is to identify potential valorization opportunities.

Bio-based materials

Coordinated by the association Valbiom, a support activity has been set up with a view to developing a local hemp textile fibre industry. This mission has helped to **identify the technical requirements** of players in the sector, to **develop a demonstrator in the form of a 100% hemp fabric produced locally**, and to **scale up the ambitions** via the Interreg Hemp4Circularity project ⁽⁶⁵⁾, which has its sights on developing a hemp textile industry in the flax basin of northwest Europe.

➔ *Good practice example for other sector/value chain*

Construction and Buildings

The Walloon policy regarding circular construction is primarily structured by regional strategies such as Circular Wallonia and the Walloon Strategy for Smart Specialization⁽⁶⁶⁾ (regional development strategy focused in identifying and supporting areas of specialization where Wallonia has a competitive advantage and can foster innovation and economic growth), through which Wallonia strives to promote construction practices that integrate circular principles. This involves the **reuse of materials, the design of modular and evolving buildings, as well as the promotion of a circular economy throughout the construction supply chain.**

Circular Wallonia, the first strategy of the deployment of Circular economy in Wallonia, specifically aims to promote circular transition through innovation and the deployment of digital solutions, focusing on:

- Developing tools for designing buildings and infrastructure in a circular manner (such as TOTEM⁽⁶⁷⁾, GRO⁽⁶⁸⁾, ...), and promoting selective deconstruction and reuse of materials;
1. Establishing support mechanisms for both supply and demand in circular construction/renovation;
 2. Implementing demonstrator projects in circular construction;
 3. Organizing regular calls for projects for enterprises involving circular construction sites, products, and services;
 4. Structuring new circular supply chains in construction (for reuse, recycled materials, biobased materials...);
 5. Structuring and prioritizing training offerings in circularity within construction;

⁶⁵ <https://hemp4circularity.nweurope.eu/>

⁶⁶ [#S3Wallonne \(wallonie.be\)](#) (in French)

⁶⁷ <https://www.totem-building.be/>

⁶⁸ <https://www.gro-tool.be/> (in French or Dutch)

6. Increasing the visibility of reversible systems and circular materials.

Under the coordination of the competitiveness cluster Greenwin⁽⁶⁹⁾, the efforts have led to the creation of a Network of facilitators in sustainable and circular construction and renovation, the start-up of a material reuse platform and the launch of 7 innovation projects in the industrial, technological and scientific sectors funded as part of the Remind Wallonia programme⁽⁷⁰⁾, a portfolio of projects with a view to creating a Walloon “mineral” Cluster.

Network of facilitators financed by the Wallonia Recovery Plan.

This network, made up of experts in the construction sector, was recently set up by the Walloon Public Service. It offers technical assistance (standards, bio sourced materials, reuse elements, waste management, etc.) and legal assistance (environmental regulations) to move towards more sustainable and circular management in construction. It also provides advice and support on financing.

To whom?

- Walloon public authorities
- Project owners/authors with a project located in Wallonia
- Building professionals with a project located in Wallonia.

Setting up a helpdesk

- Support for sustainable/circular project design
- Support in drafting a sustainable/circular “project author” type service contract
- Support in drafting a sustainable/circular works contract
- Support for the execution of a sustainable/circular project

Goals

- Encourage **responsible public procurement** (construction sector)
- Make construction/renovation more sustainable and more circular across the entire construction/renovation” process
- Develop tools reinforcing sustainable and circular construction
- Encourage the insertion of clauses relating to construction

Food Industry and Food Systems

Coordinated by Wagralim⁽⁷¹⁾, the Walloon agri-food cluster, a project to **identify flows of organic materials that are not recycled or are insufficiently derived from the agri-food sector** is being carried out in partnership with industrial companies. The goal of the project is to develop a proof of concept (POC). 4 streams of co-products have already been identified: brewer’s grains, rapeseed cake, fruit marc and wheat bran. Within the framework of these priority flows, different issues were highlighted in this report: storage, conversion, transport, administrative constraints and a lack of actors throughout the value chain. The “POC” will have to **demonstrate the economic viability of new biomass recovery from these co-products via a shared industrial tool**. The project with industrial partners is still underway and the results and benefits will be known in 2025 and published on the Wagralim’s website⁽⁷²⁾.

⁶⁹ <https://www.greenwin.be/en/>

⁷⁰ <https://www.remind-wallonia.be/fr/projets/> (In French)

⁷¹ <https://www.wagralim.be/en/>

⁷² <https://www.wagralim.be/en/ressources/>

Walloon Initiative for Circular Materials (Win4C)

The four challenges of the circular economy (Material sourcing, Design for recycling, De/re/manufacturing & Repair, Recycling) are represented within the partnership comprising 46 dynamic and innovative companies (23 large enterprises, 23 SMEs), 9 research centers with remarkable infrastructure, 4 internationally recognized universities, as well as 24 public sector organizations and institutions (investors, clusters, intermunicipalities, cities, etc.). The IIS (Initiative d'innovations stratégiques) is structured around the following axes:

- Cross-cutting Axis (skills, synergies, resources, projects of intersectoral/multi-material interest), coordinated by the CRM Group⁽⁷³⁾ (lead of the IIS);
- Metals Axis (coordinated by CRM Group and ULiège);
- Minerals Axis (coordinated by the Centre Terre et Pierre⁽⁷⁴⁾);
- Plastics and composites Axis (coordinated by UMONS).

Water

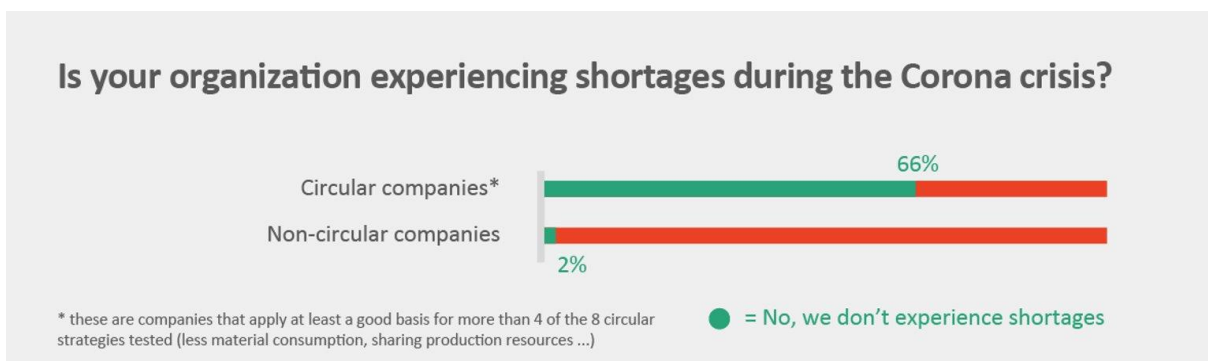
Under the coordination of the Cluster H2O⁽⁷⁵⁾, eight studies have been carried out, covering a wide range of strategic topics. Among these, two methodologies have been designed by Cebedeau⁽⁷⁶⁾, a research centre active in the identification of innovative solutions related to water sustainability, to meet the specific needs of companies: the assessment of their water footprint and the implementation of “Water and Circularity” audits in the industrial sector. Part of the results can be found on their website⁷⁷ the other part will be published before December 2024.

The way forward

Identifying and addressing barriers and challenges

Flanders

In June 2020, Circular Flanders and VITO held a poll on resilience amongst different organisations from the private, government and not-for-profit sectors during the Covid crisis⁽⁷⁸⁾. Five hundred and forty respondents formulated their biggest need for support to become more circular.



Source: Circular Flanders and VITO

⁷³ <https://www.crmgroup.be/en> CRM Group is a collective research centre having as Core Members two major worldwide steel companies (ArcelorMittal and Tata Steel) and as Associated Members numerous companies producing non-ferrous metals, providing services to the steel industry or promoting the use of metals.

⁷⁴ <https://www.ctp.be/en/>

⁷⁵ <https://clusters.wallonie.be/h2o/en>

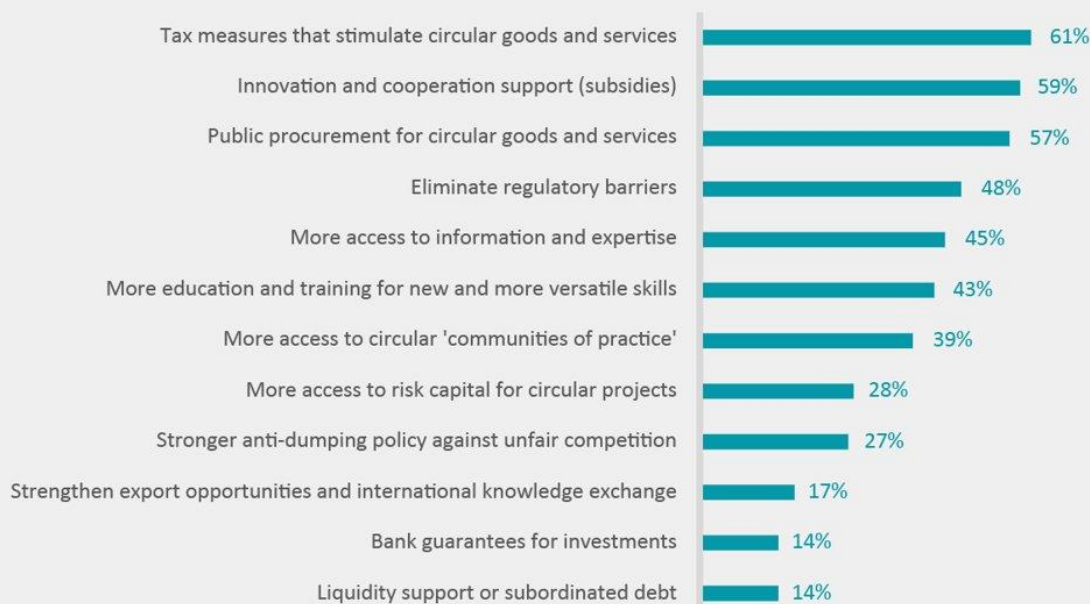
⁷⁶ <https://www.cebedeau.be/en>

⁷⁷ <https://clusters.wallonie.be/h2o/en/node/366> (in French)

⁷⁸ See: <https://vlaanderen-circulair.be/src/Frontend/Files/userfiles/files/Dossier%20Veerkracht.pdf> (in Dutch)

What support could your organization use to become more circular?

Answers from all organizations (non-profit, governments and companies), multiple options possible



Source: Circular Flanders and VITO

Additionally, the Social and Economic Council Flanders (SERV) carried out a survey amongst 1 651 organisations investigating barriers to circular production practices (⁷⁹).

Institutional

Legislative hurdles currently prohibit the use of materials classified as waste from being used as secondary raw material. Technical and economical examples exist where such waste materials could be a perfect input as raw material for an organisation from a different sector. Waste regulations, however, currently limit such re-purposing/re-use.

The study by the Social and Economic Council Flanders recently revealed details of these regulative hurdle.

- **Uneven application among EU Member States** and regions: definitions of waste, no unambiguous criteria for end of waste and no unambiguous application of the classification of hazardous waste.
- **Lack of definitions and gaps:** an absence of delineation/descriptions of recyclates, quality labels or product standards, and eco-design standards for reparability and longevity.
- **Administrative obligations and safeguards:** barriers to international trade in valuable wastes.
- **Mismatched regulations:** the Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (REACH), the Classification, Labelling and Packaging Regulation (CLP), food safety, public health, hygiene, competition, climate legislation, etc.
- **Alignment with the principles of the linear economy:** rental and purchase regulations not suitable for use-oriented business models, accounting rules, for example, depreciation rules do not take value retention into account.

⁷⁹ See <https://www.serv.be/stichting/publicatie/circulaire-economie-ondernemingen-en-organisaties-vlaanderen> (in Dutch)

- **A lack of regulation of the sharing economy** covering such aspects as insurance, liability in co-ownership and (public) commons.
- **Public procurement and tendering regulations:** limited attention to and sometimes explicit exclusion of circular solutions.
- **Gross domestic product (GDP) is an inadequate indicator of value retention.**

Market

The following economic and financial hurdles were found by the survey carried out by the Social and Economic Council Flanders on barriers to circular production practices ⁽⁸⁰⁾.

- **Market failure for certain recyclates:** supply and demand vary widely.
- **Unequal playing fields** compared to the linear economy.
- **Price ratio** between primary and recycled materials: some recycled materials are relatively more expensive than primary materials and raw materials and/or energy.
- **Products from recycled or bio-based raw materials:** often more expensive because not yet scaled up.
- **Incomplete internalisation** of environmental and health costs.
- **Raw material prices** are relatively cheap compared to the cost of labour: hinders labour-intensive activities such as repair.
- **Financing** of use-based circular business models.
- **Direct and indirect rebound effects** in, for example, the sharing economy, and 3D printing.
- **Cost of reverse logistics** and associated take-back warehouse space

Social

The following social hurdles were found by the survey carried out by the Social and Economic Council Flanders on barriers to circular production practices ⁽⁸¹⁾.

- Lack of knowledge for technical, social and ecological system innovation.
- Non-circular behaviour among citizens and professionals.
- Lack of awareness and sense of urgency.
- Resistance to reuse/sharing/use, absolute preference for ownership.
- Vested interests that benefit from maintaining a linear economy.

Furthermore, a lack of access to information, lessons learned, and education/training proved to be a hurdle to circular economy adoption.

Companies

The following hurdles for companies were found by the survey carried out by the Social and Economic Council Flanders on barriers to circular production practices ⁽⁸²⁾.

- Knowledge about material flows and in-use stocks.
- Knowledge of how to redesign production processes to optimise the use of raw materials.
- Knowledge for the development of sustainable alternative materials.
- Knowledge about the link between ecology and inequality.
- Knowledge about the possibilities of new circular business models.
- Alignment problems in value chains.
- Complex, international value chains.
- Low trust between companies not used to working together.
- Focus on short term by, among others, shareholders, buyers and consumers.

⁸⁰ See <https://www.serv.be/stichting/publicatie/circulaire-economie-ondernemingen-en-organisaties-vlaanderen> (in Dutch).

⁸¹ See <https://www.serv.be/stichting/publicatie/circulaire-economie-ondernemingen-en-organisaties-vlaanderen> (in Dutch)

⁸² See <https://www.serv.be/stichting/publicatie/circulaire-economie-ondernemingen-en-organisaties-vlaanderen> (in Dutch).

In order to present a positive business case, the circular economy often needs to adopt a value-chain approach, with co-operation between companies along that chain. This is not, however, current practice, with most companies having no view on what happens to their product after they have sold it. Such co-operation is definitely outside the comfort zone of most companies and requires thinking beyond their core business.

Without being exhaustive on the **possible policy initiatives to mitigate the listed barriers**, the following items can be listed, supported by the SERV study on policy recommendations for a circular transition⁸³.

In the governance field, following items must be **sustained**.

- Adopting a multi-pronged strategy with simultaneous efforts on technology, product design, revenue models and socio-institutional change.
- Obtaining commitment of all relevant actors.
- Leverage digitalisation.

The following aspects need **reinforcement**.

- Removing legal, economic, financial, social and institutional barriers.
- Achieve policy coordination between and within policy levels.
- More strong links to the climate transition
- Leverage the innovative use of innovative policy arrangements.

In addition, specific attention is needed on the **fiscal incentives for social and repair/re-manufacturing activities**. These still have systemic difficulties in competing with massive-scale linear production practices. Fiscal incentives on tax setting may be a useful way to incentivise repair and re-manufacturing.

Moreover, preparation of the active labour force for the circular transitions is needed in terms of job projections and new skills.

High barrier  Low barrier	Institutional challenge to develop policy for a complex cross-sectoral issue
	Market barriers for recycled resources
	Companies' ability to grasp opportunities
	Consumer behaviour and awareness
	Good indicators and targets

In December 2023, OVAM published a study on: “The missing link of the Green Deal: The case for an EU Resources Law⁽⁸⁴⁾. This report makes the case that, for the EU’s Green Deal to be effective, it is critical to target the root cause of the triple environmental crises of climate change, pollution, and biodiversity loss: excessive extraction, production, manufacturing and consumption of material resources. This excess is not evenly distributed in the world: as highlighted in this report, the EU consumes more than its fair share – levels that are almost double the estimated sustainable consumption levels. Addressing material resource consumption by **establishing an EU Material Resources Law** will be critical to meet the fourfold objectives set out in the Circular Economy Action Plan (CEAP) and stay within planetary boundaries. Moreover, the EU will not achieve its climate change targets without making progress on resource consumption.

Developing an EU Material Resources Law should not be seen in opposition to growing European prosperity. Rather, **it suggests a new approach** in which human needs are met with less material resources

⁸³

https://www.serv.be/sites/default/files/documenten/SERV_20190225_Transitie_naar_circulaire_economie_Beleidsagenda_en_aanbevelingen.pdf (in Dutch)

⁸⁴ [https://ovam-](https://ovam-english.vlaanderen.be/documents/177280/797580/231215+The+missing+piece+of+the+EU+Green+Deal+-+The+case+for+an+EU+resources+law.pdf/0b53d4e1-b804-7c38-ac34-7e617e0b4ab4?t=1703083491151)

[english.vlaanderen.be/documents/177280/797580/231215+The+missing+piece+of+the+EU+Green+Deal+-+The+case+for+an+EU+resources+law.pdf/0b53d4e1-b804-7c38-ac34-7e617e0b4ab4?t=1703083491151](https://ovam-english.vlaanderen.be/documents/177280/797580/231215+The+missing+piece+of+the+EU+Green+Deal+-+The+case+for+an+EU+resources+law.pdf/0b53d4e1-b804-7c38-ac34-7e617e0b4ab4?t=1703083491151)

through **adopting a system change approach** with a focus on **the servicification of the economy, smart industrial policy, and decoupling.**”

Wallonia

The identification of the main barriers and challenges that the Walloon enterprises are facing linked to the implementation of circular economy is currently being done by conducting a literature review and questioning the enterprises with a survey that allows them to explain their main challenges. The study was published after the completion of the current report.

Future policy plans

Flanders

Belgium included two reforms and four investment projects under the Circular Economy component of its national recovery plan. One reform and two investment projects were initiated by Flanders:

1) **New governance Circular Flanders:** Flanders has in Vlaanderen Circulair (Circular Flanders) a central platform whose mission it is to facilitate the transition to a circular economy in collaboration with industrial partners, knowledge institutions, governments, banks and civil society. In this reform, the existing formula has been drastically improved and expanded. The public-private partnership has a renewed governance, and will now focus on and invest in a combination of six strategic agendas (circular construction, chemistry/plastics, bioeconomy, other product chains in the manufacturing industry, the food chain and the water cycle) and seven strategic levers (financing, innovation, circular procurement, research, awareness, ...).

A steering group meets regularly to decide on strategic lines. Working groups have been established for every working agenda and strategic lever. These groups have decided on priorities and have started work on the supporting of projects, legal bottlenecks, etc. An overarching Project Group monitors interfaces between the different individual working groups.

2) **Recycling hub:** In general, Flanders aims to support recycling projects that use waste materials (both locally produced and imported) into raw materials, e.g. investments in new pre-treatment techniques, recycling installations or expansion of existing installations; or adjustments to production processes to recycle to process materials. Flanders aims for a substantial environmental benefit in relation to the granted support, e.g. environmental benefits in the form of reduction of residual waste, detoxification of the cycle (such as asbestos destruction) or re-used quantities of recyclates. €30 million subsidies was distributed through two project calls.

By offering such subsidies, Flanders wants to take steps forward in realising the following objectives:

- A **reduction in the amount of residual waste** (up to 100 kg/capita of household residual waste by 2030 and an equivalent reduction for industrial residual waste) in this way contributing to a reduction of CO₂-emissions by 25 % from waste incineration by 2030 (target from national climate plan).
- A **reduction of the material footprint** of Flemish consumption by 30% by 2030.
- A **contribution to Europe’s ambition to quadruple the sorting and recycling capacity** for plastics by 2030 (Plastic waste strategy) and to increase the use of recyclates (SUP Directive).
- The **removal and destruction of asbestos**, producing harmless new materials that can be used again.
- A **surge in the steady amount of secondary raw materials** as resource for new products.

In a first phase, OVAM developed an **assessment framework to support recycling activities in a selection of priority sectors**. Projects were to be evaluated on their maturity/risk level, quality, impact (both environmental and economic), and their policy relevance. It had to be possible to demonstrate a substantial environmental gain (per euro subsidy) e.g. environmental gain in the form of reduction of residual waste, detoxification of the cycle (such as asbestos destruction) or reused quantities of recyclates.

Per European requirements, it is also mandatory to adhere to the DNSH-principle (do no significant harm), demonstrating that no project does significant harm to any of the six major environmental goals.

In the second phase, two calls were launched. Applicants were ranked and subsequently selected according to the aforementioned assessment framework. The two calls have been finished, and 14 projects have been selected for support. The implementation of the subsidized projects is monitored. We do note that it is not evident - even with subsidies - to keep all investments going due to the rapidly rising costs of materials and energy.

3) **Circular construction** (Department Economy, Science and Innovation (EWI)/Flemish Agency for Innovation and Entrepreneurship (VLAIO)): Circular construction pays attention to two important aspects: urban mining on the one hand and forward-looking building on the other. It is important to focus specifically on construction, since:

- 30 to 40% of the waste comes from this sector;
- renovation and new construction require a lot of material and energy, so circular building practices have a great potential for savings;
- accelerating the renovation rate of the Flemish building stock is one of the biggest challenges within the Flemish climate and energy policy;
- there is great potential for efficiency gains in the construction sector through adapted building practices and digitization.

The challenge is to **increase the renovation rate of Flemish buildings with a factor 3** so as to make them more energy-efficient and at the same time reduce the environmental impact of construction materials and their treatment as waste materials. The goal was to invest **€10 million in pilot and demonstration projects** for substantial developments in the field of circular construction, in coordination with the strategic agenda for construction within Circular Flanders, with attention to both urban mining and future-oriented design and construction.

Subsidies have been granted to 100 projects on circular construction, for knowledge dissemination on circular manufacturing industry, for the purchase of (external and internal) advice on circular production, and for the creation of collective living labs by private companies. At least 500 companies (SMEs) and organizations were a direct beneficiary or a participant in these collective projects for both themes of circular construction and circular manufacturing industry.

4) **Circular manufacturing** (EWI/VLAIO): Circular concepts have to be promoted in manufacturing industry at large. In the context of Circular Flanders, strategic agendas on circular manufacturing (electronic waste, textiles, batteries, ...) are being developed. The challenge is to stimulate every company to function in a circular ecosystem, including SMEs. This project sets up specific project calls to distribute €15 million subsidies in line with innovation and entrepreneurship in the VLAIO instruments, in particular for studies, within the collective instruments (such as TETRA (TEchnologie TRAnsfer)⁸⁵, COOCK (Collective R&D and Collective Dissemination of Knowledge)⁸⁶) and for pilot and demonstration projects in accordance with the roadmap to be developed in the strategic agenda.

Subsidies have been granted to 100 projects on circular construction, for knowledge dissemination on circular manufacturing industry, for the purchase of (external and internal) advice on circular production, and for the creation of collective living labs by private companies. At least 500 companies (SMEs) and organizations were a direct beneficiary or a participant in these collective projects for both themes of circular construction and circular manufacturing industry.

⁸⁵ <https://www.vlaio.be/en/vlaio-netwerk/tetra>

⁸⁶ <https://www.vlaio.be/en/vlaio-netwerk/coock-collective-rd-and-collective-dissemination-knowledge>

Wallonia

Some of the measures of Circular Wallonia have been included in the Walloon Recovery Plan. This package gathers 17 measures from the circular economy strategy and aims to boost economic development. Axis 3 of the Walloon Recovery Plan aims to boost Wallonia's economic development through digitisation, reducing the number of brownfield sites, an ambitious industrial policy and strengthening the CE. Two main aspects are concerned here: the realisation of the potential of the CE and support for the prevention, reuse and recycling of waste.

The objectives are as follows:

- Realising the potential of the CE through the implementation of Circular Wallonia;
- Setting up **innovation partnerships** in two of the six priority value chains – for metallurgy and building materials;
- Develop **and strengthen the collaborative and functional economy**, eco-design, eco-innovation and the collection and sorting of waste flows, selective collection/sorting of material flows starting with priority value chains and with a view to promoting reuse, preparation for reuse and recycling. Create an aircraft dismantling industry;
- Continue and **accelerate the digitisation of data communication processes** and the use of data related to waste management;
- Strengthen controls, on illegal waste management practices and channels.
- Develop the eco-design of products, dematerialisation, the transition to zero waste and the economy of functionality;
- Fight against over packaging and develop **reusable packaging** and containers;
- Maintain products and equipment in service for as long as possible – **promote reuse and repair**;
- Develop an approach that promotes the prevention of professional waste and the reuse of materials within companies;
- Reduce losses and (non)food waste and promote quality composting;
- Support **the development of reuse centres** in Wallonia in collaboration with the Fédération Ressources;
- **Extend sorting and selective collection** to new waste fractions – organic waste, plastics, used mattresses, furniture, toys, reusable equipment, certain construction waste, asbestos at home, etc.;
- Encourage **sustainable construction**: develop and generalise selective deconstruction – promote the reuse and recovery of construction, demolition and renovation waste;
- Promote **quality recycling** – support the development and improvement of techniques for decontamination, material extraction and treatment;
- Develop the **recovery of by-products** – undertake action on the ground to encourage companies to create partnerships for the exchange of by-products in coherent territorial areas and support the establishment of synergies;
- Support the **sorting, collection of and innovative logistics** for professional waste, through calls for projects and the setting up of material libraries.

European Topic Centre on
Circular economy and resource use
<https://www.eionet.europa.eu/etcs/etc-ce>

The European Topic Centre on Circular economy and
resource use (ETC-CE) is a consortium of European
institutes under contract of the European
Environment Agency.

