



CIRCULAR
FLANDERS



CIRCULAR FLANDERS RETROSPECTIVE REPORT 2017-2019 THE FIRST PERIOD

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- ▶ TNM (Civil Society Transition Network)
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- ▶ The Flemish Building Confederation
- ▶ VITO
- ▶ VLAIO
- ▶ VLAKWA & VMM
- ▶ VVSG (Association of Flemish Cities and Municipalities)



INTRO

Welcome to the Circular Flanders Retrospective Report. This report's aim is to provide you with **an overview of the work carried out by the Circular Flanders operational team over the past two years**. The report also coincides with the end of the first period. On the establishment of Circular Flanders, we drew up a rolling programme for the 2017-2019 period with our Kick-off Statement. This retrospective report is a review of the plans set out in the Kick-off Statement at the time.

So, what was our most important finding? **A good deal more was accomplished than we'd initially anticipated**. For example, we had the opportunity to launch three Open Calls, that way funding over 130 innovative circular economy projects. The Green Deal on Circular Construction was also an unprecedented opportunity that we were able to put on the market. What's more, the complementary reinforcement of our team by the OVAM experts in ecodesign and area-specific operations expanded our scope.

A relevant distinction to be kept in mind when reading this report, is that we only report on the accomplishments in which the Circular Flanders *operational team* was involved. First of all, **most of our accomplishments have been developed in partnership** – in cooperation with our driving force, OVAM, in particular. While we are often both catalyst and initiator, we are also frequently just an 'ordinary' partner. It's for this reason that we would like to use this report as an opportunity to mention our partners on each of the projects and once again express our appreciation for the smooth cooperation! Secondly, our efforts have also involved our **steering group members**, which includes organisations from the business world, academia, civil society and governments. **They also shouldered their responsibilities** by setting up campaigns to promote a circular economy in their fields of activity. These campaigns encompass too great a scope for us to provide a detailed picture of them all, which is why we requested that each steering group partner provide a concise overview of their own perspectives and accomplishments. The fact sheets produced as a result of this request have been woven into this report.

At the time at which this report was drawn up, Circular Flanders was actively promoting a **'new start'**, with the restructuring of management and the development of a new work programme for the coming years. In a nutshell, this retrospective report has come at an excellent turning point, an opportunity to reflect on the lessons learnt to develop a roadmap for the future.

We hope you really enjoy leafing through and reading this report.

Brigitte Mouligneau
Transition Manager

WHAT'S THE BEST WAY TO READ THIS REPORT?

- 1 This retrospective report is an **interactive PDF**. External links to downloads or online resources have been embedded on each project page so that you can easily click through to find out more.
- 2 The dark bar at the top is a **navigation bar** that allows you to easily jump from chapter to chapter.
- 3 There is an arrow at the top left which is a **back button**. It will take you back to the page you just viewed.
- 4 A **hamburger button** is at the top right, which opens the general table of contents.



1/ ABOUT US

THIS CHAPTER DISCUSSES

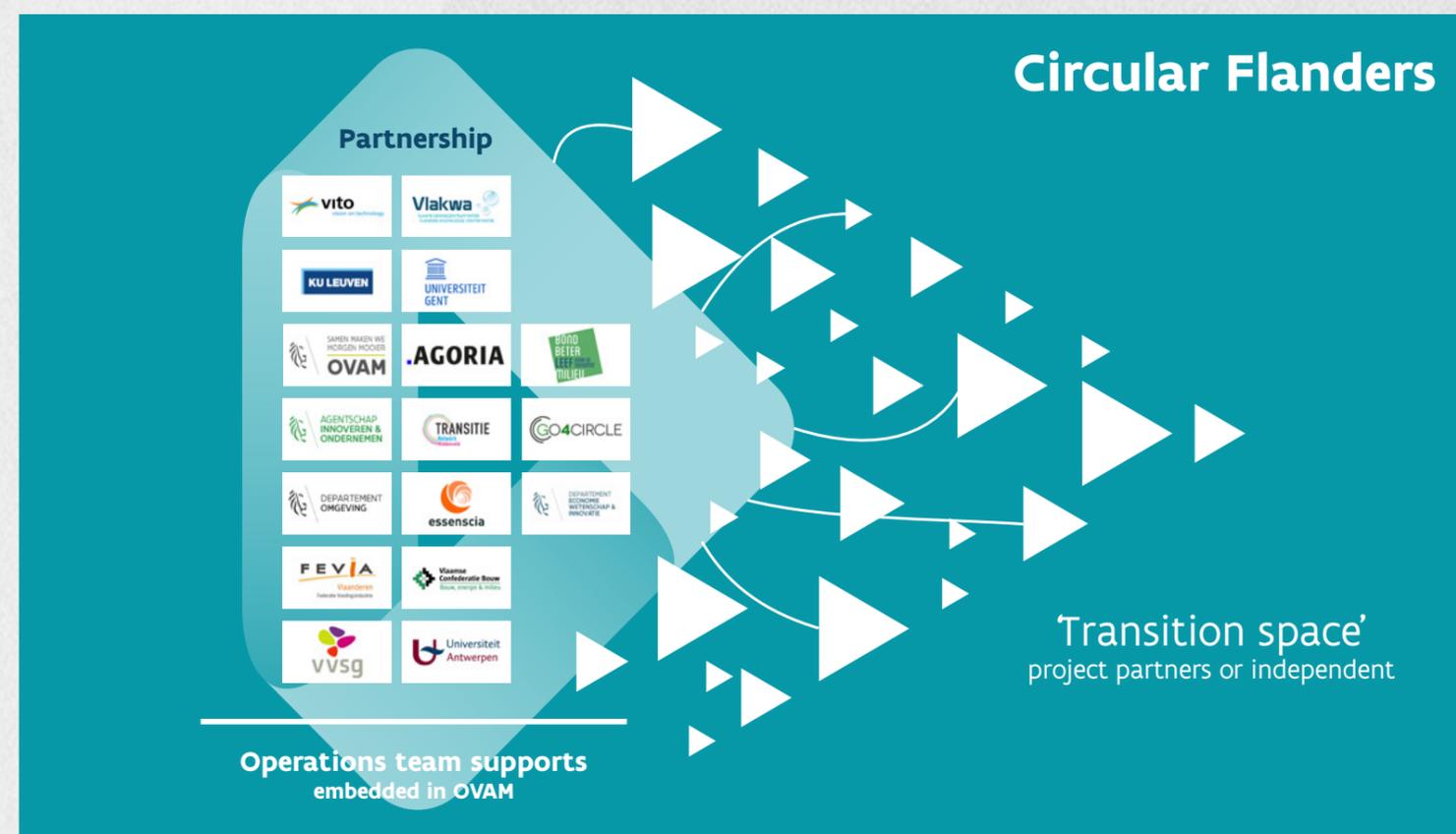
- A. A PARTNERSHIP
- B. OUR APPROACH
- C. OUR PARTNERS
- D. THREE PILLARS

A. A PARTNERSHIP

Circular Flanders is the hub and source of inspiration for Flanders' circular economy. It functions as a partnership between public authorities, businesses, civil society and the knowledge community that undertake collective action.

In addition, Circular Flanders is also a broad movement of citizens, entrepreneurs, civil society organisations, local authorities, etc. seeking to set up circular economy-related initiatives. We actively connect them and provide them with support.

The Circular Flanders partnership is supported by a multidisciplinary team that is an integral part of OVAM.





B. OUR APPROACH

Our approach can be summarised as six core activities:



1. NETWORK & COMMUNITY > We connect and co-create.

Successfully implementing a circular economy isn't something that can be done in a bubble. Partnership and shared commitment on the part of Circular Flanders' partners – both public and private – is crucial in this respect. We bring together various partners and project partners to meet circular economy's challenges head-on.



2. KNOWLEDGE & EDUCATION > We build and share our knowledge.

Measurement gives us the facts. That's why we're working on a research agenda. Under the umbrella of the Circular Economy Policy Research Centre (CE Center), an association of scientists conducts research into various aspects of the circular economy. We share this knowledge and steer specific policy-relevant research assignments.



3. INNOVATION > We enable.

Using targeted instruments, we encourage and speed up innovation and entrepreneurship towards a circular economy. Our concept of innovation covers a broad context, from technological innovation, innovative product design and business models, to process innovation, need systems and new forms of cooperation.



4. CATALYST > We make it happen.

We support pioneers and pragmatic go-getters in a variety of ways, e.g. by trying to reduce the risks of experimentation (de-risking) and encouraging testing in a circular economy by presenting challenges (collective processes towards stimulating entrepreneurs to take their ideas that one step further), sectoral learning processes and demo projects.



5. POLICY > We support.

We focus on streamlining and linking the various policy agendas relevant to a circular economy, something we do at a local, Flemish and federal level up to the European and/or international levels. We are the Flanders circular economy contact point vis-a-vis these public authorities, and we also promote guiding and support policies.



6. EMBEDDING > We make it grow.

We ensure that the principles and good practices concerning a circular economy are scaled up and embedded in Flemish companies, civil society organisations, the education sector, and at the larger public and local authorities and that they are embraced and practised by citizens. We encourage citizens and businesses to be accountable for their role in the circular economy. Good examples of citizens' initiatives can be inspiring in this respect.



C. OUR PARTNERS

Image: Circular Flanders Steering Group

© Alpha Photography

Creating a circular economy is everyone's business. That's why we are working on a broad partnership of organisations that involves a genuine commitment to action. We bring partners from the knowledge and business communities, governments and civil society together.

Meet our steering committee:

1. Dirk Van der Stede (VLAKWA)
2. Brigitte Mouligneau (CE Transition Manager)
3. Alex Verhoeven (VVSG)
4. Mieke Houwen (EWI)
5. Tom Quintelier (Fevia)
6. Dirk Van de Poel (Civil Society Transition Network)

7. Erik Paredis (CDO, Ghent University)
8. Henny De Baets (OVAM)
9. Peter Vercaemst (VITO)
10. Frans Dieryck (Circular Flanders Chairman)
11. Olivier Beys (BBL)
12. Paul De Bruycker
13. Karel van Acker (KU Leuven)
14. Patrick Vandenbossche (Agoria)

Not pictured

15. Marc Andries (VLAIO)
16. Frank Beckx (essenscia vlaanderen)
17. Peter Cabus (Department of Environment)
18. Bernard De Potter (VMM)
19. Marc Dillen (VCB)
20. Petra Ronda (VCB)
21. Stany Vaes (go4circle)
22. Dirk Vangijseghem (VLM)



D. THREE PILLARS OF ACTION

Between 2017 and mid-2019, our work focussed on three thematic pillars. Our operations gradually expanded to include the Open Call, internationalisation and a demand-driven service point.

1. CIRCULAR PROCUREMENT

Governments, companies and other organisations can boost circular products and services via their procurement policies. That means that circular procurement is an essential lever for turning the circular economy into a reality.

It's a new procurement method for companies that focusses on people, the planet *and* people's wallets. The process involves 'buying into change', for example by opting for reusable, bio-based or biodegradable materials, by pooling or sharing resources and products with other organisations or by purchasing the enjoyment that comes with using a product instead of the product itself (product-as-a-service models).

[FIND OUT MORE >](#)

2. CIRCULAR BUSINESS

Completely closing the loop as a single company is no easy feat. A circular economy typically requires new partnerships between companies, which often come as a surprise and pass through the entire value chain and across sectors.

Rethinking business models and creating new, added value are at the heart of transitioning to a circular economy.

In 2017-2019, we focused on the construction sector, worked on means of leverage related to regulation, innovation policy and financing, developed job and skills-related projects and continued to raise awareness about ecodesign among designers and design schools.

[FIND OUT MORE >](#)

3. THE CIRCULAR CITY

There is a tremendous advantage to using cities as a living lab for the circular economy. Flows in and around the city, such as water, people, goods and energy, increasingly constitute the basis of how we think about the future. We look at the city or urban environment as an ecosystem – a complex, sprawling and interactive **metabolism** that tirelessly works to meet the needs of its inhabitants. **The concept of the 'circular city' aims to improve that 'metabolism', to make it more sustainable and resilient, and to close the various loops.**

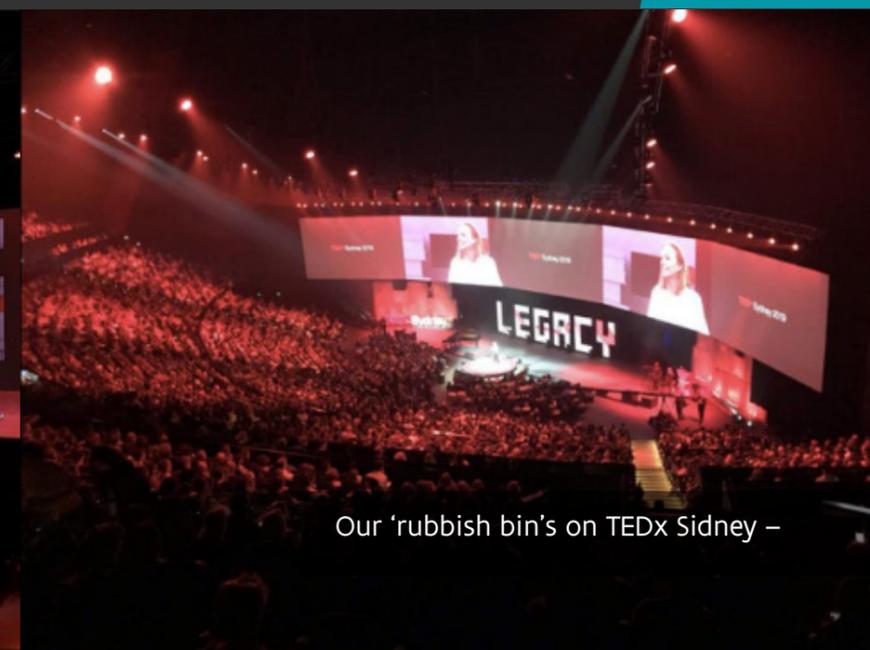
[FIND OUT MORE >](#)



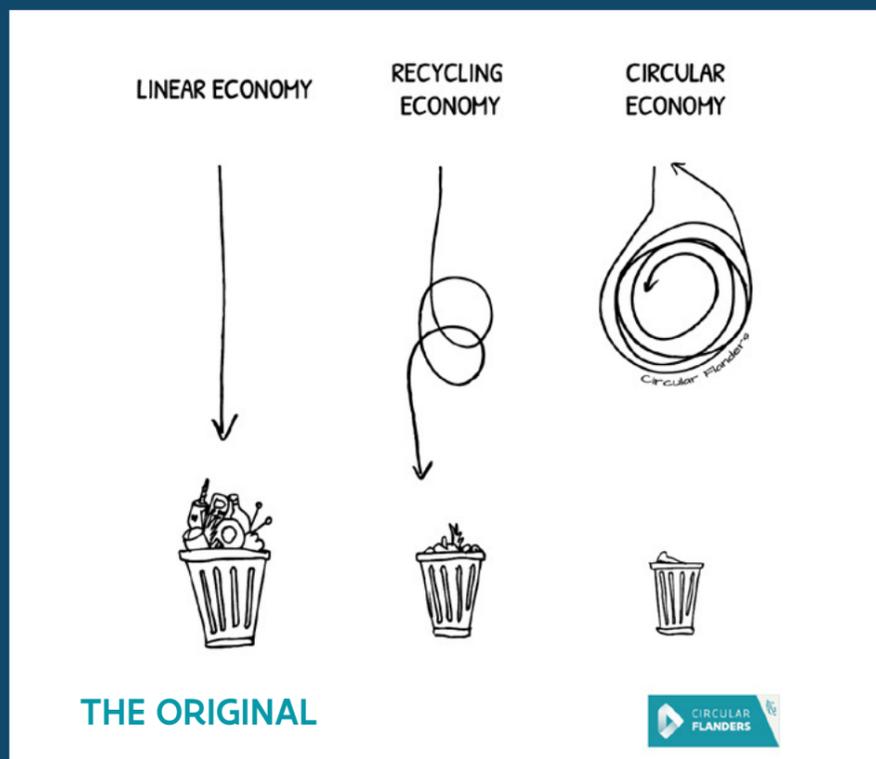
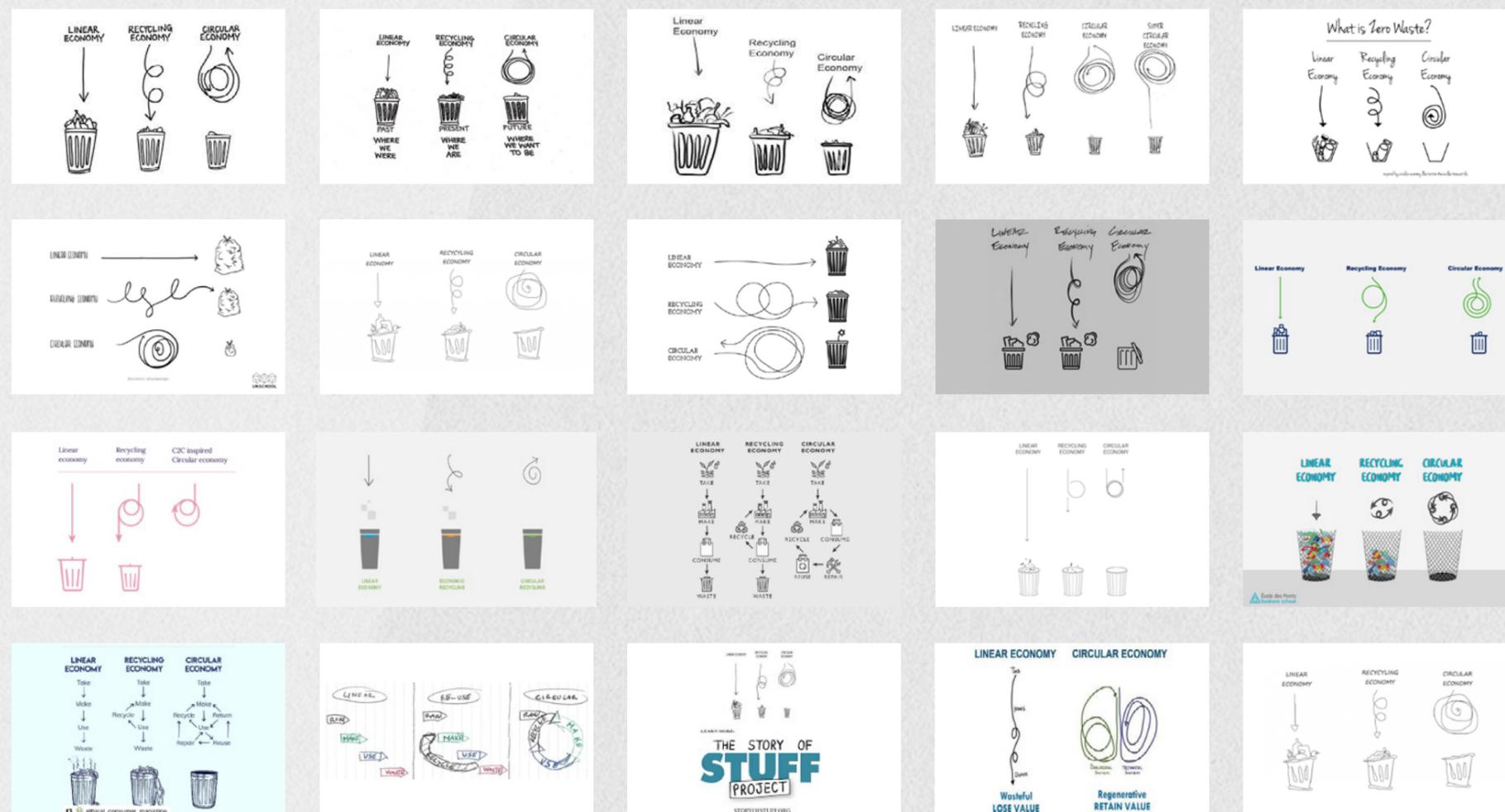
IN A SINGLE IMAGE OUR VIRAL ILLUSTRATION

How do we explain the concept of circular economy in a single clear illustration? And how do we show that it's the right upgrade for phasing out recycling as the main approach? We hit on the answer when sketching our 'rubbish bins' during a brainstorming session.

The illustration became a smash hit and travelled the world round. Educational publishers, organisations from the US to Taiwan and Australia, the European Commission, etc. requested permission to start using it. It was plagiarised, edited and copied. Circular economy organisations started using it as the basis for their logos and on Instagram; it has had impressive staying power. And the list goes on. In short, a worldwide standard was born.



Our 'rubbish bin's on TEDx Sidney –





‘If it can’t be reduced, repaired, rebuilt, refurbished, refinished, resold, recycled or composted, then it should be restricted, redesigned or removed from production.’

Zero Waste Commission of the City of Berkeley, CA

**.AGORIA**

FEATURED STEERING GROUP PARTNER

AGORIA



Agoria paves the way for every technology-driven company in Belgium working towards bettering our quality of life through the development and application of technological innovations. 'Improving the quality of life', that's our aim.



'Agoria helps its members seize as many opportunities related to the circular economy as possible.'

Patrick Van den Bossche, Sustainability Lead (L)
Jorn Verbeeck, Circular Economy Expert (R)

OUR ROLE IN THE CIRCULAR ECONOMY

The circular economy opens up a host of opportunities for the technology industry. Flemish companies are at the forefront of non-ferrous metal recycling, but there are tons of companies in the manufacturing industry as well that are pioneering with the power of the inner circle and incorporating a host of different strategies, such as lengthening the life cycle, retrofitting, remanufacturing and new business models.

In addition to applying ecodesign, digital technology also signifies significant potential for accelerating the circular economy. Digital includes company data management as well as platforms to increase transparency and data exchange between companies. Agoria assists companies in the technology industry with seizing as many of these opportunities as possible.

OUR PLANS FOR 2020

- 1 We assist technology industry companies by focusing on **orientating** within the circular economy, afterwards providing them with **integrated services** (including business model innovation, tax and legal advice, digital enablers and ecosystem) to transition from insight into the added value to **tangible circular implementation**.
- 2 We are setting up a **Circular Economy Connect 2.0**, an innovative approach by our learning network on behalf of the circular economy that focusses on combining collective and individually customised support.
- 3 We are organising the **Belgium 2020 Circular Economy Day** to inspire companies to seize as many opportunities related to a circular economy as possible.

OUR TOP 4 ACHIEVEMENTS

- 1 The *Circular Bytes casebook* (currently only available in Dutch) provides an overview of how **digital technology** can accelerate the transition to a circular economy and encourages companies to start implementing it. ▶
- 2 *Circular Economy Connects* is a **learning network** that Agoria has used to elevate over 60 circular business projects to the next level in just three years' time.
- 3 'Hoe uw circulaire business boosten' (How to boost your circular business), is a **case book** with inspirational **examples** that aims to provide companies interested in implementing a **circular strategy** with the foothold they need to start this transition. ▶
- 4 Agoria has already successfully implemented **over 150 individual coaching processes** at companies to provide them with support related to their circular business model where complex value chains are often involved.



FEATURED STEERING GROUP PARTNER

BOND BETER LEEFMILIEU (BBL)



BBL teams up with organisations, citizens, public authorities and businesses with one goal in mind – to make the transition to a sustainable, renewable society. To make this a reality, we are working towards change in the areas of energy, mobility, raw materials, food and spatial planning.



The economy will either be circular, or it won't. Let's not miss out on this unique opportunity!

Olivier Beys, Circular Economy Policy Officer

OUR ROLE IN THE CIRCULAR ECONOMY

We strive for a circular, locally embedded economy that minimises resource use and maximises well-being. Our approach? Firstly, we are committed to influencing policy. We raise awareness among politicians and nudge them in the right direction. We are in an excellent position to put environmental sustainability and social justice within a circular economy at the top of the agenda.

We also actively invest in our growing group of member organisations. From the grassroots, they are committed day in and day out to a circular economy, raising awareness among citizens, the public authorities and businesses about its benefits. We are committed to empowering trendsetters in the business world and those in the population at large, and endeavour to identify solutions to the challenges they are faced with.

OUR PLANS FOR 2020

- 1 We are developing a **circular construction**-related **online platform** called **C Builders Pro**. The platform will consist of a database of circular products and services, good practices, knowledge and reference projects, manuals for professionals, training courses, etc. ▶
- 2 We are working with local partners in Flemish Brabant on the **creation of six tool libraries** and spreading the concept throughout the rest of Flanders in collaboration with Riso and our member organisation, Repair & Share.
- 3 With regard to **packaging**, we are working on **reuse and prevention** projects so that recycling and downcycling occur as little as possible. The first focus is on **(sports) events** and reusable **e-commerce** packaging.

OUR TOP 5 ACHIEVEMENTS

- 1 Based on the '**Municipality for the Future**' heading, we offer 80 projects and campaigns run by our member organisations to **local municipalities**. The **combined package** includes **solutions** based on five transition topics, including the circular economy. ▶
- 2 We are fully dedicated to the **C-bouwers** [C Builders] project. In this regard, we encourage circular construction by raising awareness and supplying **builders and architects** with **targeted advice**. These activities will initially take place in Flemish Brabant. ▶
- 3 The BBL and Circular Flanders collaboration is a **driving force** behind the **Green Deal on Circular Procurement**. More than 100 organisations have signed up to the green deal so that two circular procurement projects can be set up in two years' time.
- 4 We are partnering with the Province of Antwerp on the **CircuiT** project to draw up **standard specifications** for public services based on the **circular procurement of IT devices**, such as laptops, desktops, tablets, and smartphones, etc.
- 5 For the '**Circular Municipality for the Future**' project, we are joining forces with the Flemish Association of Spatial Planning (VRP) on **circular repurposing of vacant premises**. The aim is to use low environmental impact materials in neighbourhoods and buildings to achieve greater spatial planning efficiency. ▶



FEATURED STEERING GROUP PARTNER

DEPARTMENT OF ENVIRONMENT



The Department of Environment implements environmental and spatial planning policy within the network of the Flemish Government's Environment policy area. The department is based on three organisational pillars:

- environmental strategy;
- environmental policy for space and the environment;
- environmental policy for energy, climate and the green economy.



“
We ensure a clear environmental framework for the circular economy.”

Peter Cabus, Secretary General of the Department of Environment

OUR ROLE IN THE CIRCULAR ECONOMY

- We are fully committed to a high-quality living environment founded on respect for people, animals and the ecosystem. We perform environmental and spatial planning assessments and make developmental choices in concert with and in the interest of Flemish society.
- We actively pursue the sustainable use of diverse natural resources in a low-carbon, energy-efficient, climate-smart society.
- We create a robust link between environmental, social and economic dimensions.
- Our climate, space and energy management position allows us to play a facilitating role in the transition to a more circular society.
- We develop and use our licensing policy to create a framework in which the circular economy receives the opportunities it needs to develop and expand. Our enforcement powers help ensure a level playing field.

OUR PLANS FOR 2020

- 1 We are exploring whether the **Flemish economic area is ready** for a transition to a circular economy and how **environmental policy** could help cushion this transition.
- 2 We are partnering with the EWI Department to develop a **facilitative Flemish industrial transition framework**, within which we aim to roll-out '**low carbon**' technologies and achieve **sympiosis** in the area of **materials, energy and CO2**.
- 3 We investigate the **spatial planning potential** of **products-as-service** and economic **subsystems** in the event that they make it on a large scale, along with how we can **anticipate** potential negative effects in terms of policy.

OUR TOP 5 ACHIEVEMENTS

- 1 We **developed the green deal** as a **new tool** for dealing with complex problems, such as the Green Deal on Circular Construction. We coordinate new green deals through our Green Deal Service Point. ▶
- 2 We prepare young people for sustainability challenges through our **educational activities**. In cooperation with Circular Flanders, we are working on a high-performance **circular economy offer** for teachers, professors and educational institutions. ▶
- 3 With the **Flanders Spatial Planning Policy Plan** strategic vision in mind, we launched the spatial planning transformation programme to **promote** the transition to a circular economy based on **densification and linkages**.
- 4 **LABO RUIJTE** - the collaboration between the Department of Environment and the Flemish Government Architectural Team - was a partner in 'Metabolism of Antwerp, City of Flows', which studied how we **could close loops on a city-regional** scale. ▶
- 5 Our **environmental inspection plan** is the basis for our continuous endeavours to enforce, among others, the waste regulations. In this way, we contribute to environmental safety and the **reliability of materials in the cycle**.



2/ CIRCULAR PROCUREMENT

THIS CHAPTER DISCUSSES

- A. THE DEAL IN DETAIL
- B. THE GDPC PROJECTS
- C. ALLIES
- D. TIMELINE
- E. TOOLS
- F. THE NEXT STEP: PROCIRC



Image: Green Deal on Circular Procurement launch on 8 June 2017



A. THE DEAL IN DETAIL

153 PARTICIPATING ORGANISATIONS

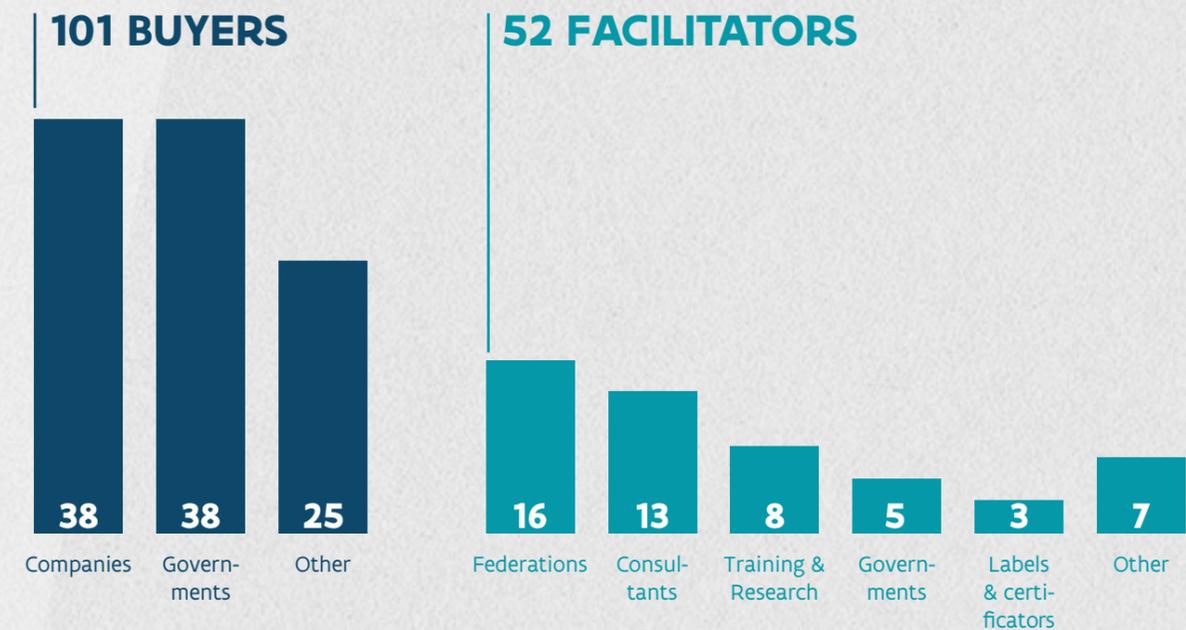
PROCUREMENT AS A LEVER FOR CHANGE

As part of the Green Deal on Circular Procurement (GDPC), over 150 participating organisations have committed to collectively applying or facilitating this procurement method. The GDPC was set up in 2017 by Circular Flanders, in collaboration with The Shift, VVSG (the Flemish Association of Cities and Municipalities) and the BBL.

The approach was inspired by the Dutch Green Deal on Circular Procurement (started in 2013) that was signed by some 40 organisations. We initially planned on targeting a similar number of signatories in Flanders; however, in the spring of 2017, it soon became clear that significantly more organisations were prepared to make a commitment. We clocked in at 153 participating parties, which in and of itself is an impressive success.



Who's in?



WHY ARE WE DOING THIS?

A circular economy needs both supply *and* demand. Simply developing and offering circular innovations, products and services isn't enough. You also need buyers who understand, want and are willing to purchase these innovations. It's for this reason, that we view circular procurement-related activities as a key lever to get this new market going. As part of the Green Deal on Circular Procurements (GDPC), over 150 participating organisations have committed to collectively applying or facilitating this procurement method.

CIRCULAR PROCUREMENT?

It's a new procurement method for companies that focusses on people, the planet *and* people's wallets. The process involves 'buying into change', for example by opting for reusable, bio-based or biodegradable materials, by pooling or sharing resources and products with other organisations or by purchasing the enjoyment that comes with using a product instead of the product itself. Circular procurement is an important lever for transitioning to a circular economy.

A. THE DEAL IN DETAIL

153 PARTICIPATING ORGANISATIONS

Participating Organisations

There are two types of participants in the Green Deal – buyers and facilitators:

- **Buyers** have committed to setting up and successfully completing two circular procurement projects between June 2017 and June 2019.
- **Facilitators** submitted a concrete project proposal with a clear commitment to employ their expertise to support buyers through training, research, exchange platforms, etc.

Unique learning network

The Green Deal participants collectively formed a learning network. Given that circular procurement was still new to everyone, this was a crucial move. The outcome of this learning network is unique in Europe. After just two years, we finished on 21 November 2019 with **in excess of 100 circular procurement experiments**, during which knowledge and experience were developed and tools and methodologies and new forms of chain cooperation were tested. All of which focussed on maintaining and even creating (surplus) value.

Producers and suppliers were also involved, because circular procurement can only succeed in dialogue with the market and when circular solutions are sought in partnership. The successful Buyer meets Supplier gatherings were a fantastic example of this kind of matchmaking.

Around four times a year, we brought buyers and facilitators together to learn from Flemish and foreign cases and to collaborate on **specific issues** proposed by textile, catering, office furniture and equipment, building materials and lighting buyers. At the same time, we also tested out **tools and measuring instruments**.



As a group, we discovered what transition management means for procurement, explored the opportunities made available by the new legislation on public procurement, and much more.

Because some organisations already have some experience, while others are still in their infancy, we offered basic training via an [online learning platform](#) (only available to participants). That way every participant was afforded the opportunity to learn at their own pace, at the times that worked best for them. After the closing GDCP event, we plan on sharing these **webinars, the main lessons learnt, the methodologies and good examples** on our website.

circulairaankopen.vlaanderen >

B. THE GDCP PROJECTS

There are three types of GDCP procurement projects:

- procurement projects carried out by participants as part of their participation in the Green Deal;
- supporting actions carried out by participants as part of their participation in the Green Deal;
- procurement experiments co-funded by Circular Flanders.

1. PROCUREMENT PROJECTS

We registered 115 circular procurement projects. In the autumn of 2019, the projects were analysed in detail. The overview below displays the project's central topics.

2. SUPPORTING ACTIONS

We registered 63 supporting actions by the facilitators.

Topics of the GDCP projects



115
projects

3. CO-FINANCED PROCUREMENT EXPERIMENTS

In 2017 and 2018, Circular Flanders launched a call for projects specifically intended for the participants of the GDCP. In 2017, we received 21 project proposals, of which 11 were approved (for a total subsidy of € 209,110). In 2018, we received 6 project proposals, of which 4 were approved (for a total subsidy of € 65,255).

Overview of the approved & subsidised projects in 2017 and 2018:

- [Circular printing, copying and scanning](#) (Care company and OCMW Leuven, 2017)
- [Circular linen and work clothing](#) (OCMW and Care company Leuven, 2017)
- [‘Circular procurement of polyethylene tubes, a test case for future files’](#) (Eandis, 2017)
- [Circular call – Berchem bicycle bridge](#) (City of Antwerp, 2017)
- [Berg van Termunt, Circular construction of a multifunctional centre](#) (Municipality of Tervuren, 2017)
- [PLOT Training Centre, the Province of Limburg active in circular construction](#) (Province of Limburg, 2017)
- [‘Meritex, a business model for four professional textile products’](#) (Centexbel, 2017)
- [Werflink, Construction material and equipment sharing app](#) (VCB, 2017)
- [essencia CAN, Circular Procurement Network for the Chemical Sector](#) (essencia, 2017)
- [Circular professional textiles, information and communication platform](#) (Centexbel, 2017)
- [Best Practice Circular Procurements Tour & Company visits to circular projects](#) (VIB 2017)
- Procurement of circular lab coats for students (KU Leuven, 2018)
- [‘ProReMat, Research into the use of reusable and recycled building materials’](#) (Van Roey Group, 2018)
- 3C platform, a platform for producers/suppliers as a circularity information hub (The Global Picture, 2018)
- Green white goods, People in poverty lease environmentally friendly household appliances (OCMW Temse, 2018)



C. ALLIES



They facilitate too:

Federations

Agoria, Creamoda, essenscia vlaanderen, Febel Sustainable Vehicles, the Federation of Belgian Textile Cleaning and Care, FEDUSTRIA, FEVIA Flanders, go4circle, IFMA Belgium, INDUFED, Catholic Education Flanders, PAPER CHAIN FORUM vzw, The Ppress, VIB - Purchasing and Logistics Association, The Flemish Building Confederation, Voka - Flanders' Chambers of Commerce and Industry (East Flanders), WOOD.BE

Training & Research

Centexbel, COBOT VZW, CSR CAMPUS, GoodPlanet Belgium, Hogent, IVOC vzw, University of Antwerp - Department of Industrial Systems and Product Design, Ghent University

Consultants

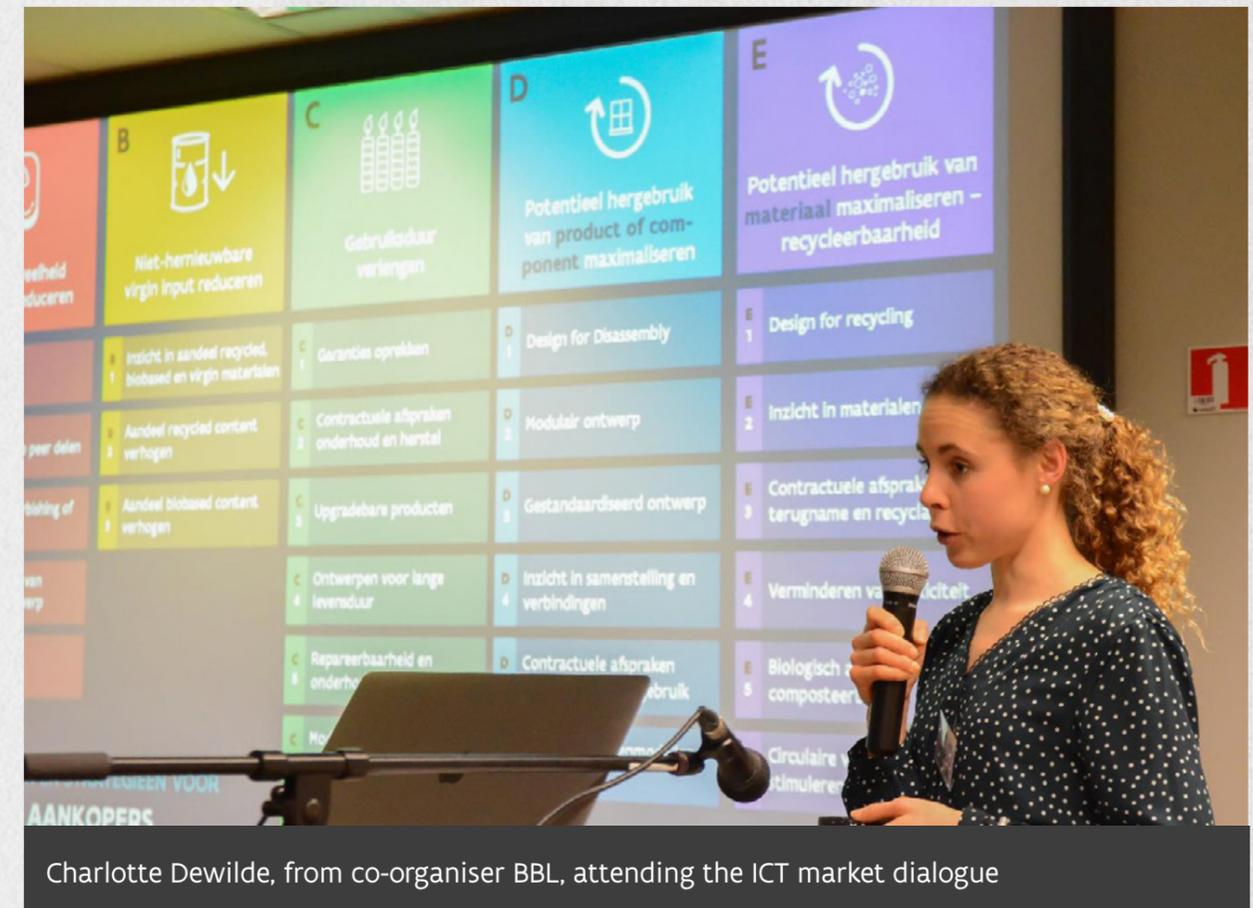
21 SOLUTIONS, APeXPRO GCV, Bopro, C2C ExpoLAB, Circular IQ, CO2logic, Ecofest, Econocom, Factor4, Group Casier Risk & Insurance cvba, Invensus, Rendemint B.V., Securitas ICT Solutions, StrinnLab vof, The Global Picture

Government

The Department of Economy, Science & Innovation - Programme for Innovation Procurement, Department of Environment, Department of Work and Social Economy - CSR Flanders, Dubolimborg, IGEMO, POM West Flanders Label & Quality Mark: Cradle to Cradle Platform, FSC Belgium, PEFC Belgium

Others

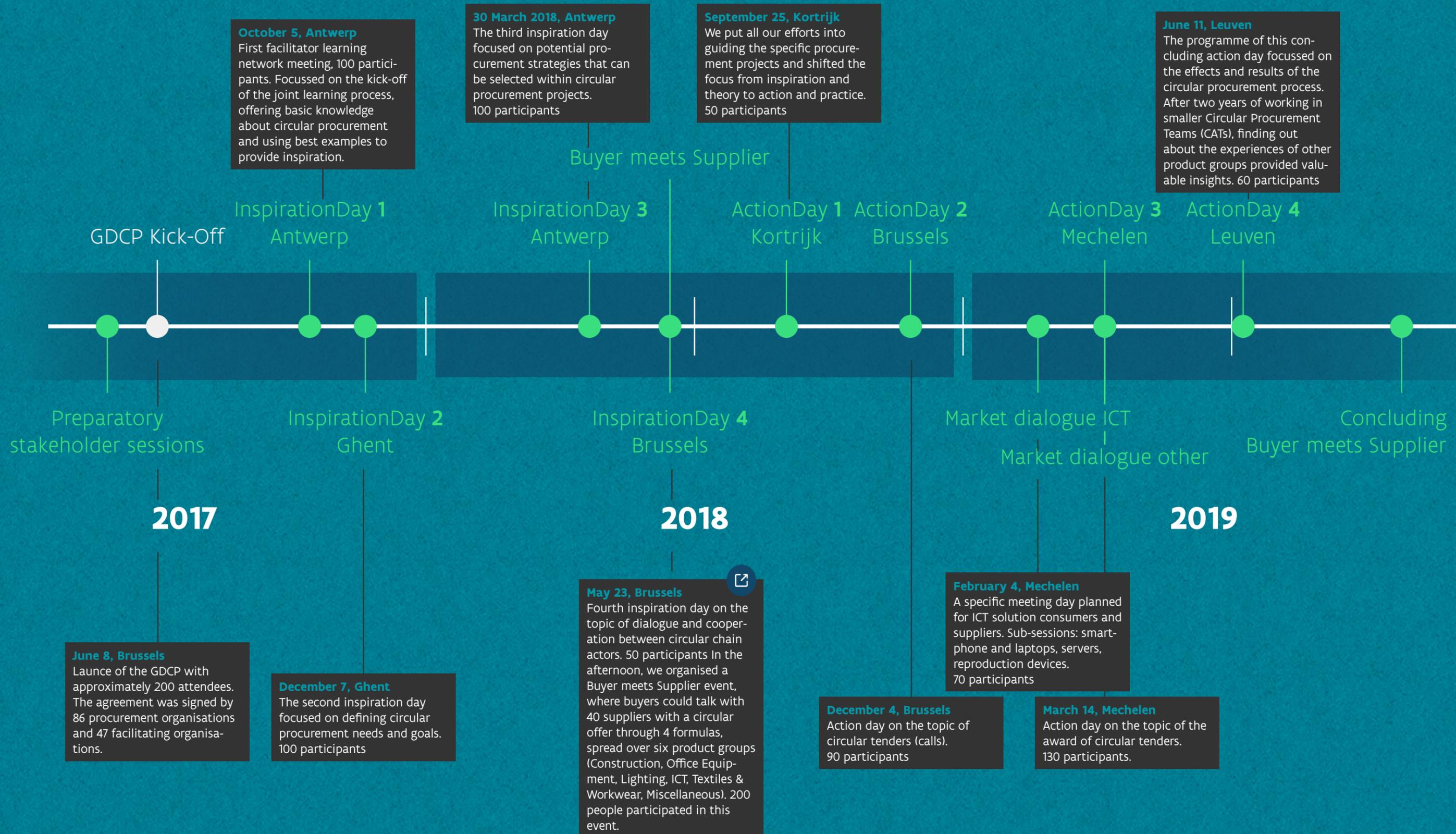
ACR+, Labour and Environment vzw, Belfius group consisting of Belfius Bank and Insurance, Belfius Auto Lease and Belfius Lease, KOMOSIE, Responsible Office, Limburg Transition, The Flemish Energy Agency, vzw DOEK



Charlotte Dewilde, from co-organiser BBL, attending the ICT market dialogue

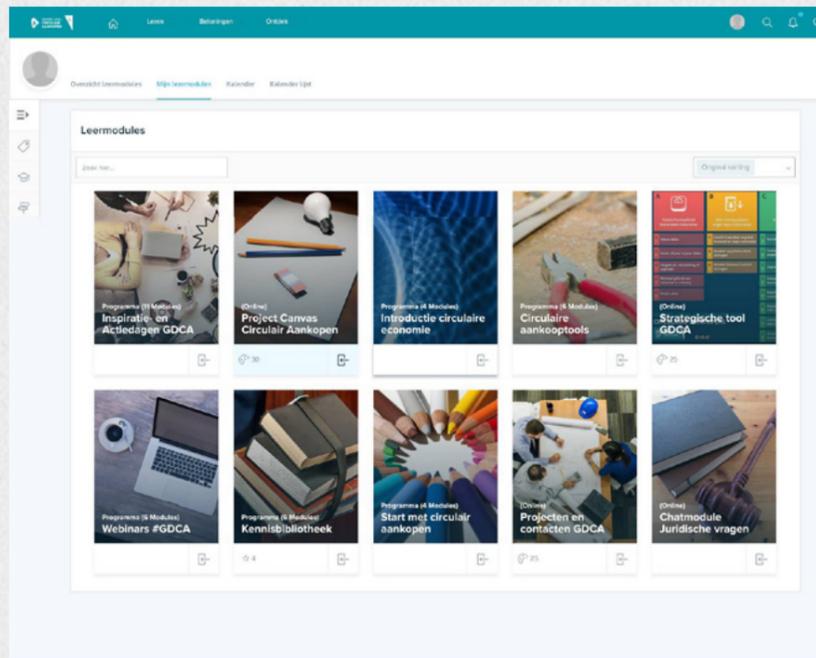


D. GDCP TIMELINE



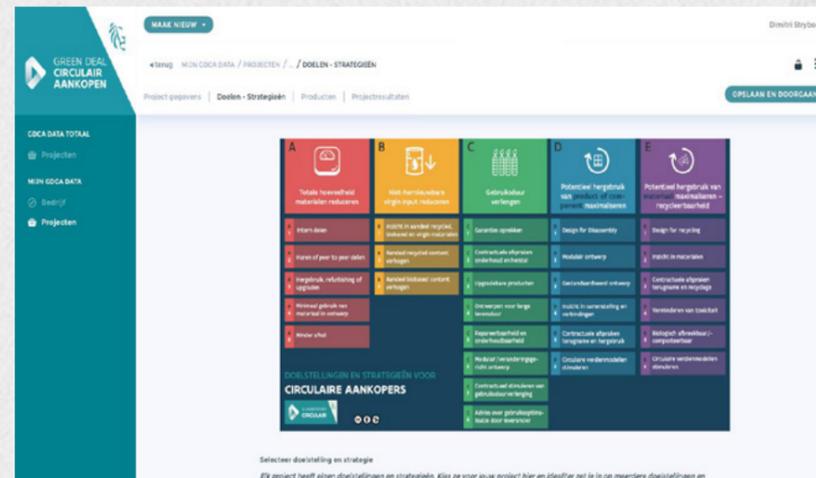
E. TOOLS

In the GDCP, we developed a number of leading tools and methodologies that are now regarded as best practices in Europe.



1. THE ONLINE LEARNING PLATFORM (CLOSED)

Circular Flanders makes a closed online learning platform to the GDCP participants. It functions as the gateway to all GDCP-related information. Participants can take online basic training courses on circular economy and procurement, access a knowledge library, reports on the inspiration days, and an overview of all GDCP projects, etc. At the end of the project, we will make the accumulated knowledge and documents publicly available on our website.



2. THE GDCP IMPACT TOOL

Using the GDCP Impact Tool, we assist participants with defining specific objectives, strategies and targets for their circular procurement projects. After having ticked a selection of objectives and strategies in the tool, they are asked one or more questions per strategy selected; they can answer these during three different assessment periods. Filling in these questions helps them gain insight into the progress towards greater circularity in the procurement projects.



3. PUBLICATIONS

Throughout the GDCP process, we developed several different fact sheets, published (PR event) reports and checklists. Here are just a few:

- [40 circular suppliers fact sheets](#);
- [Circular Procurement Targets and Strategies Plan](#);
- Sheets on the key principles of [construction](#), [ICT](#), [office](#), [textiles](#), [power](#);
- Market dialogue reports on [construction](#), [ICT](#), [office](#), [lighting](#), and [workwear](#);
- Inspiration and action day reports (available on request);
- [Circular procurement: we're boosting the market](#);
- [The Green Deal introduces me to circular solutions \(Susanova\)](#).



<p>A</p>  <p>Reduce total amount of materials</p>	<p>B</p>  <p>Reduce amount of virgin inputs</p>	<p>C</p>  <p>Extend the useful life</p>	<p>D</p>  <p>Maximise the reusability of a product or component</p>	<p>E</p>  <p>Maximise the reusability or recyclability of materials</p>
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<p>A 1</p> <p>Internal sharing</p>	<p>B 1</p> <p>Understanding the share of recycled, biobased and virgin materials present</p>	<p>C 1</p> <p>Extending guarantees</p>	<p>D 1</p> <p>Design for Disassembly</p>	<p>E 1</p> <p>Design for recycling</p>
<p>A 2</p> <p>Renting or peer to peer sharing</p>	<p>B 2</p> <p>Increasing the amount of recycled content</p>	<p>C 2</p> <p>Contractual arrangements for maintenance and repair</p>	<p>D 2</p> <p>Modular design</p>	<p>E 2</p> <p>Understanding materials</p>
<p>A 3</p> <p>Reuse, refurbishing or upgrading</p>	<p>B 3</p> <p>Increasing the amount of biobased content</p>	<p>C 3</p> <p>Upgradable products</p>	<p>D 3</p> <p>Standardised design</p>	<p>E 3</p> <p>Contractual arrangements for take back and recycling</p>
<p>A 4</p> <p>Minimal use of materials in design</p>		<p>C 4</p> <p>Design for longevity</p>	<p>D 4</p> <p>Understanding the internal composition and connections</p>	<p>E 4</p> <p>Reducing or banning toxicity</p>
<p>A 5</p> <p>Less waste</p>		<p>C 5</p> <p>Repairability and maintainability</p>	<p>D 5</p> <p>Contractual arrangements for take back and reuse</p>	<p>E 5</p> <p>Biologically degradable / compostable</p>
		<p>C 6</p> <p>Modular/change oriented design</p>	<p>D 6</p> <p>Stimulate circular business models</p>	<p>E 6</p> <p>Stimulate circular business models</p>
		<p>C 7</p> <p>Contractual incentives for extension of useful life</p>		
		<p>C 8</p> <p>Supplier guidance for use optimization</p>		

GOALS AND STRATEGIES FOR CIRCULAR PURCHASERS



F. THE NEXT STEP: PROCIRC

Since 2018, the Interreg project Procirc has raised the GDCP's experiences and lessons to an EU level. While Flemish players share their expertise, they have also gained access to a new knowledge channel that funnels in the know-how of neighbouring countries.

ProCirc is a transnational North Sea Region project that will experiment, implement and discover what circular procurement has to offer the region. It brings together a total of 30 pilot projects intended to demonstrate the added value of circular procurement in the field.

Each pilot project aims to reduce raw material use and the emission of waste and CO₂ by 20 to 25%. A support network will disseminate the generated insights and specific sector-related tools (e.g. construction, furniture and ICT) throughout the region.

Project duration

2018 – 2022

Partners

Directorate-General for Public Works and Water Management (NL), OVAM (BE), Business in the Community (SC), Network for Sustainable Business Development (DK), Camp C (BE), Agency for Public Management and eGovernment (NO), North Denmark, Municipality of Kolding (DK), ACR Plus (BE), CLEAN (DK), City of Malmö (ZW), Zero Waste Scotland (SC)

[FIND OUT MORE >](#)



WHY ARE WE DOING THIS?

By 'going European', we are tapping into new knowledge in a powerful consortium to strengthen buyers and suppliers on the Flemish market. We also create visibility in the EU – and therefore market opportunities – for Flemish companies through pilot projects and knowledge sharing.



‘Suddenly, I had a bright idea –
what if we didn’t throw away all
our furniture when we moved?’

Frank Geets, the Support Services Organisation



FEATURED STEERING GROUP PARTNER

ESSENSCIA FLANDERS



essenscia is the Belgian sectoral federation of the chemical industry and life sciences. The organisation represents the interests of companies active in the chemical, plastics, pharmaceutical and biotech industries and is made up of over 720 companies, including international companies and SMEs. The sector makes an important contribution to the prosperity of Flanders.



Our chemical sector's knowledge and expertise offer a wide variety of opportunities to partner on solutions that benefit the climate and a circular economy.'

Frank Beckx - essenscia vlaanderen Managing Director

OUR ROLE IN THE CIRCULAR ECONOMY

When it comes to raw material use, our world faces some serious challenges. The chemical industry, with its knowledge and expertise on material and molecule-related valorisation opportunities, is a key partner in transitioning to a circular economy. Given that this sector lies at the basis of most other industries such as textiles, construction, health, transport and energy, we work closely with our partners to design and produce the circular products and services of tomorrow.

An ecosystem mindset is embedded in the sector's DNA, which comes out in the tightly interconnected chemical clusters where pipelines are used to transfer waste streams between production sites. Many innovative, promising technologies are moving towards upscaling, for example, chemical recycling of plastics, the use of biomass as a raw material, biotechnological processes, hydrogen as an energy carrier, etc.

OUR PLANS FOR 2020

- 1 essenscia PolyMatters is one of the **MORE Platform's** (Monitoring Recyclates for Europe) national coordinators, responsible for accurately **inventorying recyclate use** by the plastics processing industry. ▶
- 2 essenscia is developing a **Green Deal on Circular Plastics** with its partners at Circular Flanders aimed at encouraging plastic recycling and recyclate use.
- 3 Next year, Catalisti will also be setting up two to three new innovation projects as part of the **'Sidestream Valorization'** Innovation Programme. Key themes touched on include, **plastic** and mixed plastic waste **recycling** and reuse of **water** and **CO₂**. ▶

OUR TOP 5 ACHIEVEMENTS

- 1 essenscia is one of the facilitators of the Green Deal on Circular Procurement and founded an **essenscia CAN (Circular Procurement Network)**. Three workshops were organised to encourage interest among members and to share experiences with circular procurements. This also involved information sharing about tools to be introduced in circular procurement and incorporated into business management. These were bundled and made available to members.
- 2 essenscia joined forces with the spearhead cluster, Catalisti, in February 2019 to organise a **workshop** at the leading **World Resources Forum** to demonstrate how the sector designs and manufactures **circular sustainable plastics**. ▶
- 3 Catalisti, the spearhead cluster for innovation in chemistry and plastics, successfully campaigned for a **Moonshot innovation programme**, launched in March 2019 by the Flemish Minister for Economy, Science and Innovation, Philippe Muyters. The programme's EUR 400 million strategic innovation budget, to be distributed over 20 years, allows Flemish universities and research centres to work on **breakthrough technologies for a climate-friendly industry**. ▶
- 4 In partnership with Agoria, essenscia hosted the second edition of **Belgian Plastics Day**, assembling all the relevant players in the value chain and giving circular innovations in the plastics sector a boost at a matchmaking event. A study on the circularity of plastics was published with the support of PlasticsEurope. ▶
- 5 **Circular economy** was the key theme of essenscia's **2018 annual event**. Nearly 1,000 participants showed up to find out how chemistry perceives its role in a circular economy. ▶



DEPARTEMENT
ECONOMIE
WETENSCHAP &
INNOVATIE

FEATURED STEERING GROUP PARTNER

EWI DEPARTMENT



The Department of Economy, Science & Innovation (EWI) primarily focuses on policy preparation, monitoring and assessment as the core mandate of its policy area. The EWI Department strives for excellence in fundamental research, strategic knowledge development and the valorisation of this knowledge.



Research and innovation are crucial to the transition to a circular economy!

Johan Hanssens, Secretary General of the EWI Department

OUR ROLE IN THE CIRCULAR ECONOMY

There is a tremendous amount of innovation that will have to go into the transition from a linear to a circular economy. That doesn't just include innovative research but will also require new innovative tools that facilitate this change, along with changes in consumer behaviour, i.e. the users of the products and services supplied.

It's for this reason that we continue co-financing the Circular Economy Policy Research Centre and why we back the promotion of a circular economy through our innovation tool kit.

OUR PLANS FOR 2020

- 1 We ensure policy **continuity** through **persistent support of** the circular economy.
- 2 We **boost and empower** the Flemish circular economy's **strategic competitive advantage**.
- 3 What's more, we harmonise our own Flemish policy with the **EU's** circular economy policy.

OUR TOP 5 ACHIEVEMENTS

- 1 EWI worked with OVAM to draw up the Flemish Resources Programme, a **predecessor** of sorts to **Circular Flanders**.
- 2 By providing funding of over **50 million euros** a year, we support **research** at Flemish universities that promotes a **circular economy**.
- 3 We were there from the start to **co-fund** the Circular Economy (Sustainable Resource Management) Policy **Research Centre**.
- 4 Our responsibility is to **regularly harmonise Flemish policy** with **EU** policy, which includes **expanding** from the circular economy to the spheres of bioeconomy, spatial planning, water and energy.
- 5 Our **support of Flemish strategic research centres** supplies the circular economy with a robust scientific capacity for innovation. This is particularly true of the sustainable technology developed at **IMEC** and **VITO**.



3/ CIRCULAR BUSINESS

THIS CHAPTER DISCUSSES

- A. GREEN DEAL ON CIRCULAR CONSTRUCTION
- B. DEVELOPING LEVERS
- C. JOBS & SKILLS
- D. ECODESIGN

Completely closing the loop as a single company is no easy feat. A circular economy typically requires new partnerships between companies, which often come as a surprise and pass through the entire value chain and across sectors. Rethinking business models and creating new, added value are at the heart of transitioning to a circular economy. And with that in mind, there are several levers we are committed to pursuing:

Construction is one of Flanders' major themes, if anything, simply because of the sector's huge material impact. It's for this reason that we opted to draw on our experiences with the Green Deal on Circular Procurements to start up a Green Deal on Circular Construction. Within that framework, we develop and share experiences and knowledge with each other. The objective is to have a self-sustaining system in place in four years' time that definitively embeds circular construction as good practice.

A context that promotes making opportunities for circular business models available is crucial in this respect. This is all the motivation behind our development of (innovation) policy, regulation and financing levers at the Flemish regional, federal and EU levels.

So, how do we prepare both the current and the future labour markets for a circular economy? It's something we're exploring via our 'jobs and skills' development path. We are firmly committed to enriching training programmes and giving their students extra competencies and the desire to implement a circular economy.

The circular economy requires a different approach and design when it comes to products, processes and systems. That's why ecodesign is a logical first step in any circular business model.

A. GREEN DEAL CIRCULAR CONSTRUCTION

Image: Green Deal on Circular Construction launch on 22 February 2019

© Alpha Photography



The Flemish Minister of Nature, Agriculture and the Environment, Koen Van den Heuvel joined Circular Flanders in launching the VCB's (Flemish Building Confederation) and OVAM's Green Deal on Circular Construction. In the spring of 2019, more than 300 organisations registered in two waves. That makes this Green Deal the most successful ever.

What does the Green Deal on Circular Construction (GDCC) entail?

The Green Deal emphasises that **a combination of practice and learning is the core of this policy**. The participants start experiments and bring their accumulated knowledge and experience together in a learning network. We test tools, methodologies and new forms of chain cooperation.

In addition, a **research group** is making a concerted effort to develop the so-called preconditions to a circular economy, i.e. the legal, economic and other barriers to be faced and tackled along the way. Data and experiences from the experiments feed into this research and together we formulate solutions.

About four times a year, we gather the participants of the Green Deal to provide **inspiration** via presentations on Flemish and foreign cases. We also really get down to work on concrete issues that the participants table, such as **tools and measuring instruments over the course of this event**. The point is to work as a team to find out what the transition to a circular economy implies for the construction sector.

[FIND OUT MORE >](#)

WHY ARE WE DOING THIS?

About 30 to 40% of our waste derives from the construction industry. How we build and live also has a major impact on our carbon footprint, which is why a joint transition to circular construction would make a tremendous difference. Moreover, the construction sector network in Flanders has firm local roots. That makes it significantly easier to close loops in the chain. What that means, in the end, is that the Green Deal on Circular Construction is a choice for maximum impact in Flanders.

CIRCULAR CONSTRUCTION, THE FACTS

In a circular construction economy, products and materials are reused as often as possible and residual waste is minimised.

Our definition

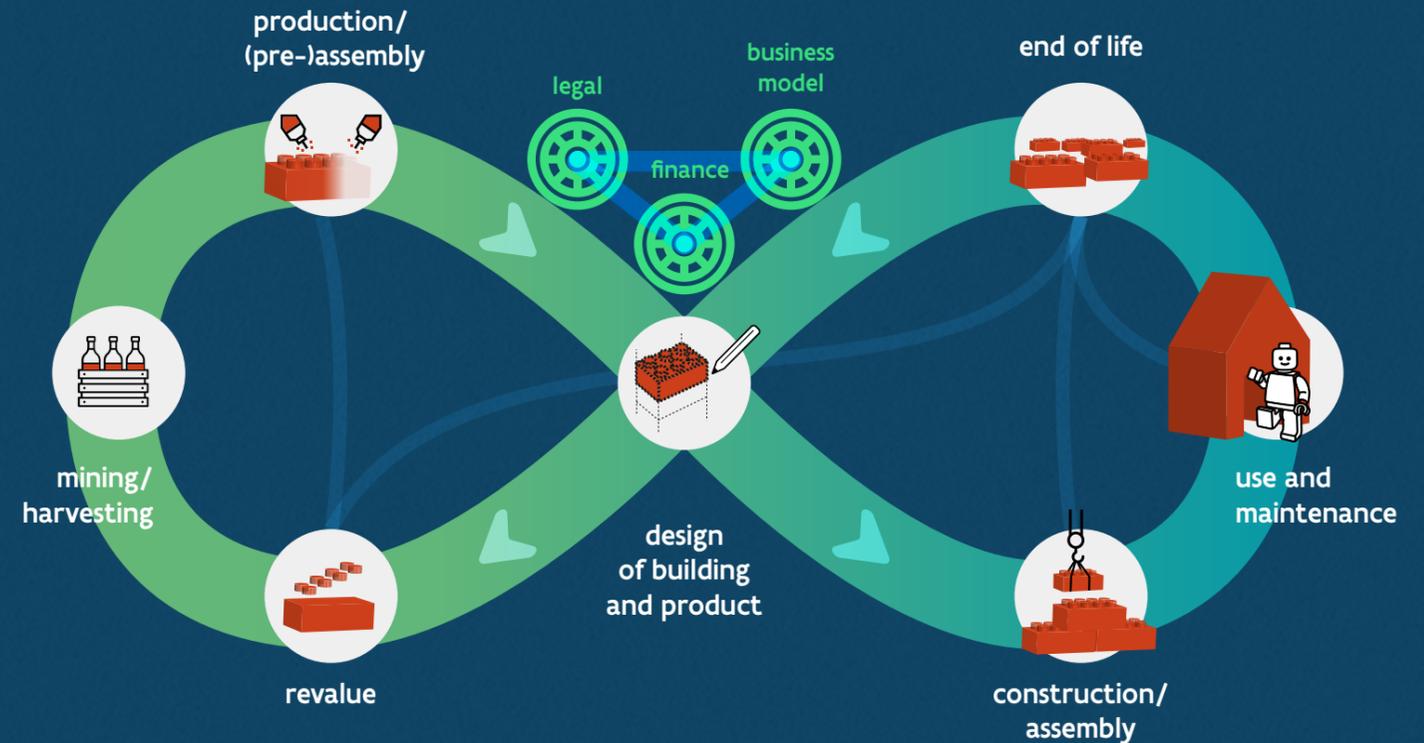
Circular construction is a building practice focussed on achieving efficient and effective use of resources to create – or at least maintain – economic, social and ecological (added) value, taking into account the current legacy and future opportunities specific to the Flemish building world. How we achieve this is via a comprehensive and dedicated collaboration within the value network.

Three main objectives

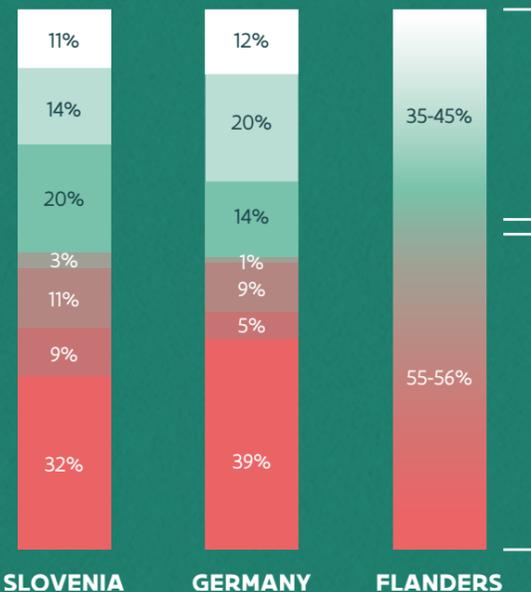
Specifically, there are three objectives of focus:

1. systemic change in terms of design, construction and/or dismantling practice;
2. adapting the business model to create social value in addition to financial profit;
3. develop, share, apply and adjust knowledge, data and practical experience through partnerships.

[FIND OUT MORE >](#)



PERCENTAGE OF NATIONAL GHG EMISSIONS



NON-MATERIALS MANAGEMENT

MATERIALS MANAGEMENT

60% of CO₂ emissions are materials related

60% of our CO₂ emissions relate to the reclamation, transportation, processing, maintenance and recycling of materials.

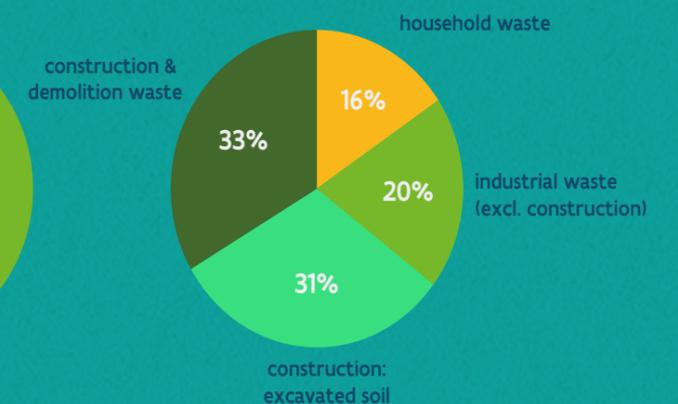
90 % of construction & demolition waste is reused



95 % of excavated soil is reused



waste



The construction sector has a crucial impact on the total use of materials in Flanders; around 30 to 40% of Flemish waste comes from construction.

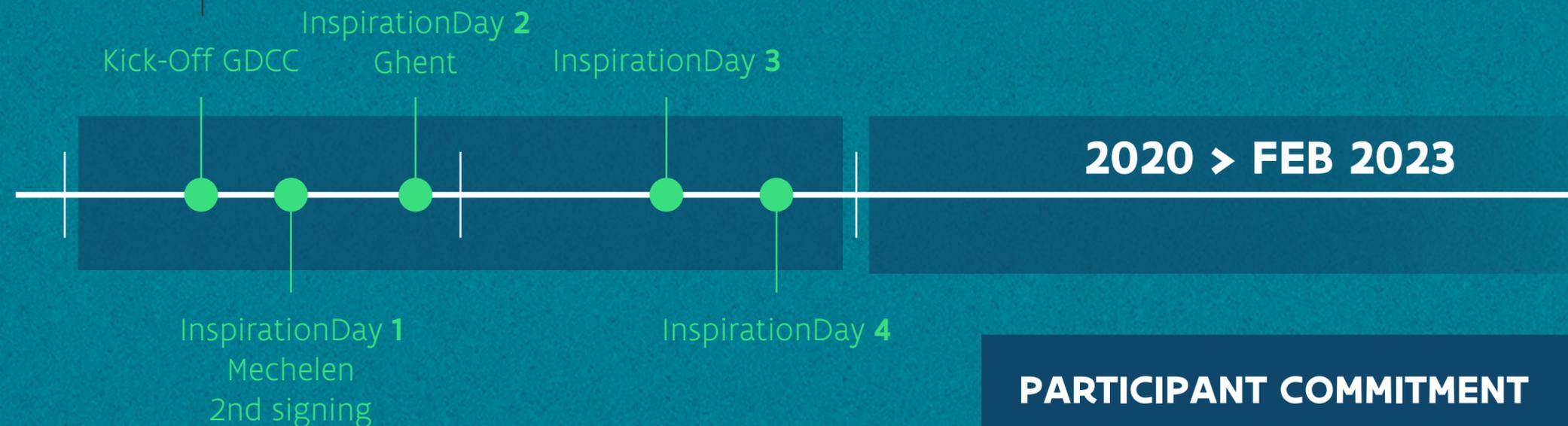
GDCC TIMELINE

February 22, Brussels

We joined our partners and 200 participating organisations on February 22 in launching the Green Deal on Circular Construction. **270 participants.**

May 23, Ghent

During this second Inspiration Day on 23 May, we took a look at the design phase during the key-notes and panel discussion. We took a small break from this during the afternoon workshops to try and find out as much as possible from the participants themselves about the cases. **270 participants.**



2019

March 26, Mechelen

Our goal during the inspiration days is to inspire everyone to set up ambitious circular experiments, while, on the other hand making a concerted effort towards developing a network in which Green Deal participants assist each other and through that process, exchange knowledge and experiences. The focus of the first plenary session was on the demolition phase as the launch of the new circular-focussed future. Participants provided their input on the expanded and future development of this learning process during the afternoon sessions.

300 participants.

PARTICIPANT COMMITMENT

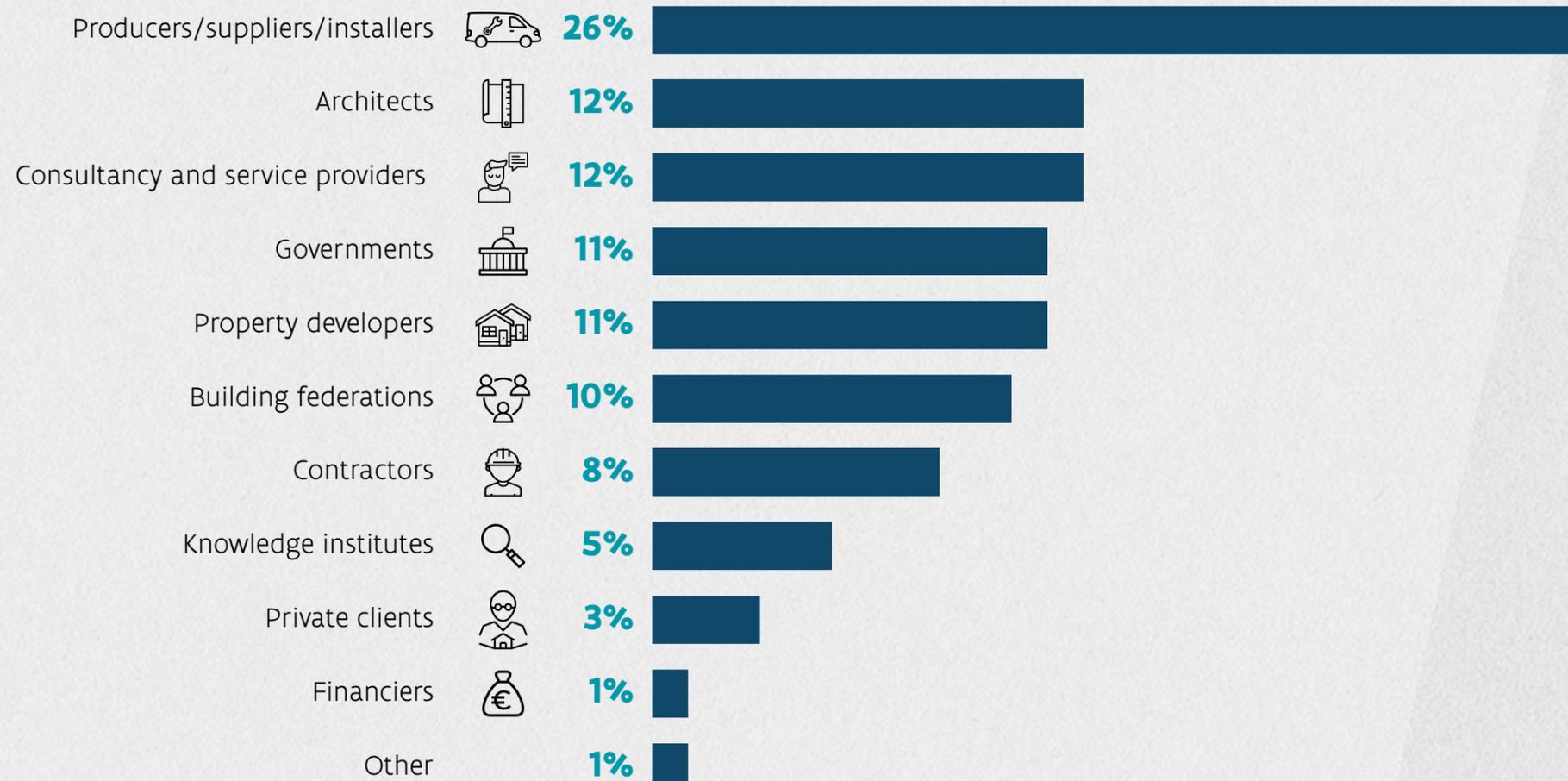
To participate in the Green Deal on Circular Construction, participants must:

- carry out at least one **pilot project** during the term of the Green Deal (e.g. execution of a construction projection, provision of a site, performing research, supplying circular products or services, develop, developing circular materials, facilitating circular construction projects, etc.);
- take an active **part in the learning network**, where participants exchange knowledge and experiences;
- agree that the **researchers** of the Circular Construction living lab may have access to all the **relevant data**, results and lessons learned from the pilot projects;
- take the necessary steps to ensure that the **principles of circular construction can be embedded structurally** in their own organisation.



320 PARTICIPANTS

Who are the GDCC participants?

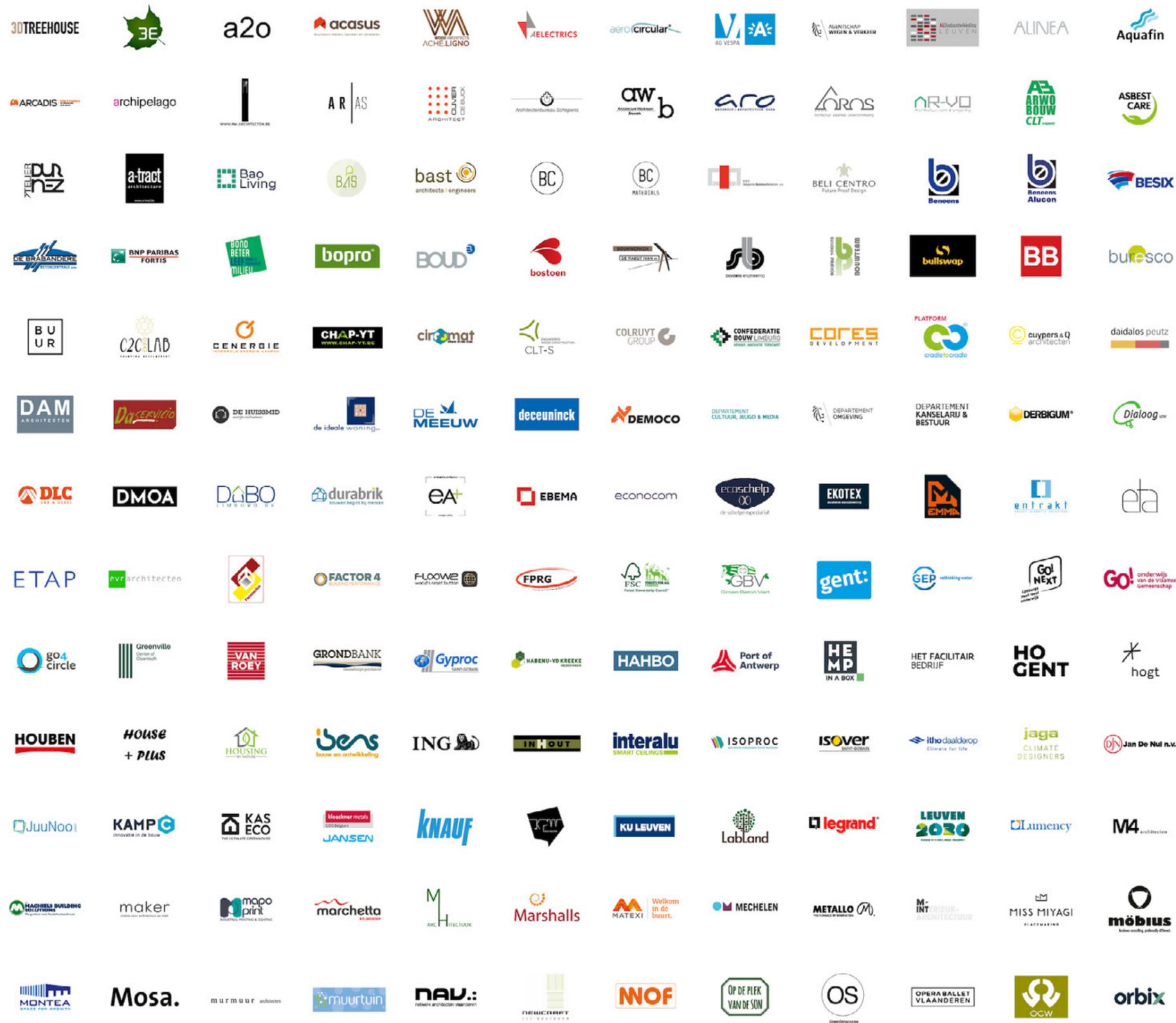


In hardly any time at all, the GDCC has gathered an impressive 320 participants, representing a tremendously wide range of (sometimes) very different organisations.

- The largest group (26%) is made up of producers, suppliers and installers of specific building systems, including interior walls, windows and doors, roofing, bricks, air conditioning, etc.
- It's followed by architects (12%) and consultancy and service providers (11%). This latter group is comprised of engineers, energy consultants, construction project managers, etc.
- Governments are also well represented at 11%, especially in their capacity as principals.
- Property developers (11%) and building federations (10%) are also on board.
- Contractors (8%), knowledge institutes (5%), private clients (3%) and financiers (1%) are underrepresented.



Allies:





Allies:



CASE:

TRACIMAT

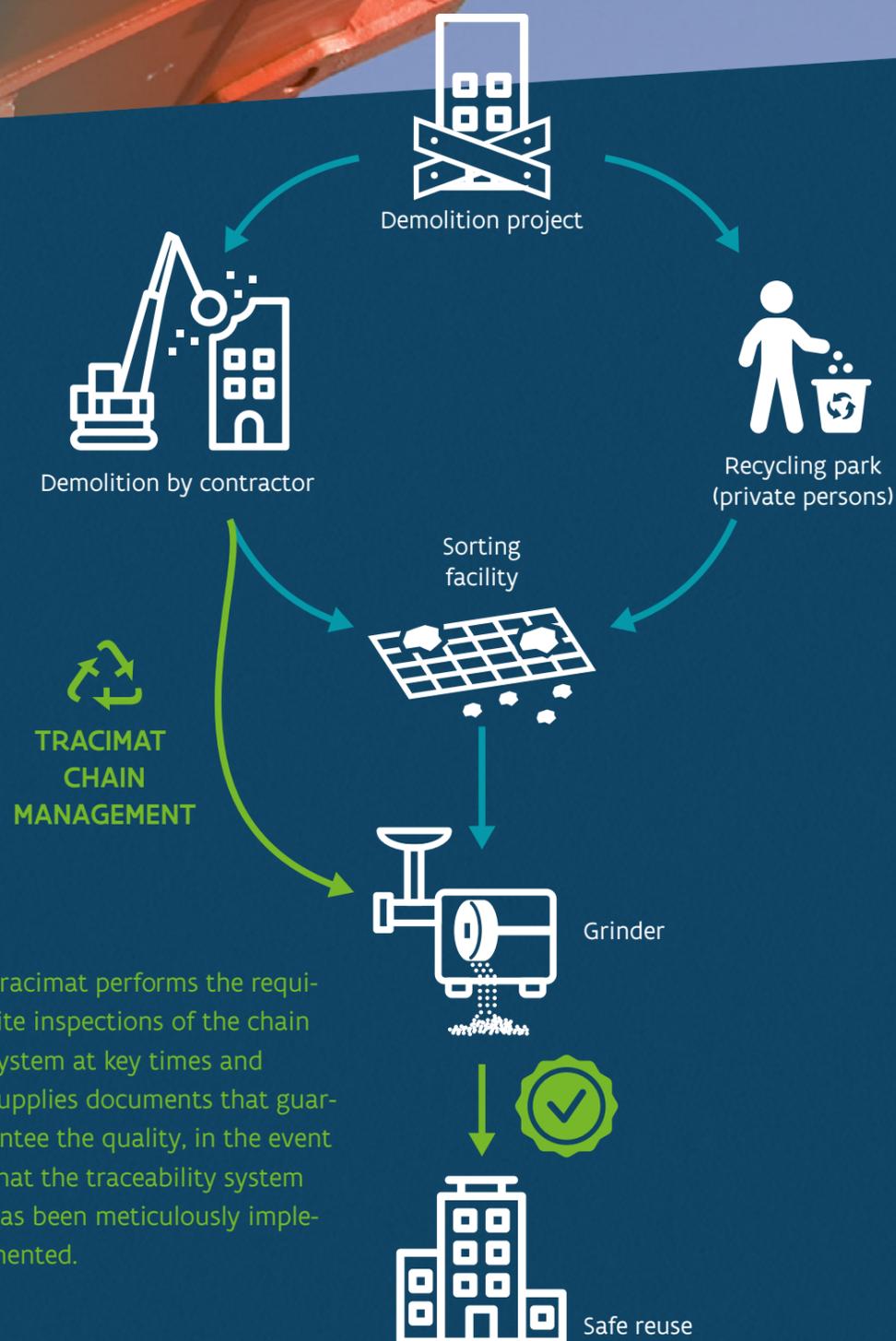
A Flemish example of demolition management with the potential to inspire at an EU level

Tracimat vzw, a recognised demolition management organisation, is *the* expert in the area of **certification of selective demolition processes** in Flanders. A comprehensive **traceability system** is used to assess the use of materials and hazardous substances (e.g. asbestos) released during dismantling and demolition work. That will make it possible for us to deploy these materials specifically for **high-quality recycling**, and we can respond to the increasing demand for **reuse** and **urban mining**.

The EU Construction & Demolition Waste Management Protocol of 2016 recognised Tracimat as an example of good practice and enjoys excellent **international standing** in France, Portugal, Denmark, Luxembourg and the United Kingdom.

Tracimat is an initiative of the **Flemish Construction Confederation (VCB)**, the **Confederation of Demolition and Dismantling Contractors (CASO)**, the **Federation of Granulate Recycling Producers (FPRG)** and the **Association of Consulting Engineering, Engineering and Consultancy Firms (ORI)**.

TRACIMAT.BE





‘Circular economy is not about recycling of volume, but about recycling of value.’

John Sommer,
MT Højgaard (Danish construction company)



Fevia
Vlaanderen

FEATURED STEERING GROUP PARTNER

FEVIA FLANDERS



Fevia Flanders, the Federation of the Flemish Nutrition & Food Industry, represents 26 sectors and 450 companies that produce high-quality and innovative food and beverages in Belgium. We are committed to the sustainable growth of the Belgian food industry in consultation with all stakeholders.



‘Circular entrepreneurship, let’s get cooking!’

Nadia Lapage, Fevia Flanders Secretary General

OUR ROLE IN THE CIRCULAR ECONOMY

The transition to a circular economy is a shared responsibility. Yes, there are challenges and yes, food manufacturers are at work on solutions on a daily basis. However, policymakers also bear a tremendous responsibility for tackling challenges related to prosperity, employment, the environment and health. Collaborating in this way also means moving forward as one. The best solutions are win-wins, and they start with constructive dialogue. Let’s work together to come up with realistic solutions that help all parties move forward.

Nutrition and food are rarely a black-and-white story, but truth be told, solutions based on wishful thinking hardly ever work in real life either. That’s an excellent reason to engage in nuanced discussions and seek constructive solutions based on scientifically substantiated facts and insights.

OUR PLANS FOR 2020

- 1 Efficient management of **packaging waste** and the **fight against litter** remain a **shared responsibility**, where every partner has to find the best solutions for reducing the overall social cost.
- 2 Amendment and simplification of the **legislation** on the use of potable water in food businesses must do a better job of encouraging **water reuse**.
- 3 The importance of the cascade of value retention as a guiding principle for the use of biomass has to be safeguarded. Food companies are interested in an even greater increase in the **high-quality valorisation of their by-products**.

OUR TOP 5 ACHIEVEMENTS

- 1 Encouraging the many SMEs to implement **energy-saving measures** was the rationale behind Fevia Flanders and the Flemish government start up of the **EFES project**. ▶
- 2 In September 2018, Fevia Flanders, in association with the Belgian Family Brewers and eleven different breweries, signed a **Green Deal** on **sustainable water use in the brewing sector**. ▶
- 3 The food industry **valorises 99% of its food waste streams**. The streams mainly go towards animal feed (55%), followed by fermentation (26%), soil (11%) and energy (7%). All of this is with respect for the **cascade of value retention**.
- 4 Fevia Flanders is part of the **Food Supply Chain Roadmap On Food Loss** aimed at driving back food loss across the entire chain. ▶
- 5 Fevia and several other companies made a commitment in June 2018 to **up the recycling percentage of packaging materials** and put a few different packaging products on the market that would be **100% recyclable, biodegradable or reusable**. ▶



FEATURED STEERING GROUP PARTNER GO4CIRCLE



go4circle is the Belgian Federation of the Waste and Recycling Sector. In a world where raw materials are becoming scarcer and companies want to produce sustainably, our 220 members are the essential link between materials used and reuse, recycling and final processing.



‘Together, we shape the future of used materials.’

Stany Vaes, go4circle General Manager

OUR ROLE IN THE CIRCULAR ECONOMY

go4circle is bound to be a leading voice in the area of smart material flows in a future-driven and circular economy. How? By positively contributing to active dialogue with other social actors with their expertise on reuse, recycling and environmentally conscious final processing.

OUR PLANS FOR 2020

- 1 There are **workers** needed to turn the circular economy into a reality. go4circle continues to launch projects that generate enthusiasm among and prepare workers for a job in the waste and recycling sector.
- 2 In a circular economy, recycling is a must. go4circle continues to engage in dialogue with producers on the issue of **ecodesign**. Their objective is to ensure that their product designs prioritise efficient recycling at end of life.
- 3 We've got to ensure that the waste heap is transformed into a recycling tower. go4circle will continue to work for more cooperation across the chain so that used materials end up being converted into new products (**recycled content**).

OUR TOP 4 ACHIEVEMENTS

- 1 **Recycled content:** go4circle supports the Valipac shrink hood project in which shrink hoods are recycled into... more shrink hoods! ▶
- 2 **Ecodesign:** on behalf of the FPS Health, Food, Chain Safety and Environment, go4circle is researching the main obstacles to recycling 13 types of waste (including PMD [low-density polyethylene plastics, metal and cartons], electronics, textiles, etc.). ▶
- 3 **Logistics & Digitisation:** go4circle partnered with ewastra to develop a user-friendly online platform that enables companies to digitise waybills and identification forms for waste shipments. ▶
- 4 **Employment:** go4circle is engaged in a number of campaigns to promote activities in the waste and recycling sector, including Circle4Jobs, the King Baudouin Foundation Circular Economy Employment Monitor, and recyclingjob.be. ▶

B. DEVELOPING LEVERS



What are the obstacles to a circular economy? Or to put a more positive spin on it, what are the levers that can boost a circular economy? Several of these obstacles or levers are something we're aware of in theory but often haven't been tested yet in a reality that's often hard to get a fix on. In the case of innovation (policy), this practical test is desperately needed. Field testing makes it possible to arrive at know-how that's applicable – as a group – based on what works and what doesn't. This practice-oriented approach is our main approach to levers.

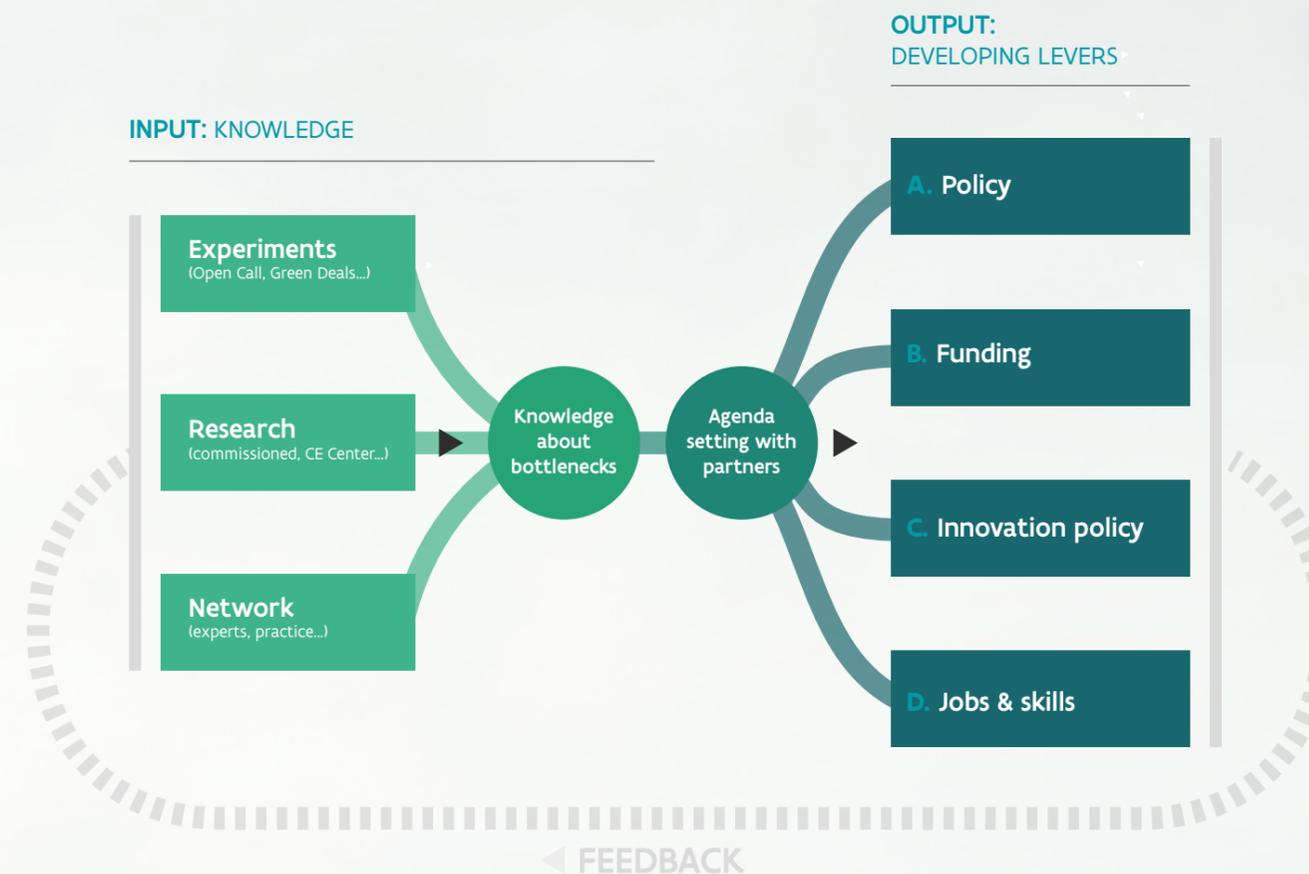
From practice to theory

- To this end, in 2017-2018 we started **calls for experimental projects** on circular procurement, the circular city and enterprise. The initial projects, which started in 2017, are now in the process of being completed. We are currently trying to identify the **common threads** in these experiments based on **two external studies and our own assessment**. These common threads form the basis on which later policy work should be carried out.
- In addition, there are also lessons to be drawn from the **circular procurement** projects. These will be shared within the framework of the Green Deal on Circular Procurements.
- It was with the same intention, that we signed the **Green Deal on Circular Construction** in February 2019 along with some with 320 other organisations committed to developing at least one experimental project a piece. This Green Deal will be reinforced with a **living lab** so that preconditions and bottlenecks can be more accurately identified.

WHY ARE WE DOING THIS?

To grow, good ideas need the right framework. A circular plan might be a nice idea, but if it conflicts with regulations, or fails to gain the funding needed to stimulate growth, it may never get off the ground. And that's at the heart of our work on the preconditions/levers. There can be no a circular economy without sufficient policy and regulation, funding and innovation support.

A snapshot



- Working on levers, to include the recruitment of a new colleague, will take **top priority from autumn 2019** onwards.

The aim of these experiments is to accumulate knowledge and know-how on circular levers *and* bottlenecks. From that point on, we can develop a number of different levers that ensure that the knowledge gained is translated into specific, tailored solutions.

Naturally, this is something we have to accomplish with other partners and governments. That ranges from the local authorities, to the other regions and the federal government – all the way up to the EU. We are actively on the lookout for new partnerships with other EU leaders in a circular economy (The Netherlands, Sweden, etc.).

B. DEVELOPING LEVERS:

1) POLICY & REGULATIONS

We work closely with OVAM on policy and regulations. For a host of policy initiatives, the transition to a circular economy is implicitly or explicitly the leitmotif. We list the most important projects below.

3

Circular Construction Living Lab

The living lab is the research wing of the Green Deal on Circular Construction. Based on practical experiences and experiments, researchers will devise policy and make practical recommendations to accelerate the transition to a circular economy in the construction sector.

The Living Lab operates according to three topics:

1. compass group (defining research questions);
2. sites and projects (field experiments);
3. research (analysis of findings).

[FIND OUT MORE >](#)

1

Intra-Belgian Circular Economy Platform

Circular Flanders is deeply involved in the Circular Economy Intra-Belgian Platform. It functions as a consultation platform, or hub, for the regional administration bodies and the federal government. It was launched in 2018 under the chairpersonship of OVAM. Content-related preparation occurs in three different working groups:

- indicators;
- material flows (with connections to product standards and ecodesign;)
- financing of a circular economy.

2

Contribution to EU policy

The **Coordination Committee for International Environment Policy (CCIEP)** enables Belgium to represent itself with a single voice and well-considered environmental positions, in the presence of numerous international institutions and organisations. OVAM, in coordination with Circular Flanders, takes the lead when the Circular Economy, among others, is on the CCIEP agenda.

We work with OVAM to conduct **international missions**. These are both incoming (reception of delegations) and outgoing missions (accompanying Flemish or Belgian delegations abroad).

We also regularly give lectures or presentation on Circular Flanders at **European forums**.

4

Study: Legal bottlenecks in circular economic projects (to be published)

Hasselt University (Faculty of Law) was commissioned by Circular Flanders to carry out a circular study on the legal bottlenecks that impede the transition to a circular economy. They accomplished this by carrying out a legal audit of a number of specific circular economy-related projects.

The following topics were addressed:

1. waste law: when is a material or product considered waste?
2. sustainable/circular public procurement;
3. product standardisation and intellectual property;
4. sub-platforms and product-as-service;
5. experimental legislation and regulatory zones.



B. DEVELOPING LEVERS:

2) FUNDING

To improve circular innovation financing, our efforts are focused on seven priority areas. After all, a great number of circular projects are often still in an experimental (demonstration) phase and haven't achieved a scale effect yet. The lack of sufficient, innovative funding is one of the serious obstacles to continued growth.



cc Fabian Blank

1

Influencing the European agenda

- We took an active role in the European expert group on financing the circular economy and the task force on the development of a European taxonomy for CE. ▶
- We used the Urban Agenda to monitor and provide input on the development of a [circular city funding guide](#) for all EU cities and towns. ▶
- Through the Department of Environment, we monitored and made sporadic contributions to the policy development on sustainable finance at the EU level.
- We maintain contact with the European Commission and the European Investment Bank to facilitate the financing of circular innovation.

2

Assisting Flemish start-ups to scale up with Flemish Environmental Holding (VMH) funds

The Flemish Environmental Holding (VMH) is a public investment company that aims to invest in promising circular growth companies. Instead of working with subsidies, they purchase shares in the company's equity, i.e. the provision of venture capital. We work closely with VMH:

- we promote VMH as a source of financing;
- we initiated and held some 15 talks with Flemish companies attended by a VMH representative, each with a view to VMH financing (as of spring 2019).

[FIND OUT MORE >](#)

3

Matchmaking & advice for companies in their quest for the right financing

We held approximately 50 meetings and networking events with companies and organisations specifically aimed at assisting them with financing their circular plans.

4

Setting up cooperation with the financial sector

We regularly meet with Febelfin and the Belgian Lease Association to see how we can achieve progress through cooperation. A number of promising avenues are in the works.



B. DEVELOPING LEVERS:

3) FUNDING

To improve circular innovation financing, our efforts are focused on seven priority areas. After all, a great number of circular projects are often still in an experimental (demonstration) phase and haven't achieved a scale effect yet. The lack of sufficient, innovative funding is one of the serious obstacles to continued growth.



cc Fabian Blank

5

Interregional and federal dialogue

- We play an active role in the financing working group of the Intra-Belgian Circular Economy Platform. This platform is a hub for Belgium's various governments to exchange knowledge and work on a shared agenda.
- We follow up Applied Scientific Research on the Environment (TWOL) studies on funding that are initiated by other policy areas.

6

Identify obstacles and formulate recommendations

- With Circular Flanders support, Econocom and Belfius Lease conducted a study on the bottlenecks of leasing as a financing formula for a circular economy, including:
 - 115 pages full of new insights on the circular economy;
 - the bottlenecks faced by and opportunities available to financial service providers, companies and governments;
 - best practice examples of circular financing.
- We began discussions with the financial sector and administrative offices in relation to individual cases aimed towards finding a solution to specific bottlenecks.

[FIND OUT MORE >](#)

7

Raising awareness through communication

- We held bilateral talks with the majority of Belgian financial institutions.
- We also partnered with VLAIO (the Flemish Agency for Innovation and Entrepreneurship) to
 - produce the *From A to Z* brochure;
 - we show companies how to apply for and access VLAIO subsidies and vice versa via our communications;
 - we integrate circular economics into VLAIO's Finmix consulting process.
- We use presentations and workshops centred on financing to guide (potential) company entrepreneurs and employees.

[FIND OUT MORE >](#)

B. DEVELOPING LEVERS:

4) INNOVATION POLICY

For innovation activities, VLAIO (the Flemish Agency for Innovation and Entrepreneurship) is our natural partner. Step by step we work together to weave the circular economy as a common thread through innovation policy.

1 Collaboration with spearhead clusters

Spearhead clusters are partnerships between companies, knowledge institutions and government (triple-helix) that develop and implement an ambitious long-term strategy and competition programme for a domain that is strategic for Flanders.

The task of the spearhead clusters is to enhance the transition priorities. It's for this reason that VLAIO initiated work in 2018 to support the clusters with projects in the fields of industry 4.0, a circular economy, energy and mobility. The focus is on projects where several spearhead clusters are involved.

The focus in 2018 was initially on identifying cooperation opportunities. In addition, VLAIO and Circular Flanders screen the project portfolio of the clusters annually to specially highlight a number of frontrunner projects.

The results were 'Frontrunners - 6 pioneering projects for a new economy'. It assembles intriguing stories about innovation projects carried out by the spearhead clusters.



[FIND OUT MORE >](#)

2 Circular Flanders in the VLAIO network

VLAIO stimulates and supports entrepreneurship through structural partnerships in which organisations tackle challenges with an offer tailored to the needs of entrepreneurs (e.g. information sessions, workshops, individual or group coaching).

The circular economy is turned into a more central point of focus in consultation with these partners. Circular Flanders established contact with EY, Flanders DC, Voka and Unizo. We also gave a number of presentations at regional departments on the funding options available for circular economy projects.

[FIND OUT MORE >](#)

B. DEVELOPING LEVERS:

4) INNOVATION POLICY

For innovation activities, VLAIO (the Flemish Agency for Innovation and Entrepreneurship) is our natural partner. Step by step, we work together to weave the circular economy as a common thread through innovation policy.

3

Coordinating Circular Flanders' support services - VLAIO

Circular Flanders taught a course on the circular economy to the VLAIO team of business advisors. The objective was to enable them to integrate this theme into their services.

The Strategic Business Processes Team has also boosted its collaboration with Circular Flanders. More specifically, the business advisors guide a number of companies towards submitting a funding application, and we exchanged information about companies that were excluded from the Open Call, but that might be eligible for additional follow-up by a VLAIO business advisor.

Relying on an internal circular economy-based working group, VLAIO makes the subject of circular economy more prominent internally and the Agency stimulates in-house knowledge sharing.

Circular Flanders is a member of this working group.

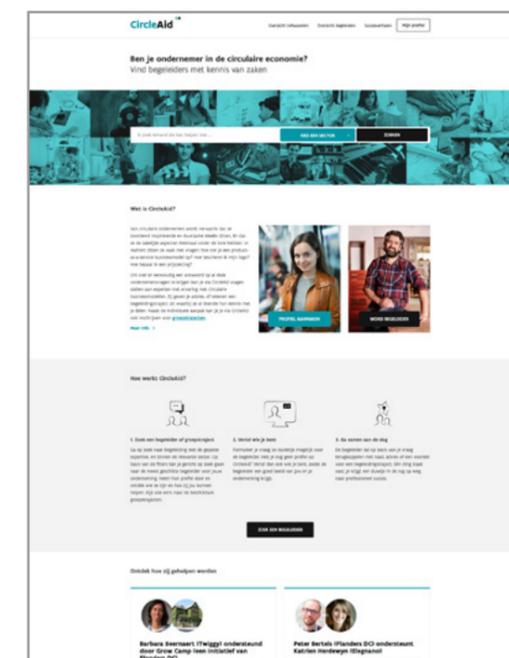
One result of this cooperation will be a brochure on potential funding for circular economy projects *and* including an overview of circular economy projects financed by one of the VLAIO instruments (expected by the end of 2019).

4

Development of the 'CircleAid' expert database

VLAIO developed the Co-pilot [Kopiloot] website in partnership with Flanders DC. Entrepreneurs can use the Co-pilot website to ask experts questions about their comprehensive experience in the cultural and creative sector. They provide advice or draw up a guidance programme that includes sharing their know-how throughout the process. In addition to the individual approach, Co-pilot also offers group workshops.

Later, we developed a different version of the tool with VLAIO, geared towards entrepreneurs in the circular economy. We christened it 'CircleAid'. CircleAid will go live at the end of 2019.





‘If we could build an economy that would use things, rather than use them up, we could build a future that really could work in the long term.’

Ellen MacArthur, founder of the Ellen MacArthur Foundation



Vlaanderen
is economie, wetenschap
& innovatie

FEATURED STEERING GROUP PARTNER

EWI DEPARTMENT – BIOECONOMY WORKING GROUP



Flanders adopted a strategy in 2013 to foster a sustainable and competitive Flemish bioeconomy. This policy consolidates several different policy areas within the Flemish government. The Interdepartmental Working Group (IWG) monitors the bioeconomy policy, amends this where necessary and possible, and acts as the Flemish government's central point of contact in relation to the bioeconomy.

OUR ROLE IN THE CIRCULAR ECONOMY

Development of a Flemish bioeconomy is synergistic with the transition to a circular economy. This combination accelerates the development of Flemish industry and agriculture that is both flexible and competitive. The bioeconomy ensures the solid collaboration of agriculture and landscape management and various industrial sectors, such as the agri-food industry, chemicals, energy, waste and water sectors.

As a central consultative body for authorities involved in the bioeconomy, IWG seeks to maintain consistency between Flemish policy and the principles of a circular economy.

OUR PLANS FOR 2020

- 1 Sustained by the increasing importance of circular bioeconomy at the European level, we are committed to providing the **Flemish bioeconomy** with an **even stronger support base** at the Flemish policy level.
- 2 We are **reinforcing the harmonisation** of the various policy areas to ensure that **circular principles** are the determining factor behind the bioeconomy's **new policy instruments**.
- 3 We are expanding **communication and collaboration** with **private actors** and **research institutions** to respond more effectively to new developments.

OUR TOP 5 ACHIEVEMENTS

- 1 We develop and coordinate a **coherent Flemish policy** that both supports and facilitates a **sustainable bioeconomy**.
- 2 We **motivate research actors** to take Flanders to the pinnacle of education, research and innovation in future-oriented regional bioeconomy clusters.
- 3 The end goal of our policy coordination? Ensuring that **biomass is sustainably produced in the most efficient and effective way possible and used** across the entire value chain.
- 4 We stimulate **demand for circular bio-based products** to strengthen markets and bioeconomy sector competitiveness in Flanders.
- 5 We bolster the Flemish bioeconomy's **international standing** so that Flanders remains a key player in EU and international collaborative efforts.

“
Biological waste streams must also be processed according to circular economy principles!”

Tom Tournicourt, Head of Innovation and Entrepreneurship at EWI




FEATURED STEERING GROUP PARTNER

KU LEUVEN



KU Leuven is a research and educational institution of international standing. Our courses are all based on innovative research conducted by the university's scientists and professors across a multitude of fields. KU Leuven prioritises interdisciplinarity and transdisciplinarity on its agenda. This is essential to meet the societal challenges of tomorrow and to achieve the intended sustainable impact of its research and education on science and society.



‘The university is a crossroads for circular economy, where education, research, entrepreneurship and commitment intersect.’

Karel Van Acker - Professor of Circular Economy and CE Center Coordinator

OUR ROLE IN THE CIRCULAR ECONOMY

As a university, we are working on the future of the circular economy in various ways.

- We conduct in-depth research on new technologies, new business models, new regulations and economic models based on a circular economy.
- The many fields of study and organisations collaborating to continue shaping the circular economy meet at KU Leuven as a crossroads. We provide the independent basis for evidence-based policy for government and business-oriented circular economy.
- What's more, we also make up the next generations of employees, entrepreneurs, policymakers and citizens of the circular economy.
- Finally, our objective is also to set a good example in our own business operations.

OUR PLANS FOR 2020

- 1 **More interdisciplinary and transdisciplinary research**, including on the potential opportunities of a sharing economy. One example would be the KU Leuven project 'Contractual rights and liabilities in circular business models'.
- 2 Continuing to expand the work on **monitoring and modelling of a circular economy** at the policy research centre, at the urban and European levels. Development of circular economy-related strategies, concepts and indicators.
- 3 **Give the circular economy a permanent place among the various masters** and continuing **education programmes**.

OUR TOP 5 ACHIEVEMENTS

- 1 The CE Center, or **Circular Economy Policy Research Centre**: for six years, KU Leuven has been the focal point for policy-relevant research in circular economics for the Flemish government, aiming towards improved monitoring of progress towards circular economics and assessing potential policy incentives. ▶
- 2 The interdisciplinary think tank **metaforum** issued a vision statement and popularised the circular economy **booklet**, *What about recycling?*. KU Leuven has also always acted as the **facilitator** at Plan C and Circular Flanders. ▶
- 3 KU Leuven is a partner in several **regional, European and other international research projects** on circular economy, including technological developments in the valorisation of waste streams, the recycling of rare-earth metals, bio-based plastics, demanufacturing, the conversion of CO₂ into chemicals, and it assisted in the founding of **EIT Raw Materials**. ▶
- 4 Circular Economics has also embedded itself in education, with **summer schools** like the successful 'entrepreneurship in a circular economy summer school', **MOOCs** [e.g. on waste electrical and electronic equipment (WEEE)], training and education and an **international 'sustainable materials' master**.
- 5 KU Leuven is an active partner in its **own business operations** within the **Green Deals** on Circular Procurement and Circular Construction. **Students** also participate in **campaigns** like 'Mine your phone', 'Tap it up', the students' 'Repair Hub' and many more.



C. JOBS & SKILLS

Image: Boot Camp participants 2018 © Alpha Photography

Circular Business Boot camp

The objective of our Circular Economy Boo(s)t camps is to inspire enterprising young people at the start of their careers to incorporate the circular economy into their approach. At the same time, we are working with them to build an informal talent pool based on Circular Flanders. And it works! An impressive share of Boot Camp participants remains part of the 'circular scene'. They find circular economy-related jobs, submit subsidy projects or do an internship. Others are busy developing their own activities focussed on this topic. The open network approach, where we involve experts and partners in the Boot camps and bring them into contact with participants, is no stranger to this.

The experience even appears to be a rich learning experience for those with a lifetime of experience and it results in (international) spin-offs.

2017

We pioneered our first Boot Camp in Antwerp, in 2017. For a week, 22 students and recent graduates dove into the wonderful world of circular economy in concert with a host of mentors from the business world. The boot campers then labour for a whole week on several concrete projects. One project, (B)old Branders, even received a small subsidy.

2018

In 2018, we did it again in Leuven, with 33 young participants. The theme was 'The Circular Shop'. What would a shop look like with a minimum of packaging? And how about e-commerce? The Boot Camp culminated in the Circular Flanders Community Night.

2019

The third edition was a special edition, dubbed the Boost Camp. The Boost Camp is a co-organisation of Circular Flanders and Protopitch 3.0, an Interreg France-Wallonia-Flanders project with Flemish partners TUA West and OCWest.

With 53 participants and a waiting list, the Boost Camp was totally sold out. For 20 students, the Boost Camp was a formal part of their study programme. Added to those 20 were nine 'sit-in' students, 17 entrepreneurs and seven employees.

The Boost Camp opened its doors to a broader audience by hosting the subsequent network event, 'Café Circulaire', and the inspiration evening, 'Soirée Circulaire'.

Discover more:

- [Boot Camp project page](#)
- [Aftermovie 2017](#)
- [How do we make a circular economy more enjoyable? \(MO*\)](#)

WHY ARE WE DOING THIS?

It might sound cliché, but it's true – to have a lasting impact, you've got to 'catch them young'. We sow change by shaping and developing a group of young circular economy ambassadors, year in and year out. Circular principles stick with them throughout their careers, wherever they take them. Boot camps, challenges and hackathons are a first – highly prominent – step in that direction. However, we're also busy behind the scenes partnering with (higher) educational institutions to structurally embed the circular economy and related, complementary themes such as SDGs, climate, design thinking and systems thinking into lecture halls and classrooms.



“

One of my epiphanies hit went I went for a cup of tea. Right before I headed back to sit with my mates, a heartfelt and pleasant feeling of euphoria welled up in me about my contemporaries.

36 partners gave

23 presentations and workshops

at the 2018 edition.

82%

is the average score awarded to the boot camp by participants.

“

Loads of ideas, progressive views, cultivated solidarity and – more importantly for me – a group where everyone belongs.

“

I'm incredibly grateful that I was able to experience this week.

Keep out of reach of scaremongers, equivocators and nay-sayers. Be warned: may stimulate an endorphin rush and cause euphoria. During use, remain on the ground floor at all times and do not operate fossil-fuelled vehicles. Causes sleep disturbance and addiction – do not use for more than five days without a doctor's prescription.





C. JOBS & SKILLS

Image: H.M. Queen Mathilde visits the E-Loop Challenge

© OVAM

Recupel E-Loop Challenge

On the fringes of the WRF conference, Recupel, OVAM, Circular Flanders and The Argonauts organised the 'E-loop Challenge'. The Challenge was based on our Boot Camp method. 15 participants (selected from a staggering 1,300 entries) from around the world were commissioned to come up with effective solutions to reduce and/or prevent our growing mountain of electronic waste.

The participants were faced with three challenges: design 'for recycling', 'for collection' and 'for re-use' of e-waste. For three days they immersed themselves in a design sprint and pitched the results to the World Resources Forum. During the sprint, participants were given access to the experts attending the Forum.



© OVAM

Hack Belgium Partner

HackBelgium is a sustainable innovation festival that takes place annually in Tour & Taxis. In hackathon format, the 1,000 participants set up sustainable projects across various fields. Circular Economy was a key theme right from the start. We supported the workshops in terms of content and curated the entire theme for the latest edition.

In the process, we also generated synergies between our projects. For example, a team from Hack Belgium (COSH) managed to acquire funding from the Open Call. Hack Belgium participants also filter into our boot camp and vice versa.



© Hack Belgium

C. JOBS & SKILLS

Image: 2017 Circular Business Boot Camp

© Frederik Beyens, commissioned by Stadslab 2050

Towards systematic integration with higher education

We jump-started a collaboration with a cooperative of educational experts (Schoolmakers) in 2019, aimed at systematically integrating our projects and processes into the mainstream world of education. They ensure that the knowledge developed by Circular Flanders is **rooted and valorised within the general education system**. For example, we are designing a brochure that educational institutions can use to set up their own boot camps or ecodesign challenges.

At the same time, we are developing a **specific offer for educational institutions** to develop short-term circular education experiments. The offer is tailored to the study programmes and has a tangible impact on the actual content of the courses. Our goal by 2020, is to assist five different fields of study with developing this type of experiment within their curriculum.

Lastly, we work in close partnership with the **Ecocampus** (Department of Environment) team to coordinate our efforts towards (greater focus on) sustainability in higher education.

Guest lectures and traineeships

Among others, we gave guest lectures at:

- University of Antwerp - The Electromechanical Engineering Technology Programme
- VUB - Logistics Management Programme
- University of Antwerp - Engineering Technology Programme
- Hasselt University - Bio-based and circular economy postgraduate course
- Odisee - Agro- and Biotechnology course
- Syntra - a circular economy coaching training course
- ...

We supervise two work placement/training projects:

- KU Leuven - postgraduate course in innovative entrepreneurship
- Erasmus Brussels University of Applied Sciences and Arts - idea & innovation management



D. ECODESIGN

DESIGNING FOR THE CIRCULAR ECONOMY



WHY ARE WE DOING THIS?

It all starts at the drawing board. A circular product or service has to be solidly designed to deliver on that circular promise. In other words, sustainability and circularity are an inextricable element of good design. That's why we inspire and encourage designers to think a step ahead, to ask questions, and to come up with new, relevant solutions.

OVAM Ecodesign is the Flemish ecodesign expertise centre. It has primarily operated out of Circular Flanders since 2018.

In this way, we partner on a well-thought-out life cycle approach for designers. We aim for circular design that's aesthetically pleasing and beneficial to humanity and the planet.

Since the autumn of 2018, OVAM Ecodesign activities have partially become part of Circular Flanders purview. This is our method of arranging cross-fertilisation *and* improvement.

1. It turns design into a visible and major topic of the discourse on the circular economy in Flanders.
2. We work towards a coherent student and recent graduate-oriented approach to students and recent graduates that includes boot camps, guest lectures, challenges, tool kits, etc. These are coordinated within a logical framework.
3. Circular Flanders is being enhanced by new expertise, which enables us to do an even better job carrying out our advisory role.

Ecodesign activities are aimed at two target groups.

1. Students and Teachers:

- We raise awareness among both groups about the importance of sound, sustainable design via guest lectures, community building and the EHO kit (Ecodesign in Higher Education).
- We're also organising the Ecodesign Challenges. The Challenges are two-day events during which students try and find a creative solution to a challenge that assign them.
- We hold an annual Ecodesign Award for Students. Each of these activities challenge design students to come up with sustainable design concepts that have the greatest impact.

2. Professionals:

- We advise and inspire designers by providing access to an extensive case database. With tools such as the SIS toolkit, the Ecolizer and Close The Loop (in partnership with Flanders DC), we help entrepreneurs make more headway.
- We partner with Flanders DC to put ecodesign front and centre in the Henry Van de Velde Awards for designers. This functions as a category award and/or as a criterion in the award process.

We provide a few examples on the following pages.

ECODESIGN CHALLENGES

© Alpha Photography

2018

28 & 29 sept
Gent
Kortrijk

TEXTILE FOR LIFE Hoe kunnen we het leven van textiel verlengen?

Students from Howest's Industrial Product Design study programme and HOGENT's Fashion and Textile Technology study programme met the challenge to extend the lifespan of textiles head on.

100 PARTICIPANTS

[FIND OUT MORE >](#)

2018

3 & 4 okt
Mechelen

FUN FOR LIFE Hoe kunnen we het leven van speelgoed verlengen?

Students from the University of Antwerp's Bachelor of Product Development study programme and the Erasmus Brussels University of Applied Sciences and Arts' Idea & Innovation Management study programme also met the challenge to extend the lifespan of toys head on. On average, toys only last 3.7 years.

150 PARTICIPANTS

[FIND OUT MORE >](#)

During the two-day Ecodesign Challenges, students look for creative solutions to a specific challenge. A group of experts provide them with support during this process, at the end of which they'll have to pitch their idea before a professional jury. In 2018 and 2019 we organised a total of five challenges.



ECODESIGN CHALLENGES

© Alpha Photography



2019

26 & 27 sept
Gent en Kortrijk

THE CITY AS A FOREST

Design en biologie in de stad van de toekomst.

What happens when we combine design and biology to find solutions to tomorrow's challenges? Ghent University, GLIMPS, BOS+ and Circular Flanders invited designers and biologists/bio-engineers to partner on the 'The City as a Forest' challenge.

150 PARTICIPANTS

[FIND OUT MORE >](#)



2019

1 & 2 okt
Mechelen

EVERYDAY LIFE HACKS

Hoe buigen we dagelijkse gewoonten om tot duurzaam gedrag?

Product development students from the University of Antwerp and future Idea & Innovation managers from Erasmus Brussels University met in Mechelen to try and identify ways to 'hack' people's daily habits into sustainable behaviour.

100 PARTICIPANTS

[FIND OUT MORE >](#)



2019

15 & 16 okt
Mechelen

CIRKEL SECTOR MECHELEN

Op zoek naar een hoogwaardige toepassing voor de reststromen in Mechelen.

What would happen if we drew a circle around Mechelen and tried to find raw materials for new products within that circle? Two companies made their waste streams available to 60 Thomas More students in the Design and Production Technology, Furniture Design and Space and Service Design study programmes.

150 PARTICIPANTS

[FIND OUT MORE >](#)



ECODESIGN AWARD FOR STUDENTS

Young designers play a major role in the future of ecodesign and the circular economy. That's why we annually present Ecodesign Awards to highlight students' strong projects and reward them for their efforts. The presentation of the Ecodesign Award for students took place during the 2018 Biennale Kortrijk City Interior Design Festival in the abandoned Saint Maartens Clinic in Kortrijk. The winners' designs were displayed at the 'We Are The Next Generation' exhibition during Kortrijk Creativity Week.

2018 WINNER: FIBIO

A washing machine filter that blocks microplastics

Laure Herweyers, a University of Antwerp student in the Product Development study programme, received first prize for her Fibio project. When synthetic clothing is washed, microplastic fibres are released. Wastewater treatment plants aren't currently capable of adequately filtering out these fibres. The result is that they end up in the oceans. Laura's conclusion was that that's got to change. She developed an external filter for washing machines that blocks up to 97% of microplastic fibres.



2019 WINNERS: SIMPLIE, WELLE, DEVEL'UP

Sustainable menstrual products and signs made of biocomposite



There have been two award categories since 2019. 'Everyday Life' addresses projects that contribute to a more sustainable daily life and 'Problem Solving' tackles projects that aren't afraid to be disruptive and have a systemic approach in mind. Sofie Buyse, Rani Veroustraete and Thor Gerard won the Everyday Life Award. They came up with sustainable and above all user-friendly alternatives to disposable menstrual products. Bert Vuylsteke won the Problem Solving Award with his signs made of compostable biocomposite.

[ALL WINNERS >](#)

HENRY VAN DE VELDE ECODESIGN BY OVAM

The Henry Van de Velde Awards highlight and honour Flemish designers, companies, products, projects and services domestically and internationally, that have a positive impact on the economy and society through design. 'Ecodesign by OVAM' was one of the 2018 categories. Starting with the 2019 edition, ecodesign has become a general criterion for all entries.

2018 WINNER: HNST + ESG Green

The most circular jeans in the world

The Ecodesign Gold Award went to start-up HNST which, in partnership with the European Spinning Group textile company, developed *the* most circular jeans in the world.

This sustainable and innovative HNST jeans collection is based on teamwork between a creative start-up and a number of other partners. This got started in an initial phase based on the exceptional cooperation with the European Spinning Group (ESG) textile company, which produces textile yarns for a variety of markets and applications.

Both partners had already opted for open innovation, co-creation and circular design as business models. The ESG Green yarn used to weave the HNST jeans collection symbolises this new 'design thinking' in classic sectors.

[FIND OUT MORE >](#)





‘Teaching is not rocket science, it is much, much harder than that. Rocket science is about moving atoms from a to b; teaching is about moving minds.’

Diana Laurillard, British Professor of E-learning

WE MAKE
TOMORROW
BEAUTIFUL
OVAM

FEATURED STEERING GROUP PARTNER

OVAM



OVAM is a Flemish government service that ensures that Flanders deals with waste, materials and soil in using a well-considered and environmentally conscious approach. We direct policies on waste, materials and soil, which has an impact on the enforcement of the related legislation.



‘OVAM is the driving force behind the transition to a circular economy in Flanders.’

Henny De Baets - OVAM CEO

OUR ROLE IN THE CIRCULAR ECONOMY

The circular economy is one of the Flemish Government's transition priorities. As the driving force behind the transition, OVAM's goal is to stoke the fires of this change – in partnership with Circular Flanders.

How do we accomplish this goal? We make a circular economy the common thread that runs through all of our activities. We support Circular Flanders practically and with content, house the operational team and co-finance the Circular Economy Policy Research Centre (CE Center). Through the Open Call, we also support innovative and valuable circular economy projects in the field.

OUR PLANS FOR 2020

- 1 The **Plastics Plan** is reaching **cruising speed** to ensure greater prevention, reuse and better recycling of plastics. Among others, that includes the ban on disposable cups at events. ▶
- 2 We are working with the Circular Economy Policy Research Centre on a **set of indicators for the circular economy** in Flanders. That will make it possible to get a bearing on the current state of affairs and to monitor developments. ▶
- 3 We make **data on waste streams even more accessible** by providing access to the waste data of municipalities, individually tailored to their needs. We are also launching the symbiosis platform, making it possible for companies to exchange waste streams among their organisations. ▶

OUR TOP 5 ACHIEVEMENTS

- 1 We promote the closure of **loops in the construction industry** by detoxifying waste streams. We launched the **asbestos removal plan** and Tracimat, a **tracking system** construction and demolition waste. We are actively developing and disseminating knowledge via the Green Deal on Circular Construction and Totem, a new tool to improve the **environmental performance of buildings**. ▶
- 2 The **Circle tips** tool provides **entrepreneurs** with tailored advice on how to transform their material management into a more sustainable process and how to reduce their waste invoices. Another one of our tasks is to ensure that the legislation results in **increased and more precise sorting by companies**; that makes it possible for us to re-use waste streams as much as possible. ▶
- 3 As of May 2015, OVAM became owner of the **Potterij**, a dilapidated site in the centre of Mechelen. We're working with our partners to breathe new life into the site. The site is being turned into a **circular lab**, where thinkers and makers meet, and small-scale production has the space to take place in the city. ▶
- 4 By organising the **World Resources Forum** in Antwerp, we put **Flanders on the international map** as an innovative region with companies that are at the forefront of a circular economy. ▶
- 5 The **space** available in Flanders is severely limited, which is why we have to treat it with respect. **Healthy soil** is a key requirement in this respect. That's why the Flemish government has prioritised **mapping historical pollution** of soil across Flanders by 2036, along with initiating its remediation. Owners have been urged since 2017 to have their soil inspected as a result of a targeted **activation policy**. ▶



FEATURED STEERING GROUP PARTNER TNM (CIVIL SOCIETY TRANSITION NETWORK)



The Civil Society Transition Network (TNM) is a network of trade unions, the environmental movement, international development organisations, social organisations, the cultural sector, alternative media and scientists. TNM members are interested in joining forces to make the transition to a society that is sustainable *and* socially just a reality.

OUR ROLE IN THE CIRCULAR ECONOMY

Since its establishment in 2010, TNM has strived to accelerate this sustainable transition, while ensuring that it takes place fairly, with social justice as a non-negotiable factor. In this respect, our guiding principle is a positive vision of the future based on six pillars:

1. embedding the economy in society;
2. living within environmental limits;
3. an open and creative coexistence;
4. deepening of democracy;
5. reducing social inequality;
6. to make an excellent quality of life a reality.

TNM's vision of the future and its 'just transition' agenda intersects with and reinforces the Sustainable Development Goals (SDG), more specifically corresponding with the 'wedding-cake' model of the SDGs (Stockholm Resilience Centre, 2016) where the interrelation of the 17 SDGs is central.

OUR PLANS FOR 2020

- 1 We joined Circular Flanders in launching the **DIY package** to set up a local **Betergem 2038 workshop** (for local authorities, schools, citizens, civil society organisations, etc.). ▶
- 2 We are setting up **new transition initiatives**, including, for example, a study of **fair taxi-sharing systems** and a pilot project on **'Recovering Solar Energy Together'** via company roofs and the roofs of public buildings, among others.
- 3 We have our sights set on transition safaris as a knowledge lab, the heart of which is **scaling up specific transition practices**. An initial safari will explore, among others, practice oriented towards a sustainable and healthy nutritional policy in Flemish schools.

OUR TOP 5 ACHIEVEMENTS

- 1 We raise broad awareness about the transition mindset through the **circular economy transition fair** and the **Betergem 2038** transition workshops. These workshops motivate associations and citizens to personally take action.
- 2 We are participating in the **social and political debate** by reviewing policy measures (see the distribution of the energy bill) and by developing policy proposals supported by the TNM network.
- 3 We make **knowledge sharing and development** possible between our members to generate support within our own organisations. A few examples include the **'everyone renewable'** campaign and the organisation of lectures, including, among others, by Thomas Rau.
- 4 We joined Circular Flanders in launching the **DIY package** to set up a local **Betergem 2038 workshop** (for local authorities, schools, citizens, civil society organisations, etc.). ▶
- 5 Achieving **spin-offs active in the energy transition** like the civilian cooperative **Energent** on renewable energy projects, or the non-profit association **Energy democracy** that focusses on starting and organising citizen-based co-management of our distribution networks. ▶

‘We don't live in an era of change – we live in a change of era.’

Dirk Van de Poel, Civil Society Transition Network Chairman



4/ THE CIRCULAR CITY

THIS CHAPTER DISCUSSES

- A. PUBLIC ACTIVITIES
- B. URBAN AGENDA
- C. SMART CIRCULAR CITIES
- D. CIRCULAR SPACE(S)
- E. CIRCULAR METABOLISM
- F. PRODUCTIVE CIRCULAR CITIES

The Circular City site is relatively new and our most 'open site'. For that reason, its approach has the characteristics of being a scouting mission and investigatory while also being pragmatic and as specific as possible, wherever possible. It responds to the growing awareness of the enormous potential of cities and regions to accelerate the transition to a circular economy.

We conducted a number of experiments on this site to start an 'offline' dialogue with a broad audience, namely by organising community workshops and going on tour with our circular coffee bar (A).

We are also focusing on changes through the joint development of knowledge in a European network. Circular Flanders/OVAM took an active role in the Circular Economy Urban Agenda Partnership (B). The objective of this collaboration is to share experiences and balance amendments to (European) regulations and changes to funding opportunities.

Another driving force is the momentum around 'Smart Cities' in Flemish cities. Circular Flanders saw an opportunity to explore and deepen the circular economy-related potential of digital technology (C).

OVAM is also constantly setting new standards for the brownfield and greyfield policy. This policy emphasises the value of *land as a resource*, whereby remediation operations not only 'recycle space', but also provide soil and other services to maintain the city's health. Moreover, the remediation's interim period offers all kinds of cultural and social organisations an opportunity to experiment, in addition to 'changing the place' in terms of urban development (D).

The development of 'Circular Metabolism' as a new practice has led to greater coherence of the big picture (E). We use our master classes to highlight this topic. Antwerp researched how this could be implemented in their spatial planning and economic context.

Finally, we focus on the work we carried out related to 'the productive city' (F). If we no longer view the city as an isolated environment, but as part of a far broader circular region instead, there are all kinds of opportunities to reintroduce the manufacturing industry to the city (F) – manufacturing that integrates knowledge, innovation and production.

A. ACTIVITIES FOR THE GENERAL PUBLIC

COFFEE CYCLE STORIES

Coffee Cycle Stories is our mobile coffee bar, but it's not just any coffee bar. Coffee Cycle Stories turns circular economy theory into something tangible for everyone.

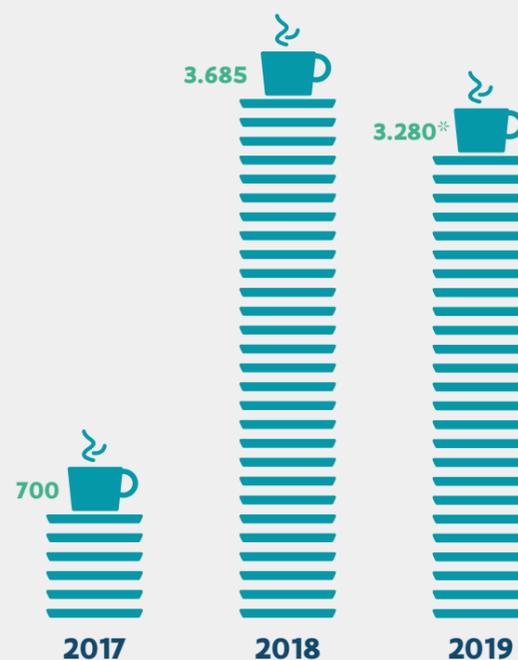
People can stop by for a cup of coffee, freshly made by our barista, and hear fascinating stories about the reuse of coffee, from bean and skin to coffee grounds. You can see, feel and smell the circular applications yourself. The bar illustrates 'residual products' contain the seeds of a whole new economy.

Coffee Cycle Stories is a collaboration between Coffee Café (the Royal Association of Coffee Roasters) and Circular Flanders.

The coffee bar made an appearance 16 times in 2019, at events with an interesting but new audience, i.e. that in most cases hasn't heard of the circular economy yet. You could find us at the VVSG meeting for local authorities, the VITO G-STIC conference, the Supernova science festival, the Fevia annual event, etc.

'Customer' reactions were always positive, about the creative applications, the coffee bar and fortunately... about the coffee, too.

Cups of coffee served



In the meantime, the coffee bar has been booked for 25 events. We try to speak to as many 'customers' as possible, explaining the basics of a circular economy. A conservative estimate, in which we strike up a conversation with someone for every 10 cups, projects that we held a total of 766 conversations about the circular economy.

* extrapolation based on planned events



Photo: © VITO

WHY ARE WE DOING THIS?

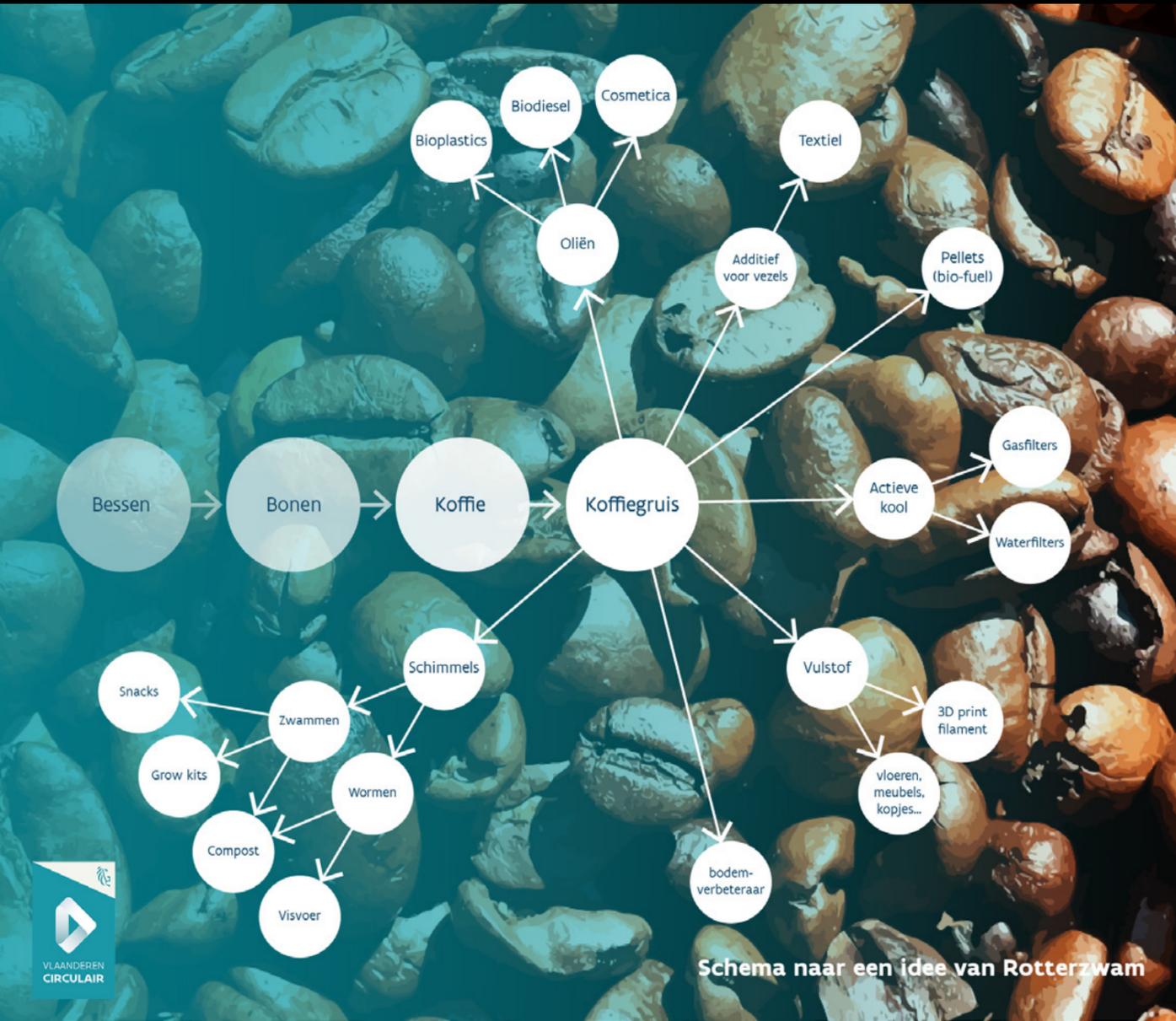
In addition to the usual (digital) marketing channels, we consciously invest in 'field marketing', where we visibly participate in events and directly address participants. These conversations are a huge investment compared to digital contact, but it also makes a deeper, lasting impression. We continuously give the aesthetic appeal of a circular economy a boost through genuine dialogue.

[FIND OUT MORE >](#)

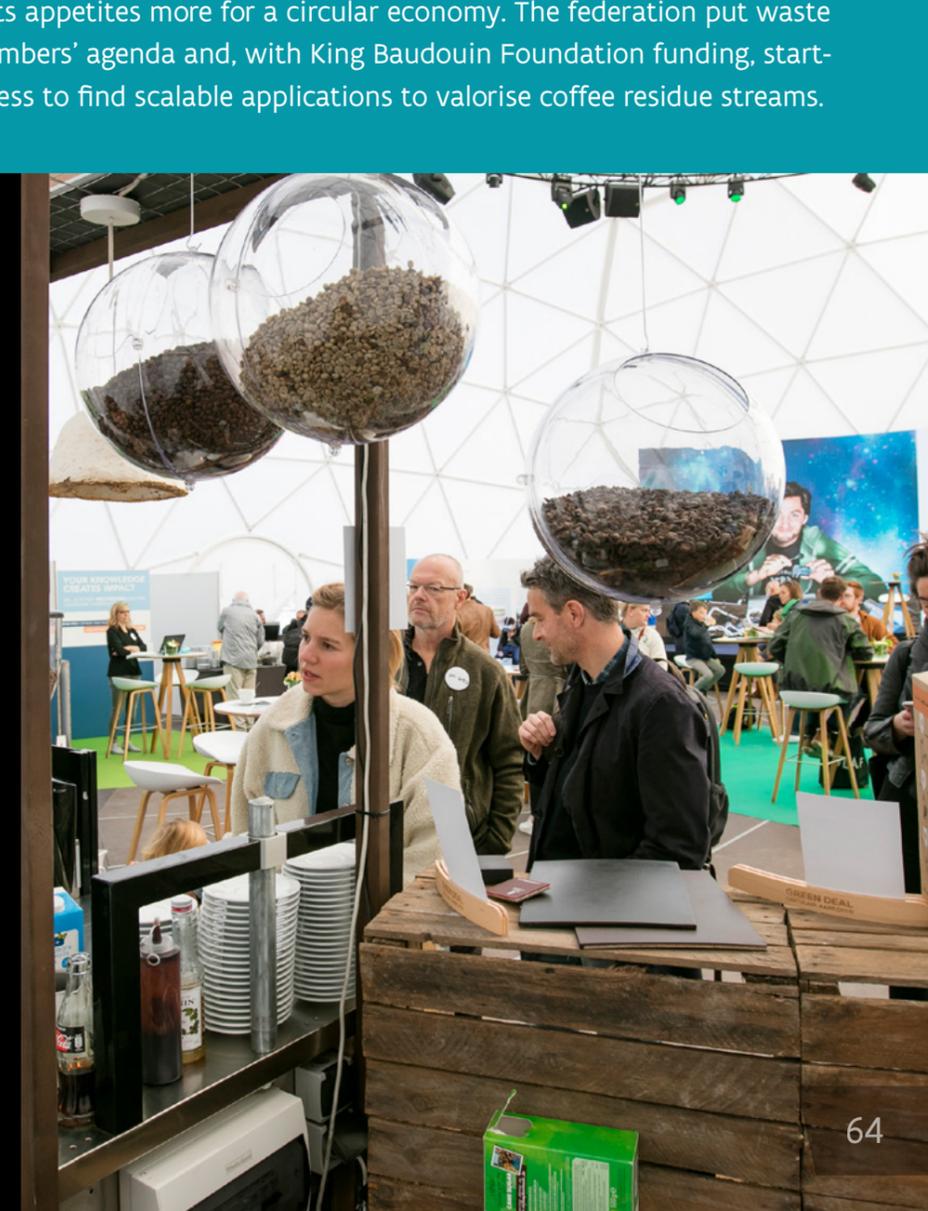


TAKING THE COOPERATION A STEP FURTHER

The cooperation with the coffee federation that established the coffee bar only whets appetites more for a circular economy. The federation put waste on its members' agenda and, with King Baudouin Foundation funding, started a process to find scalable applications to valorise coffee residue streams.



Schema naar een idee van Rotterzwam



A. ACTIVITIES FOR THE GENERAL PUBLIC

THE COMMUNITY WORKSHOPS

BETERGEM

Betergem is a workshop that was developed to inspire communities about a liveable, sustainable and circular future. The project is a collaboration between the Civil Society Transition Network and Circular Flanders. Participants go on an imaginary journey to a public assembly in Betergem, anno 2038. On their 'arrival' they discuss the city's future scenarios based on several themes. These themes include housing, working, manufacturing, money, consumption, nutrition, culture and mobility. We consciously injected a good dose of humour and focused on solutions instead of problems.

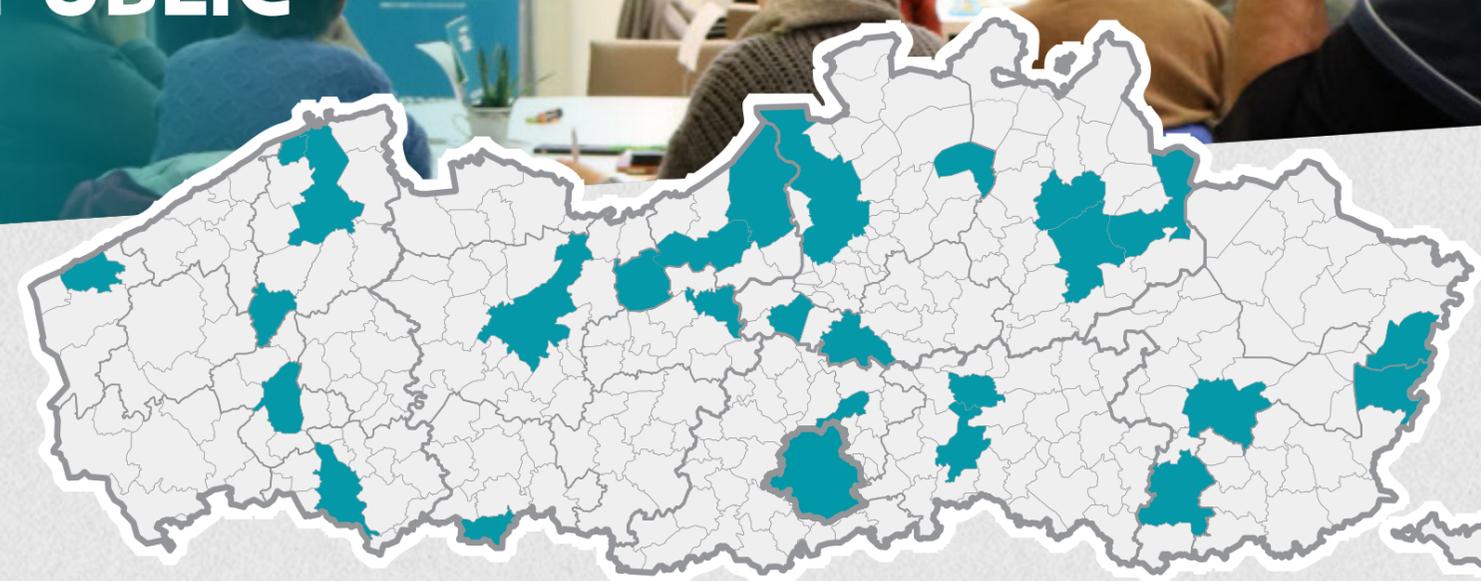
We actively rolled out the workshop in 2018 via promotional activities and offering an all-in workshop package, including coaching for organisers. All told, we held 48 workshops attended by 1,800 people. Each workshop entailed two hours of dealing with themes such as sustainable and circular management of money, housing, working, mobility, etc.

After the campaign year, we switched gears and offered a DIY package; however, anyone who still wants to organise the workshop can download a handbook, working materials and videos from the www.betergem.be website. We also offer a list of 'accredited' coaches.

BETERGEM.BE

WHY ARE WE DOING THIS?

All too often, information shared about transitions, a circular economy, technological innovations, etc. remains the sole purview of insiders. That also reflected the Civil Society Transition Network's experience, which is what kindled an interest in trying an alternative to the traditional central events. And that's how we ended up partnering to develop the Betergem workshops. We gave people without any prior knowledge a chance to work on transition themes through a series of several local – and therefore decentralised – events.



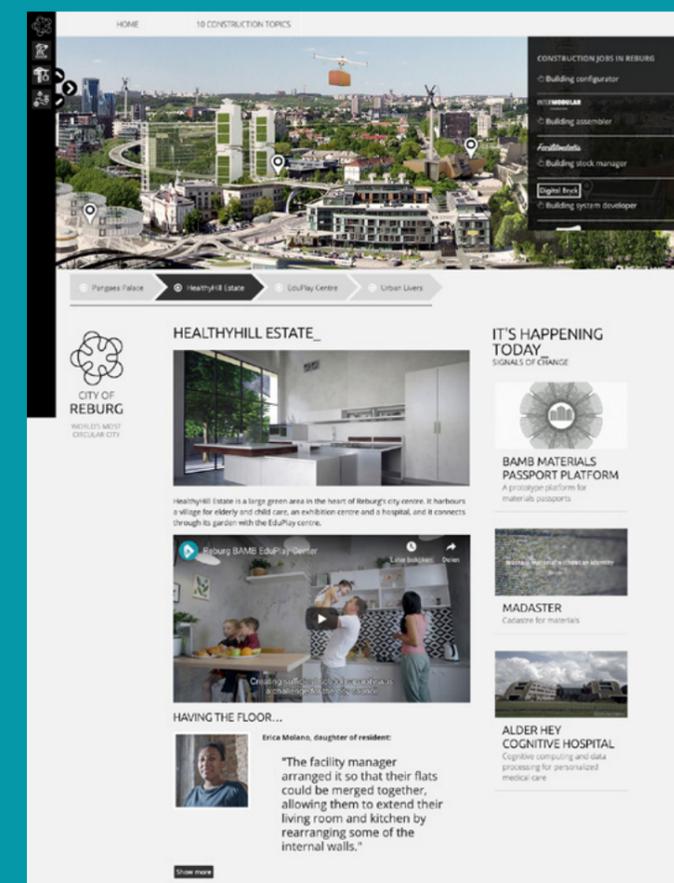
48 WORKSHOPS – 1,800 PARTICIPANTS

INITIAL INSPIRATION: THE REBURG PROJECT

Reburg is an 'imagineering' project that helps visualise and make what living and working in a circular future tangible. The Betergem workshops took off based on a desire to bring these kinds of dream exercises more to life in practice.

As part of the European Buildings as Material Banks Project (BAMB), we also developed a new chapter with VITO on change-oriented construction. Actors use videos to show and tell how the construction industry will have changed by 2050. Current theory and practice are what support the stories.

[CHECK OUT REBURG >](#)



B. URBAN AGENDA PARTNERSHIP ON CE

CIRCULAR ECONOMY URBAN AGENDA

Since 2017, Circular Flanders/OVAM has participated in the Circular Economy Urban Agenda, coordinated by the city of Oslo. This partnership consists of 4 cities, 2 network organisations, 4 Member States and the European Investment Bank (EIB) working with the European Commission (DG Regio and DG Environment) for a period of two years. The European Commission's objective in implementing this innovative multi-governance approach is to create a more relevant connection between its policy and the specific needs *and* solutions of cities and their citizens.

ACTION PLAN

At the end of 2018, the partnership presented the [final action plan](#), to be implemented as of 2019. The actions target (1) improving legislation, (2) financial instruments and (3) knowledge sharing to contribute to the EU's long-term goals of sustainable growth and social, economic and territorial cohesion. On the one hand, the specific actions and recommendations intended to integrate with the current plans are geared towards specifically assisting cities in the implementation of a circular strategy. On the other, the partnership devised several actions and made recommendations to the EU and the Member States to facilitate the roll-out of a circular economy in urban environments.

WHY ARE WE DOING THIS?

The EU has high ambitions with respect to the circular economy. Harmonising the needs of and options available to cities and their inhabitants with this policy is essential. There must always be a *reality check* on the ground. By participating in the Urban Agenda, we, as Circular Flanders/OVAM, employ our expertise to put bottlenecks and the good practices of Flemish cities high on the European agenda.



OUR CONTRIBUTION

Circular Flanders/OVAM contributed throughout the entire project, however, specifically taking a leading role in the activities related to governance and cooperation with the European Commission's [Circular Economy Stakeholder Platform](#) :

- Together, we created a Circular City Portal that assembles good practices, publications and strategies to help cities get underway in practice, not just in theory;
- Circular Flanders also assisted in organising workshops and made substantive contributions based on our experiences on behalf of the European Investment Bank's initiative to create a [Circular City Funding Guide](#);
- The [CE-Center](#) (Circular Economy Policy Research Centre) made a key contribution to the application of circular economy-related urban indicators;
- Lastly, we actively involved various Flemish partners in activities that bore specific relevance to them (VLAKWA, Urban Policy, VVSG and the City of Mechelen).

INFOGRAPHIC: CIRCULAR CITY GOVERNANCE

What can a local authority do?

REORGANISE YOUR CITY

- 1 Create common long term ambition , with political support & use it in your branding
- 2 Set up cooperation between city departments and appoint a coordinator
- 3 Act circular (circular procurement, futureproof urban planning, sustainable building,...)
- 4 Get insights in your resources (waste, water, materials,...)

STIMULATE CITIZENS INITIATIVES

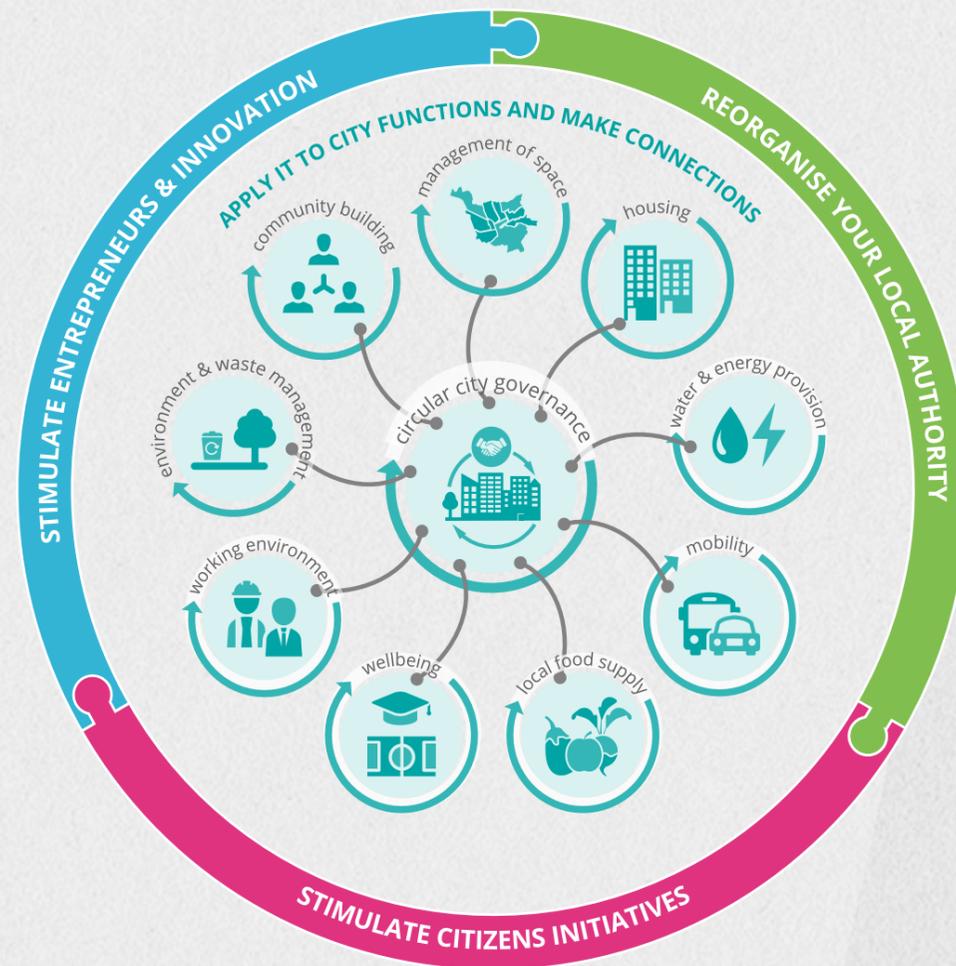
- 5 Promote sharing & functional economy
- 6 Raise awareness and coach citizens
- 7 Support bottom up initiatives through legislation, funding, cooperation, communication,...

STIMULATE ENTREPRENEURS & INNOVATION

- 8 Stimulate local symbioses through (business park) networks, smart technologies,...
- 9 Create incentives to attract circular business (offer space, taxes, subsidies,...)
- 10 Communicate success stories

Circular strategies to focus on

GENERAL AND TECHNICAL NUTRIENTS



INFOGRAPHIC

The roll-out of a circular economy requires a total systemic change and a new form of governance. A new method of collaborating – both between the city's various departments and its inhabitants and companies – is required to establish an effective circular strategy. This infographic was put together based on interviews with the European frontrunners and focusses on the various roles of the city. For example, initiatives can be developed that align with a circular economy both from a poverty prevention perspective and a job creation viewpoint.

Moreover, it demonstrates specific actions a city can take regarding its own administration or how it can stimulate and support its residents or businesses. The city is the perfect site for various policy areas and stakeholders to boldly experiment and where the effects of these experiments are also visible straight away.

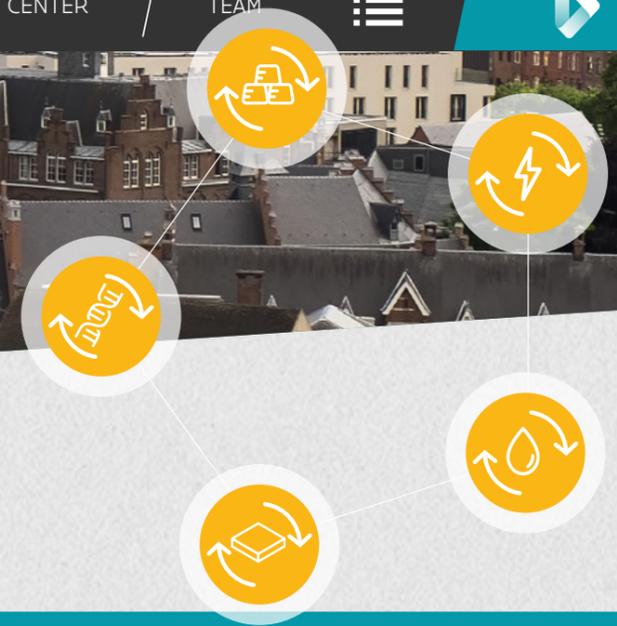
This infographic is a tool for specific cases to be compared in terms of governance: who took the initiative, which new partnerships were forged, and what results did this lead to? In that way, the cases transcend the *facts & figures*, telling the story behind the project.

[CIRCULARGOVERNANCE.CITY >](#)

[EU STAKEHOLDER PLATFORM >](#)

C. SMART CIRCULAR CITIES

DIGITAL TECHNOLOGY POTENTIAL



In partnership with the Province of Flemish Brabant, we hosted an event in February 2018 addressing the question: ‘How can smart technology advance the circular economy in a city?’ Pantopicon and imec presented an exploratory mapping of the potential on behalf of Circular Flanders.

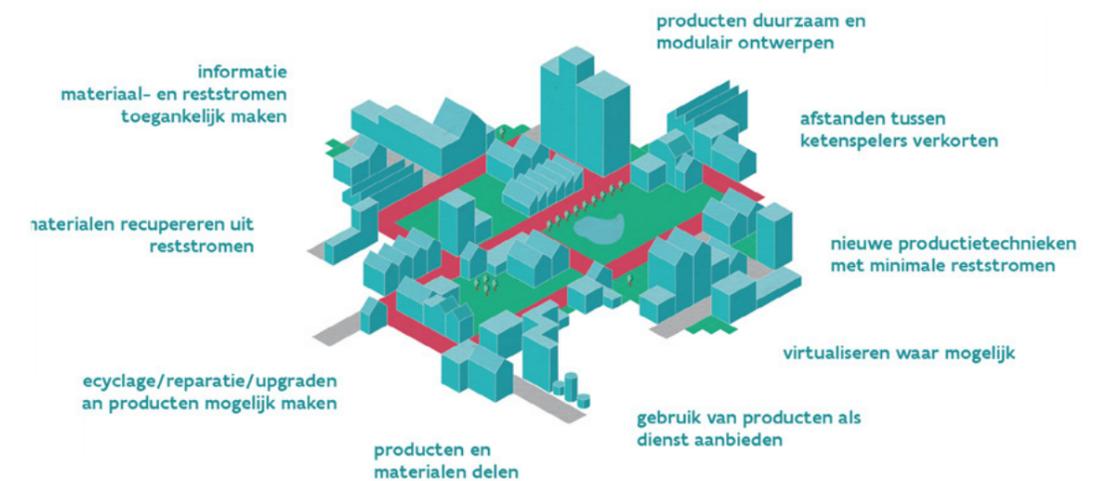
In a circular city, it’s all about connection. Closing loops (of materials, water, food, energy and space) is only possible if producers, processors, city services and citizens work together. Smart technology can make these connections much easier.

Circular Flanders commissioned Pantopicon and imec to investigate how smart technology can help to put circular strategies in place. A broad approach to smart technology was taken, with the research touching on technological trends such as smartphone use, sensors, blockchain and data processing, privacy and platforms. This resulted in a comprehensive picture of potential applications and Belgian companies that are already actively involved. The research will be reviewed and updated at the beginning of 2020 and made accessible via an online tool.

MAPPING THE POTENTIAL

In the Smart Cities study, we mapped out the potential of ‘smart’ technology in the circular economy. Five flows were mapped, followed up by an in-depth study of their respective potential. The study will be formatted and made available on an online tool at the beginning of 2020.

EXAMPLE: MATERIALS



[DOWNLOAD THE MAPPING >](#)

WHY ARE WE DOING THIS?

The circular economy provides an attractive framework for the effective use of resources as well as a sound economic argument for going down that road, while digital technology is vital to the embedding of circular principles and circular economy practices in the day-to-day operation of cities and regions. Digital technology as a key lever is something we want to and must continue to explore.



D. CIRCULAR SPACE(S)

VACANCY AS AN OPPORTUNITY



Hendrik Baelskaai (Ostend)

A garage workshop and above-ground storage tanks with oil products were housed on a site between Hendrik Baelskaai and Victorialaan in Ostend until late 2002. The soil and groundwater had been heavily **contaminated** with mineral oil. Now that OVAM's **soil remediation** activities are all but complete, the re-development of the site can finally move on. The site (including a building) is part of Project Oosteroever's master plan, with which the city of Ostend intends to bring harmony to the current business operations in the port area and future habitation.

The non-profit association O.666 was established as a result of a two-year **co-creation process** on the Ostend Oosteroever urban development project. O.666 represents **organisations on the lookout for innovative approaches to furnishing the building** at Hendrik Baelskaai and its integration with the neighbourhood. The building on the old fishing quay – amid newbuild projects and businesses – is in the process of a radical transformation. O.666, in consultation with OVAM (as owner), was granted temporary use of the building until 2022. The agreement will be renewable annually thereafter.

O.666 was literally given 'space' to organise this location into a **circular economy breeding ground and laboratory**, in essence, a home base for entrepreneurs, makers, social actors, art organisations and citizens' initiatives. By extension, OVAM is charting new waters in the brownfield and greyfield policy.



De Potterij reborn (Mechelen)

OVAM gained ownership of De Potterij (the Pottery), a **dilapidated and polluted site** in Mechelen, in 2015. OVAM is resolutely in favour of **redeveloping** the site's added value to society so that society is reimbursed some of the funds invested in soil remediation. OVAM, the City of Mechelen, the Social House Mechelen, the Thomas More University College and Circular Flanders are partnering to give the site future prospects. Miss Miyagi and BUUR were appointed as project directors to bring the site in Mechelen 'back into circulation'.

De Potterij is one of the five 'Back in Circulation' pilot projects in collaboration with the Flemish Government Architectural Team. It's being redeveloped into a **circular lab**, e.g. as a living lab for circular construction where both knowledge and practice are shared.

In addition to 'changing the place' in terms of urban planning, parallel research is also being conducted on **innovative partnerships and financing models** that make long-term social and economic outcomes possible. Miss Miyagi's **property platform has** been custom developed as a tool for attracting potential users and producers.

By tying the policy themes, interests and planned initiatives of the various authorities and actors in Mechelen **together**, the building can have a **more significant collective impact**. Co-creation is key in this respect. That way the circular economy is tangibly and meaningfully implemented in Mechelen's city centre.



D. CIRCULAR SPACE(S)

OPEN CALL PROJECTS

We also work via the [Open Call](#) (see below) to support projects that reuse and reinvent space. Check out the three projects below to see how.



Circular Scenario

Proposals for the circular furnishing of vacant buildings

A BBL (alliance for a healthier living environment) and VRP (Flemish association of spatial planning) project

'Circular repurposing' of a building or site requires a different mindset and development strategy, one that keeps track of all the links in the chain and the different stages in the life of a building or site.

BBL and VRP aim to embody this in the 'Circular Municipality for the Future'. They started out with three practical vacancy-related cases: a vacant military domain, a semi-vacant school and a vacant shop. In each case, they tried to find opportunities to prepare the buildings for a circular future and to put the circular economy into practice.



Open Promoter Platform

A No Newbuild Circular City

An Endeavour project

The 'Open Promoter Platform' seeks sustainable strategies to improve the life cycle of vacant and hard-to-sell/lease buildings.

The platform combines the options and practical tools for repurposing buildings using co-productive, open-source and sustainable methods. It has citizens, businesses and governments in mind – everyone has a say in the redevelopment of the neighbourhood's vacant buildings.

The platform model has been drafted in the meantime, and a market survey is currently being conducted in cities and municipalities.



Labo Leegstand (The Vacancy Lab)

A contaminated site becomes an experimental space

A BUUR project

'Labo Leegstand' conducts practical research into modular construction by developing a building kit for temporary furnishing of vacant buildings. The first testing ground up is [De Potterij](#), a strategically located contaminated site in Mechelen's city centre that will be set up for temporary use.



E. CIRCULAR METABOLISM

FROM CONCEPT TO TANGIBLE PRACTICE

Image: urban metabolism Antwerp © FABRICations

MORE THAN JUST A FLOWS AUDIT

Cities and regions can't function without constant **flows** of materials, water, sediment, energy, food, air, biomass, data, and so on. **Metabolic studies research these flows and map them, which** is how heat maps, potential maps, flow charts, etc. are created. In the past, these studies were often limited to a kind of audit exercise with input and output data of flows and stocks. Their objective was chiefly to optimise individual flows. While there's nothing wrong with this, a city is still made up of more than the sum of its individual flows. Models, analyses and indicators are needed and can raise awareness; however, they rarely generate insights into the 'spatial planning footprint' of flows, daily dynamics and management, accessibility of flows, and how governments and other players can take action on this front.

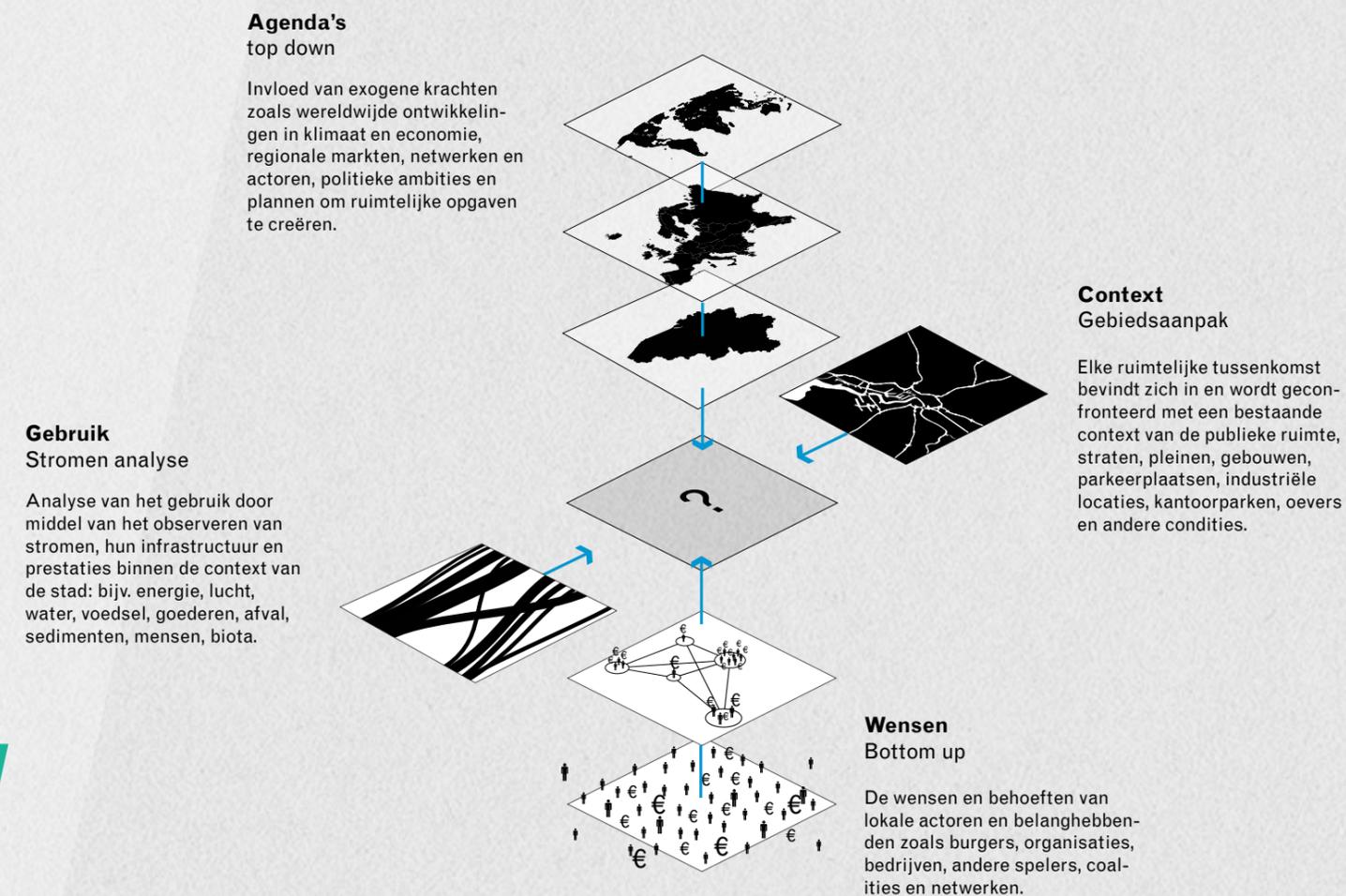
TAKING THE CONTEXT INTO ACCOUNT

It's for that reason that circular metabolism studies should explore the context of specific areas in which those flows occur. Thanks to the **link between research and design practice** current studies take this into account. Different agendas (citizens, public authorities, businesses, territory, etc.) are systematically taken into account, **and local knowledge and valuable initiatives are inclusively integrated** (see figure). As a result, these studies are always tailored to specific places, on a community scale (place-based). In our opinion, that's really what working with circular metabolism is all about.

WHY ARE WE DOING THIS?

Circular metabolism is a useful metaphor for research, design and policy. Through metabolism, everyday aspects of urban life are reassessed. Where does the water running from the tap come from? What happens to my rubbish bag after I put it out on the street? The metabolism doesn't just show how urban life works but also exposes the financial, social and environmental costs borne by the city (source: [Agora](#)). And that's why Circular Flanders and its partners stimulate research and encourage new practices inspired by urban metabolism at various locations throughout Flanders and Brussels.

FLOW CHART: IT'S MORE THAN JUST FLOWS



Source: FABRICations



E. CIRCULAR METABOLISM

USING FLOWS IN DESIGN

1010au, © Antoine Horenbeek

MASTER CLASSES

We organised three master classes, 'Designing With Flows', in the slipstream of BOZAR's A Good City Has Industry exhibition, where the results of the [Atelier Brussels](#) at the International Architecture Biennale Rotterdam (IABR) were presented.

The master classes were a collaboration with the [Flanders Environment Agency \(VMM/MIRA\)](#), the [Flemish Government Architectural Team](#), [FABRICations](#) and the non-profit organisation, [Metabolism of Cities](#). Their primary purpose was to familiarise participants with the theory, concept and practice of 'circular metabolism'. In this relation, we were also interested in starting and contemplating a shared agenda, while also seeking to foster a partnership made up of incredibly diverse actors.

'SERENDIPITOUS OUTCOMES'

The debate set in motion by the master classes resulted in some serious, rather serendipitous outcomes:

PUBLICATIONS AND ARTICLES

- publication '[Designing the Future](#)'
- special issue [Urban Metabolism](#) (AGORA, 2018)
- articles '[Interpreting circularity. Circular City Representations Concealing Transition Drivers](#)' (KU Leuven, 2018) and '[Circular Area Design or Circular Area Functioning? A Discourse-Institutional Analysis of Circular Area Developments](#)' (TU Delft, 2019)

ADDITIONAL RESEARCH/ACADEMIC WORK

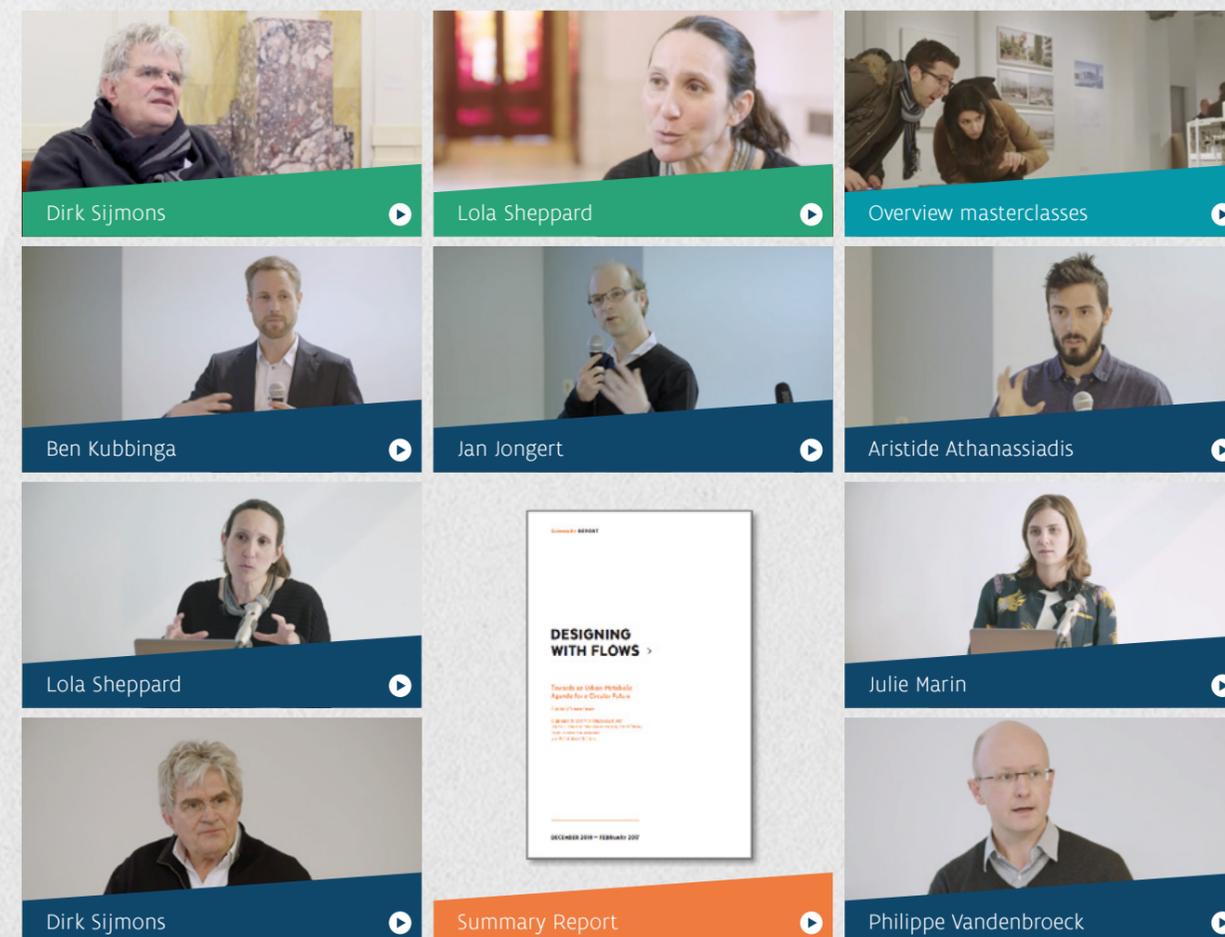
- design research 'Buda Metabolism (Northern Brussels Periphery)' and 'Metabolism Antwerp'
- PhD dissertations, such as [Circular Economy Transition in Flanders. An Urban Landscape Design Contribution](#) (KU Leuven, 2019)
- the establishment of a [Circular Metabolism Chair](#) (ULB, 2018)

COMMUNITIES AND SEMINARS

- start-up of a [Flemish-Brussels-based Circular Metabolism Community](#)
- seminar series '[Cities in the metabolic loop](#)' within the metrolab.brussels framework
- Brussels part of an international seminar series [Urban Metabolism in Policy and Practice](#) (Cape Town - Beijing - Brussels), a collaboration between Metabolism of Cities, the ULB Urban Metabolism Chair, Circular Flanders and UN Environment.

TRIGGERING DEBATE

Review the lectures, interviews or download the *summary report*:





E. CIRCULAR METABOLISM

ANTWERP, CITY OF FLOWS

1010au, © Antoine Horenbeek

'The Metabolism of Antwerp, a City of Flows' is a research-by-design project on nine types of flows in and around Antwerp: energy, water, food, air, goods, waste, people, mobility and biomass. The project mainly focuses on the opportunities they offer to set Antwerp up for a future as a circular city.

ANTWERP, THE GUINEA PIG

The design research into the 'Metabolism of Antwerp, City of Flows' was set up in 2016 by a **unique coalition of the Flemish Government Architectural Team, the Department of Environment, OVAM, the City of Antwerp and the Port of Antwerp**. The project addresses the question of how goods, biomass, waste, energy, people, air and data travel in Antwerp. How do these flows affect the the quality of life? Where can the most opportunities be found? On the one hand, the project needs to feed into the update of the Antwerp Strategic Spatial Planning Structural Plan (s-RSA for short). On the other, the city can function as a test case for investigating how we can close loops on a larger scale and evolve towards sustainable, circular cities.

FLOWS > CHALLENGES > SOLUTIONS

The city of Antwerp itself requested the metabolism study to improve its consideration of the many flows in and around the city. **Eight key flows** were addressed: energy, water, food, air, goods, materials, people and 'biota' (plant and animal life of the region). Appointments and in-depth interviews with experts, internal brainstorming sessions with city services, supplemented by desk research and historical analyses all contributed to the study of these flows. For each flow, the infrastructure and its use or role was mapped. The region, city and street's main challenges



were also sketched as part of the overall picture. In this way, a transition was made from facts and analyses to challenges and promising projects.

Promising projects often respond to multiple flows simultaneously. Four crossflow themes were highlighted: **heat (energy transition), air quality (healthy living), circular building materials (a circular economy) and drinking water (climate adaptation)**. For each theme, a project was developed in detail, including what its relevance is to Antwerp, how to implement the project and who should be involved.

The evolution towards a circular city is still at an early stage, but little by little, it's starting to take shape. In the Inspiration Note for the new **Antwerp Strategic Spatial Planning Structural Plan**, **for example**, the 'short-distance city' has become an important principle. Circular entrepreneurship and flow management are important starting points for new policy and concrete urban projects.

CITY DEBATES

One of the research project's unique characteristics is that, in addition to the usual expert sessions, **public 'city debates'** were also organised to gather input. Members of **advocacy groups, administrations** at different levels, **business managers, researchers, students, designers** and interested **citizens** participated in these debates.



© Frederick Beyens

F. PRODUCTIVE CIRCULAR CITIES

TOWARDS CIRCULAR URBAN ECONOMIES

CIRCULAR (CITY) PORTS

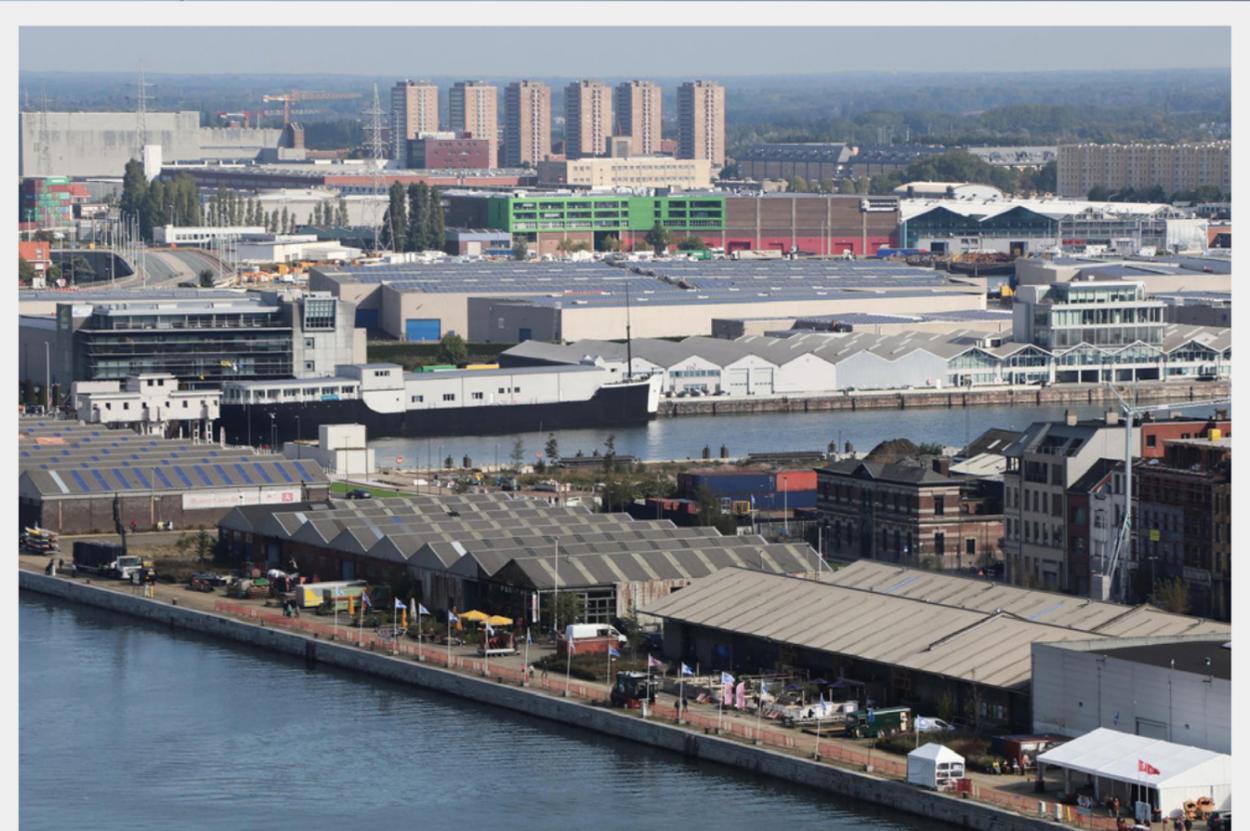
From time to time, Flemish ports are called the 'gates to our prosperity' or the 'engine of our economy'. These large contiguous economic zones are undergoing radical transformation as a result of global market developments, which also entails an expectation that circularity will play a key role in that change. All Flemish port authorities have also made the circular economy a top priority.

At the Flemish-Dutch government summit in 2018, a **shared approach** towards the inevitable **transitions** faced by the **delta ports** was advocated.

Circular delta ports are a recurring theme in the '[Low Countries 2020-2100](#)' exploratory study and were also central to the [IABR-2018 + 2020-The Missing Link](#) (International Architecture Biennale Rotterdam) and its Brussels component '[You Are Here](#)'. This was the rationale behind the development of four avenues of approach, centred on the four scales of circular port operations: the port authority, the city port, the port region and the delta area (Flanders-Netherlands).

WHY ARE WE DOING THIS?

The decades-long prioritisation of housing and offices over the manufacturing industry has effectively expelled this employment market from the city. If we stop looking at the city as an isolated environment, but as part of a much wider circular region, there are all kinds of opportunities for long-term shared profits. What this requires is an approach to strategically embed a productive circular economy. Among others, that will require reintroducing the manufacturing industry to the city, manufacturing that effectively links knowledge, innovation and production.



1010au, © Antoine Horenbeek

City ports are the quays and port infrastructure of the 19th and first half of the 20th century. For the most part, they no longer have a port 'function'; however, it is precisely these areas – where the city and the port meet – that are winning back their significance. Why? It's an ideal place for establishing a smart **link** between the inevitable **sustainability transitions** and the **broader socio-economic development** of both city residents and businesses.

[Architecture Workroom Brussels](#) and [1010au](#) mapped the circular potential of the city's ports with a **benchmark of 11 European city ports**: from Antwerp to Ghent, Hamburg and Le Havre. The study assessed mutual opportunities, connections and challenges, starting with the current circular initiatives at the various different city ports. Starting in 2020, the study will be followed up by the creation of a collective impact programme.

[DOWNLOAD THE STUDY >](#)

F. PRODUCTIVE CIRCULAR CITIES

TOWARDS CIRCULAR URBAN ECONOMIES



The Northern Brussels Periphery

The northern periphery is the **area north of Brussels** and covers part of Brussels and part of the Flemish Region. The **area is both dynamic and complex** with significant spatial planning hurdles. A **jumble of projects** are in the pipeline and several different actors are involved, **which is why clear coordination is a must.**

With this in mind, the Department of Environment and perspective.brussels, the Province of Flemish Brabant and OVAM launched a **Northern Periphery Spatial Planning Programme**. The region's stakeholders will develop a common spatial, economic and societal **future perspective** and **action plan** for the area via the programme, with the circular economy incorporated throughout.

One **concrete sub-project** will be to map and **analyse industry** and the potential for material **cycles** in the **BUDA zone**. A subsidy by Circular Flanders is likely to make the actual exchange of waste streams in the area a reality.



The Belgian Coast

Given its unique location, the coast, more so than other regions in Flanders, will face **demographic changes, climatic change** impact, the transition to sustainable energy and the transition to a circular economy.

How can the **reconversion** of the **built environment** in the coastal municipalities and the adjacent hinterland play a role in tackling these challenges? What role can interventions play on the smallest scale and how do they relate to the coastal region as a whole? These and other questions were explored in the **'Urban System Coast?' design study**, commissioned by the Department of Environment, OVAM, the Flemish Government Architectural Team and the Province of West Flanders as part of the Labo Ruimte [Lab Space] partnership. Among others, the study provided input for a draft compaction and reconversion framework within the Coastal Zone Spatial Planning Programme (TOP).



East Flanders Core Area

By 2050, the population in the **region around Ghent** (the East Flanders Core Area) will have gone up by 15 to 25%. A host of challenges go hand in glove with this **population increase**, in terms of (residential) space, mobility and climate. 23 municipalities in and around Ghent decided to form a partnership to jointly take on these challenges. How can demographic growth in this region be seized as an opportunity to create a sustainable, climate-proof and healthy living environment by 2050? OVAM/Circular Flanders backed these efforts by conducting a study on the circular area's goals. What makes an area 'circular', and what approach and which activities are part of that circularity? And who plays what role?

Outside the core area, the province is also working on **circular strategies** as one of the pillars of its spatial planning policy, climate policy and economic development. **Local authorities** are encouraged to consider how this could impact them.



‘No closed loops
without open minds.’

Walter Tempst, co-founder of Plan C,
Circular Flanders



FEATURED STEERING GROUP PARTNER GHENT UNIVERSITY



In its sustainability vision statement, Ghent University declares its intention to become a leading knowledge institution for a future that is environmentally, socially and economically sustainable, in a local and global context. To this end, Ghent University integrates sustainability into its education, research and services, and implements sustainability in its business operations.

OUR ROLE IN THE CIRCULAR ECONOMY

Ghent University signed the Green Deal on Circular Procurements to help jump-start the transition to a circular economy. This signalled Ghent University's commitment to supporting companies interested in acquiring more knowledge about circular procurements and to starting up pilot projects within the organisation itself.

At the same time, circular economy-related studies are being carried out in different departments and its integration in education is an agenda priority.

OUR PLANS FOR 2020

- 1 **Strategic investment in the interdisciplinary consortium 'Urban Waste and Circular Economy'**, with three new professors in the Faculties of Political and Social Sciences, Engineering and Architecture, and Sciences.
- 2 New steps will be taken towards a **disposable-free Ghent University**, with no bottled water in the vending machines, water fountains across the campus, an experiment with reusable salad bowls and soup cups, circular building materials and more.
- 3 URBCON is a **circular concrete** research project in which – in addition to recycled **aggregates** – work is also carried out at the **binder** level (demonstration, adaptation of standards, etc.). ▶

OUR TOP 5 ACHIEVEMENTS

- 1 **CAPTURE** is an interdisciplinary cooperation initiative. Its purpose is to accelerate radical innovations in the **sustainable recovery of raw materials** through **cooperation** with various stakeholders, with valorisation as an end goal. ▶
- 2 A partnership made up of the Karakters communications agency, Ghent University researchers and policymakers and the City of Ghent attempted to identify significantly more sustainable **alternatives** to classic (PVC) **signage materials**. This must become the new standard. ▶
- 3 Students developed a **modular and circular construction project** from materials with a low environmental impact, the **mobble**. This system can be used to renovate flat buildings and construct new-builds. ▶
- 4 An initial **PC classroom** was furnished with approximately 120 **in-house refurbished devices**, so that the life of our devices are extended. Discarded IT equipment is donated via a VLIR-UOS project to Cuba.
- 5 A few **visible products** put **C2C in the spotlight**: C2C cleaning products, furniture in the Green Hub, panniers, pencil cases, hammocks, etc. – all made from discarded banners, reusable cups, etc.



Innovation, talent, daring to do the unimaginable – the assets we bring to a circular economy.

Rik Van de Walle - Ghent University Rector



FEATURED STEERING GROUP PARTNER

THE FLEMISH BUILDING CONFEDERATION



With over 10,000 member companies, the Flemish Building Confederation (VCB) is the professional organisation that best represents the Flanders construction sector. We represent major construction companies, SMEs and the self-employed within various building professions, such as contractors, infrastructure contractors, road construction companies, finishing and installation companies.

OUR ROLE IN THE CIRCULAR ECONOMY

For years, the Flemish Building Confederation has been committed to a watertight cycle of building materials and earthmoving in Flanders to ensure safe, recycled materials in the construction industry. Our tagline, 'construction, energy and environment' is reflected in all kinds of initiatives, such as high-quality earthmoving and the selective tracking of demolition and construction waste as a raw material for new applications.

Tracimat and Werflink are also used to facilitate access to and the quality of these materials. Circular construction is gradually becoming the standard, which is why the VCB was one of the Green Deal on Circular Construction's first architects. In future, our focus will also shift towards pervasive urban mining so that other sectors have access to recycled building materials and towards taking the circular economy to the next level.

OUR PLANS FOR 2020

- 1 The creation of a **Circular Construction Label**. A methodology and **recognition of** circular approach and construction of buildings by the chain partners involved. ▶
- 2 The **Circular Bio-based Construction Industry** Interreg 2 Seas Project, where we partner with neighbouring countries on an integrated approach and system for the integration of bio-based building materials in circular construction projects. ▶
- 3 Interreg NWE Project Facilitating the **Circulation of Reclaimed Construction Elements**. Development of a methodology for the inventory, demolition, digital offer and public procurement of reusable building materials. ▶

OUR TOP 5 ACHIEVEMENTS

- 1 **Tracimat** certifies a **selective demolition process** and guarantees traceability of waste materials released during dismantling/demolition work. The result is 'cleaner' waste streams that make higher quality recycling possible. ▶
- 2 **Grondbank**, a **tracking system for excavated soil**. This organisation supports earthmoving actors, provides soil management reports and offers solutions to practical earthmoving-related problems. ▶
- 3 **Werflink** is the online sharing platform where **construction companies**, sites and shipyards in Belgium can **share, lease and sell** their **surplus** equipment and materials, unused or surplus tools, cargo and storage space. ▶
- 4 The Interreg project **HISER** investigates solutions (tech and non-tech) that target **high-quality reclamation of raw materials from construction and demolition activities**, based on a circular approach and across the entire value chain. ▶
- 5 The **Asbestos Charter for Roof Contractors** contains a guide and compliant working method for affiliated roof contractors, in line with environmental and employer's obligations and with the objective of making Flanders asbestos safe by 2040. ▶

‘
The construction sector is a pioneer of the Flanders circular economy.’

Marc Dillen, VCB Director General



5/ OPEN CALL

THIS CHAPTER DISCUSSES

- A. CIRCULAR ECONOMY EXPERIMENTS
- B. A BROAD SUPPORT NETWORK
- C. FUNDING
- D. OUTPUT(S)

A. CIRCULAR ECONOMY EXPERIMENTS

In 2017 and 2018, Circular Flanders was able to financially support 135 circular economic projects via the Open Call. While this report was being written, an assessment of the third call in 2019 was underway, already involving the submission of 266 project proposals.

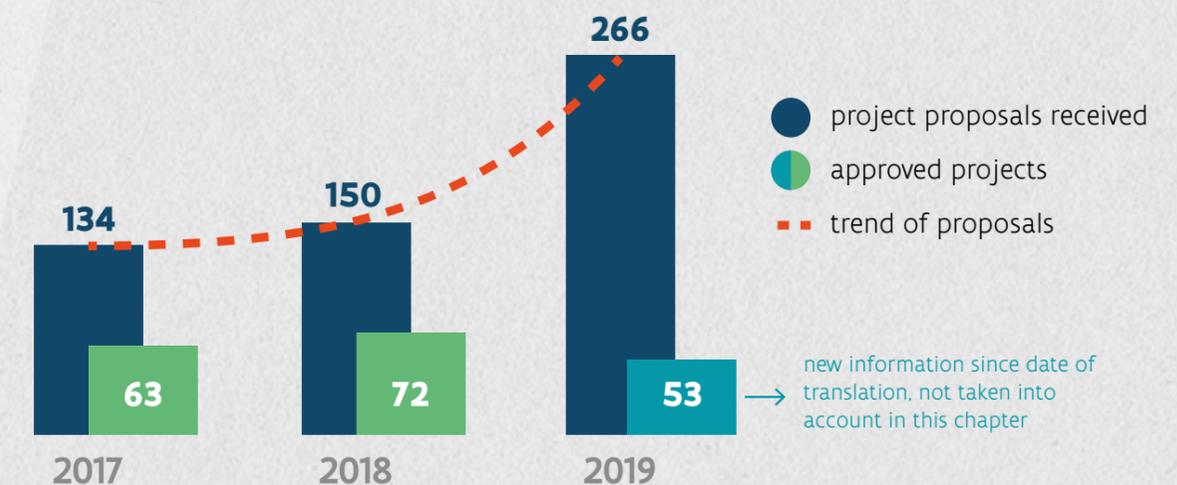
However, market failures (risks, and a linear psychological, economic, tax-related and normative framework) occasionally hamper the start up of innovative circular projects. And that's why our goal is to give experimental projects the boost they need through funding.

We also carry out practical research as part of the Open Call, having things tested in the field and capturing lessons learned about the barriers and drivers encountered in the process. We can use this knowledge to adapt policy that's been well-substantiated or have it adapted by others and put greater effort into specific levers.

WHY ARE WE DOING THIS?

Market failures (risks, and a linear psychological, economic, tax-related and normative framework) occasionally hamper the start up of innovative circular projects. And that's why our goal is to give experimental projects the boost they need through funding. At the same time, we want to learn from practice. The theory of circular economy-related benefits and principles has already been described in detail; however, that picture is often incomplete without enough real-life lessons to round it out. The Open Call provides organisations with the opportunity to experiment in a safer environment and gives us the opportunity to capture lessons about the thresholds or *drivers* they face. We can use this knowledge to adapt policy that's been well-substantiated or have it adapted by others.

Number of project applications received proposed and approved 2017-2019



Co-financed to date
(2017-2019):

135 projects

Funding in the amount of:

EUR 11 million

Graph: The number of project proposals submitted is increasing on an annual basis.

A BROAD SUPPORT NETWORK

Image: Launch of the Struvite installation at the Kruitfabriek event venue © Aquafin

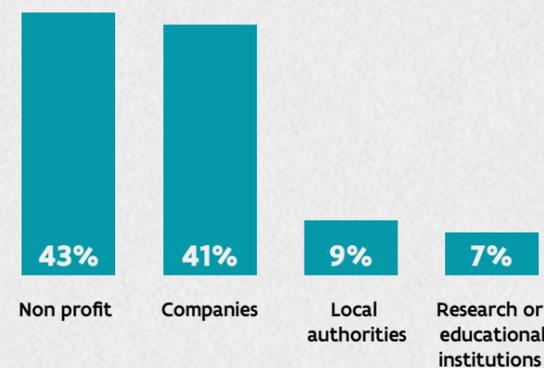
[DOWNLOAD THE OVERVIEW OF ALL PROJECTS](#)

The Open Call deliberately targeted a high number and wide range of thematic projects.

The underlying motivation is:

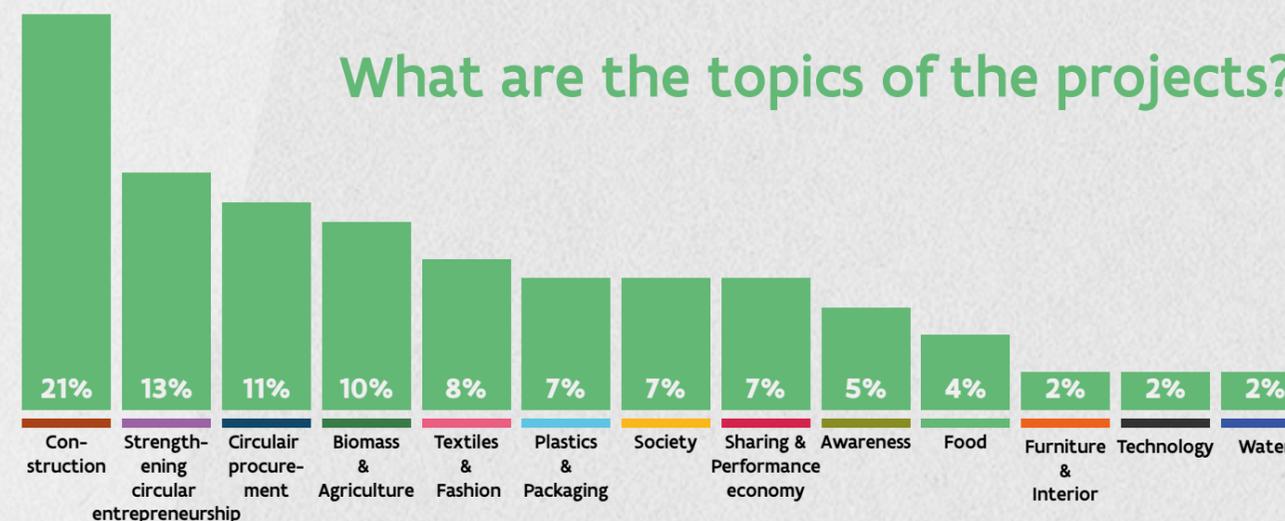
- risk spreading:** by supporting several medium-sized projects instead of a few huge ones, we boost the chances of success. By sowing more flower seeds, we're more likely to end up with a larger field of blossoms (potential circular successes).
- democratisation of the transition:** (1) through avoidance of a priori exclusion of actors or themes and (2) by using an accessible procedure, we hope to encourage everyone, from SMEs to non-profit organisations to local authorities, to implement a circular economy. This is our approach to making a societal-wide transition a reality.

Who applies?



43% of the applicants are **non-profit**, while 41% are **companies**. As of yet, local authorities (9%) and research or educational institutions (7%) have been less willing to avail themselves of the Open Call subsidy system. (Note: sector federations are regarded as non-profit.)

What are the topics of the projects?



One in five funded projects is **construction-related**, ranging from testing innovations, to new business models and rolling out sharing platforms, etc.

This is followed by projects aimed at **strengthening circular entrepreneurship**. These often include processes that entrepreneurs adopt to transform their companies into more circular operations.

The third major group is comprised of **circular procurement projects**. These are experimental projects within the framework of the Green Deal on Circular Procurements that received a limited subsidy.



C. FUNDING

Image: MAAkbar Leuven

Projects are subsidised based on three categories:

1. 'city and entrepreneurship' projects;
2. 'circular procurement' projects;
3. revamped '2017 city and entrepreneurship' projects.

This latter includes projects that as just barely not making the grade in the first round, but upon re-examination and re-assessment were awarded grants in 2018.

A total of **10.9 million euros** were invested in 2017 and 2018. An additional EUR 5 million has additionally been pledged for 2019.

The **average grant amount** is EUR 89,000 (with a max of EUR 100,000) for an average **project budget** of EUR 136,000. The average co-financing contribution of tenderers is 29% (with a minimum of 20%).

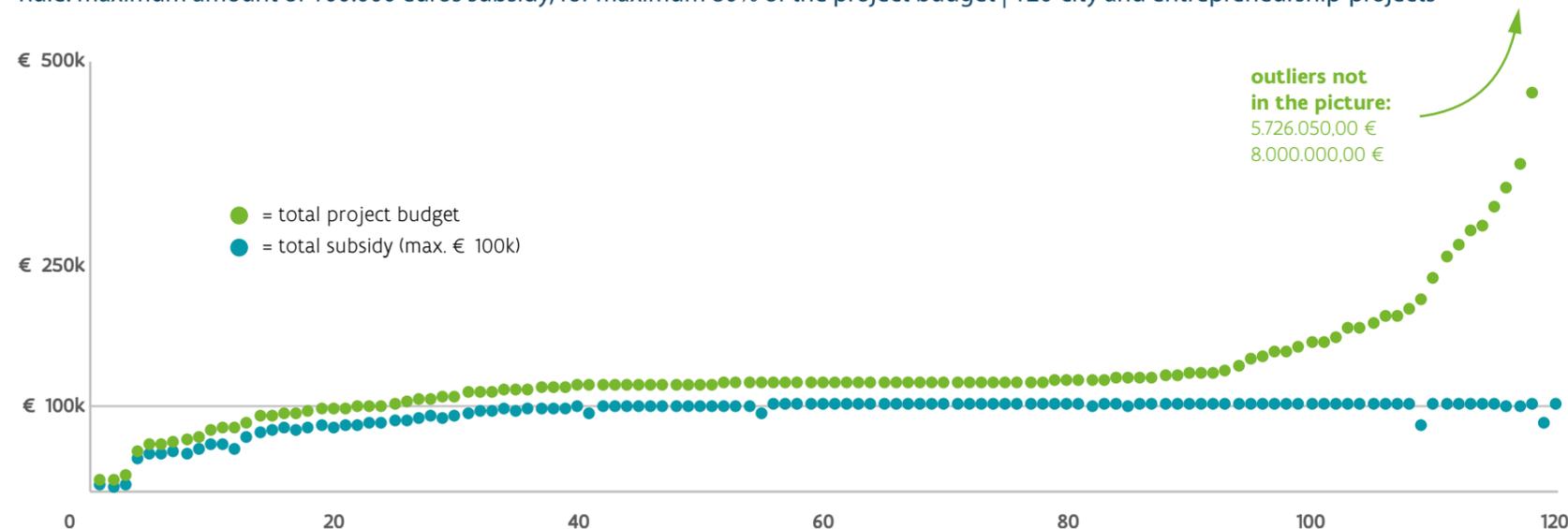
These are the figures without Call Procurements and two special outliers with an exceptionally high project budget.

What's the budget?

		# projects	budget
2017	city and entrepreneurship	52	4.588.249,31 €
	procurement	11	209.110,00 €
2018	revamped 2017	15	1.455.365,56 €
	city and entrepreneurship	53	4.656.044,38 €
	procurement	4	65.255,00 €
		135	10.974.024,25 €

Medium-sized projects funded

Rule: maximum amount of 100.000 euros subsidy, for maximum 80% of the project budget | 120 'city and entrepreneurship' projects



D. OUTPUT(S)

Image: COSH! launch

While the projects are all incredibly different, we have implemented a typology of likely output types:

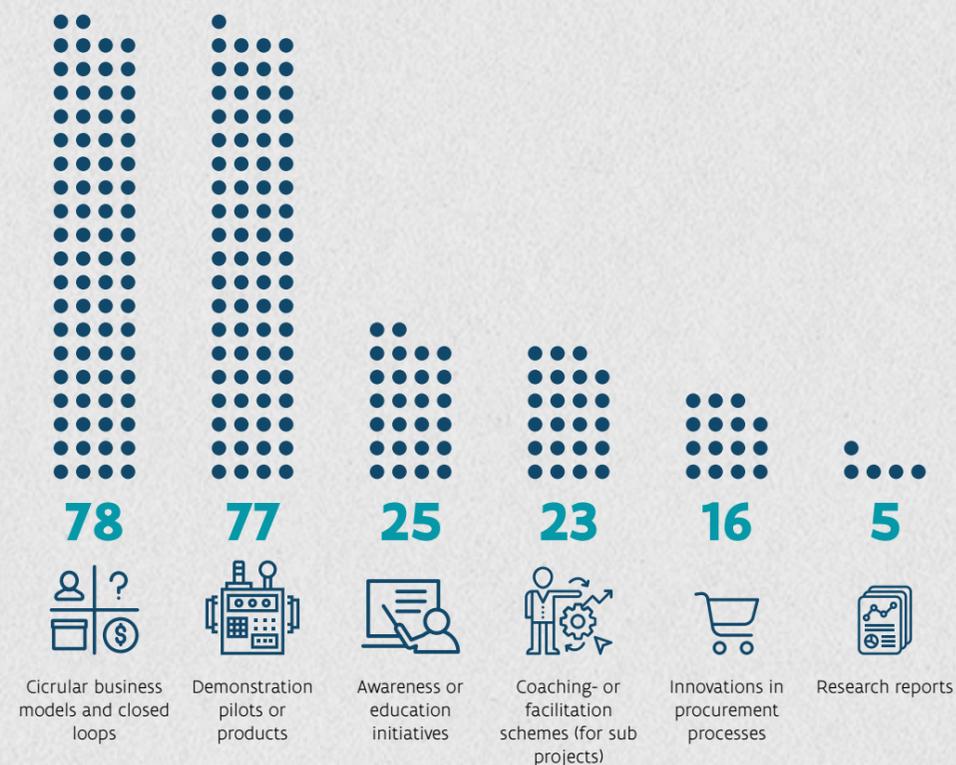
- **78 circular business models and closed chains:** these are projects in which partners try to identify means of structural cooperation, test new market offerings, and implement innovations in a closed chain, etc.
For example: Eco-Oh is researching whether it can offer sofas as a service to local authorities.
- **77 demonstration plants or products,** projects that convert theoretical and technological knowledge into a functioning installation on site. These projects are usually accompanied by a circular business model, involving suppliers and customers.
For example: Aquafin is installing a struvite installation on the Kruitfabriek [‘Ammunition’ Factory] site in Vilvoorde.
- **25 awareness-raising or education initiatives** are projects that set up educational and awareness-raising activities for their ‘supporters’. The stakeholders work as a team to establish how the circular economy could benefit them.
For example: AGORIA’s Circular Bytes increases its members’ knowledge about digitisation opportunities for the CE. The project informs and plays a matchmaking role for companies.

- **23 coaching or facilitation processes (for sub-projects),** or projects that organise circular business model coaching for a specific set of sub-clients or projects (selected via a call, for example).
For example: VITO’s Expedition Circular supports four companies in discovering how they can turn their circular ideas into a business case.
- **16 innovations in the procurement process** are the projects funded under the Green Deal on Circular Procurements to facilitate innovative procurement processes.
For example: ZORG Leuven builds circularity into the framework agreement for the sustainable rental and maintenance of linen and workwear.
- **5 research reports are** projects that convert theory into applied/applicable knowledge and report on it.
For example: Econocom studies the financing bottlenecks and opportunities related to pay-per-use models and tests these insights via a real financing case.

Note 1: All projects are required to communicate their results to the public. Dissemination or PR is therefore not a project-output category in itself.

Note 2: Several projects deliver several outputs simultaneously.

Expected outputs Open Call 2017-2018





‘My company is desperate for competition.’

Didier Pierre – Nearly New Office Facilities



FEATURED STEERING GROUP PARTNER

VITO



VITO is a leading international research and consultancy centre that provides knowledge and technological innovations facilitating the transition to a more sustainable society. We do this in the areas of energy, chemistry, materials, health technology and land use. We connect different parties in a sustainable value chain.

Now that the circular economy is becoming mainstream, it's essential to have a critical debate.'



Karl Vrancken, Sustainable Materials Research Manager

OUR ROLE IN THE CIRCULAR ECONOMY

Transitioning to a circular economy requires changing our way of life. It will lead to new patterns of interaction between people and alter how we produce, own, use and reuse products. In cooperation with our partners, industry and governments, we aim to be the driving force behind this transition in Flanders and Europe, with the global context in mind.

As a research organisation, we actively develop new technologies to make the circular economy a reality. In doing so, we look beyond recycling and re-use of waste materials, taking new business models, the development of innovative materials, material management models, innovative frameworks for government policy, etc. into account.

OUR PLANS FOR 2020

- 1 VITO is joining forces with WTCB, Hasselt University and the VUB to create the **Circular Construction Living Lab**, a part of the Green Deal. We supervise transition-oriented **experiments** and carry out research into **selective demolition** and **modular building**. ▶
- 2 For the Circusol Horizon 2020 project, VITO is developing a business model for **leasing solar panels and batteries**. We put this model into practice in neighbourhoods and companies by working with international partners. ▶
- 3 Producing cement is both energy-intensive and causes high CO₂ emissions. VITO develops **technology** and sustainable **building materials** for the '**greening**' of the **concrete sector** with cement replacements and recycled aggregates.

OUR TOP 5 ACHIEVEMENTS

- 1 VITO develops **new building materials** based on industrial mineral waste streams. An excellent example is Carbstone, a CO₂-negative building block based on metal slag and with CO₂ as a binder. ▶
- 2 We supported businesses with circular **business experiments** as part of **Expeditie Circulair** [Circular Expedition]. Through process guidance, expertise and networking, a blueprint was drawn up to help get companies started. ▶
- 3 VITO brings leading international organisations to the table to discuss what a circular economy requires in terms of technology. In the annual **G-STIC conference** we exchange lessons learned on digital innovation. ▶
- 4 We support the Flemish and European policies in developing **circular economy indicators** and introducing **policy frameworks**. This provides publications publication content for OVAM and the European Environment Agency.
- 5 The 2020 European Horizon project '**Construction As Material Banks** (BAMB), gathered 15 parties from all over Europe with a single goal in mind – to accomplish a **system revolution in the construction sector** by developing circular solutions. ▶



AGENTSCHAP
INNOVEREN &
ONDERNEMEN

FEATURED STEERING GROUP PARTNER

VLAIO



The Flemish Agency for Innovation and Entrepreneurship is the Flemish government's point of contact for every entrepreneur in Flanders. We stimulate and support innovation and entrepreneurship and contribute to a favourable business climate.



‘Circular economy has a strong presence in the VLAIO portfolio. Increasing its visibility even further is one of our top priorities.’

Mark Andries - VLAIO Administrator General

OUR ROLE IN THE CIRCULAR ECONOMY

The Flemish Agency for Innovation and Entrepreneurship has a pioneering role in stimulating sustainable and circular entrepreneurship in Flanders. To this end, we have four areas of focus:

1. subsidy grants;
2. tailor-made advice;
3. facilitating a network of service providers;
4. creating the right environmental conditions.

Support measures such as the ecology premium, along with our other subsidies, such as SME growth subsidies and innovation aid are excellent means of making the transition to a circular production (process).

OUR PLANS FOR 2020

- 1 We will **step up the cooperation** between the transition to **Industry 4.0** transition and a circular economy transition within the framework of Vision 2050.
- 2 When updating our **entrepreneurial support**, we also provide **space to network with, inform, advise, and coach them** on the topic of circular economy. We also make **innovations more accessible to all** companies involved in our activities.
- 3 In line with the ongoing focus on optimising our tools, we will also **keep track of** any circular economy **funding opportunities**.

OUR TOP 5 ACHIEVEMENTS

- 1 In 2018, VLAIO initiated a programme to support the **spearhead clusters** in planning and developing **projects** in the Transition Areas of Industry 4.0, **Circular Economy**, Energy and Mobility. In addition, we work with Circular Flanders to screen the **project portfolio** of the clusters annually to specially highlight a number of **frontrunner projects**. ▶
- 2 VLAIO supports and stimulates entrepreneurship through **structural partnerships** in which different organisations combine their efforts to meet challenges. Circular economy as a theme takes on a **more central point of focus in their offer** in consultation with these partners.
- 3 VLAIO uses its **industrial site management** to put the circular economy on the map. For example, we support projects in the field of exchange/reuse of **water, energy, heat and materials**. In addition, we also strive for more meticulous, 'interwoven' and circular **land use** on industrial sites.
- 4 Circular Flanders taught a **course** on the circular economy to our team of business advisors. The Strategic Business Processes Team has also boosted its collaboration with Circular Flanders. We **exchange knowledge** and **provide support** to a number of companies with their funding applications. ▶
- 5 Relying on an **internal circular economy-based working group**, we promote the topic of circular economy in-house and encourage knowledge sharing. Circular Flanders is a member of this working group. The working group will produce a **brochure** on the potential **support measures** for circular economy projects (publication at the end of 2019).



6/ MARKETING & COMMUNICATION



A. PRODUCTS AND CHANNELS

& onderhoudsjobs

Clearly and enthusiastically explaining a circular economy is a permanent aspect of Circular Flanders' work. To this end, in addition to the project-specific communication available elsewhere in this report, we develop general communication products. We also continuously ensure that we are active on social media. **A short overview**

Online reach



Website (excl. subsites)
4.7 k visitors/month



Twitter
CirculFlanders: 3,900
OVAM_Ecodesign: 1.4 k



Facebook
vlaanderencirculair: 2.7 k
ovamecodesign.link: 1.9 k



Instagram
circular.flanders: 1.4 k
ovamecodesign.link: 650



LinkedIn
Circular Flanders Group: 1.3 k
GDCC group: 500
GDGP group: 400

EVENTS



Through cosy and inspirational events like our Community Night, we bring circular thinkers and doers together. We organise matchmaking sessions to make networking just that bit simpler.

TOOLS



We support the Close The Loop Tool for circular fashion and textiles, The Circular for business model development and built the CE Compass, a focussed checklist for circular projects.

INFOGRAPHICS



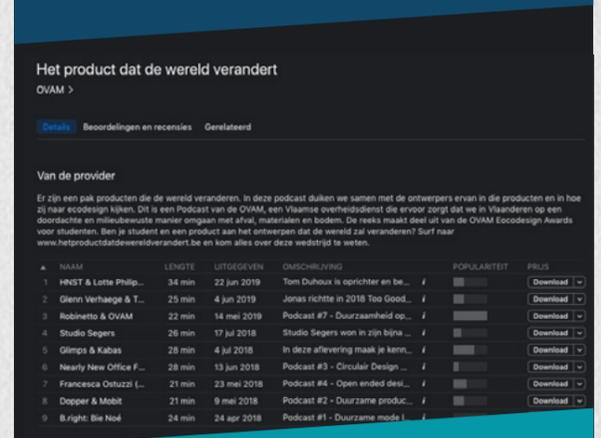
As enthusiastic devotees of visual communication, we continuously invest in the development of infographics. Some of our charts have become international 'greatest hits'.

VIDEOS



We regularly publish our own video content on our social media accounts, including material on circular project case films, ecodesign winners, research centre researchers who explain their projects, etc.

PODCASTS



Codesign by OVAM created a series of podcast episodes called 'The product that changes the world'. Each episode features an interview with inspired designers.



A. PRODUCTS AND CHANNELS

Mechanical-
Biological

Clearly and enthusiastically explaining a circular economy is a permanent aspect of Circular Flanders' work. To this end, in addition to the project-specific communication available elsewhere in this report, we develop general communication products. We also continuously ensure that we are active on social media.

A short overview

CASE DATABASES

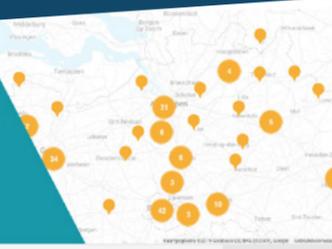


Doeners in Vlaanderen

Look what is moving in Flanders

VOR MAP

TOEGANG



Filter op: Sectoren • Thema • Aanpak • Vibe • Provincies

BOUW • KUNSTSTOFFEN • BIO-MAKIA • ENERGIJE • VOEDING • WATER • RIJNTEGEBIED • METALEN • TEXTIEL & MOE • TECHNOLOGIE

DINOTEN • CHEMIE • FINANCIË • DETAILHANDEL • LOGISTIEK • SOCIAAL-CULTUREEL



We maintain an [ecodesign case database](#) and [bilingual database of circular projects and activities](#) in Flanders.

BLOGS



Dit was de Recupel E-loop Challenge

2020-09-23 10:00

In de marge van het 9000-organisatie Recupel, Ondernemers Vlaanderen en The Agentschap de Landbouw Vlaanderen, is de eerste uitdaging van de wereldwijde Recupel E-loop Challenge.

LEES MEER >



We regularly publish blog articles on our websites, including [interesting case stories](#), [ecodesign highlights](#) and [news and interviews](#) from the research centre.

NEWSLETTERS



Europese Investeringsbank maakt 10 miljard vrij voor Circulaire Economie

Het 'Joint Initiative on Circular Economy' zal de implementatie van circulaire economieprojecten in de EU ondersteunen en versnellen. Het initiatief verschaft de komende 5 jaar leningen, participaties of garanties voor beloftevolle projecten bij lokale overheden, grote en kleine ondernemingen of onderzoeksinstituten.

Meer weten >



We send out a carefully crafted newsletter to 2,300 (GDPR-proof) subscribers on a monthly basis. On top of that, we send a quarterly newsletter with the CE Center to around 1,200 e-subscribers.

SLIDESHOWS

Gevorderd beleid: recyclagemarkt

BIOLOGISCHE CYCLUS

TECHNISCHE CYCLUS



We developed a set of standard slides and presentations for explaining the circular economy clearly and comprehensively. That includes audio recordings. We offer this material on request.

B. SERVICE POINT: ON DEMAND SERVICE PROVISION

In addition to our supply-driven activities, we go to significant lengths to answer questions 'from the field'. That ranges from a simple phone call to an event lecture. Often, we see that the first consultation results in ongoing cooperation or support. The service point is the mouth of a 'funnel' towards more.

Incoming e-mails: we receive around 260 substantial questions by e-mail every year (figure based on accurate registration in the first 8 months of 2019). These are e-mails we didn't solicit, i.e. they don't cover GDCP, GDCC, Open Call, a request for modification or additions to our communication, spontaneous applications or telephone calls. These e-mails are always followed up by the team and occasionally lead to a consultation.

Consultations: the operational team staff get together around ten times a month to offer free advice. Often, it's companies or people looking for inspiration, direction or support for their circular plans that show up to these consultations. Consultations typically take place at the office, but appointments by video are also an option. For answering technical policy-related questions we also have the option of calling in an OVAM expert, where relevant.

Presentations/lectures: Circular Flanders continues to be a warmly welcomed guest at all kinds of events. From workshops about sectoral events to international conferences, we get the news out about the circular economy everywhere we go. This amounts to 66 appearances a year, on average, for a domestic audience and 28 a year for international audiences.

Service point in numbers



Email:
answering
substantive questions

260
per year*

*Numbers **excluding emails** mails for GDCP, GDCB, Open Call, content on the website, job applications, phone calls.



Consultations
face to face support

110
per year**

** Estimate based on partial agenda counting.



Presentations/lectures:
delivering talks at events or
seminars

66 **28**
per year per year
domestic international
audience*** audience

*** Estimate based on amount of unique presentation and speech files per year.



C. IN THE PRESS

The press also has an easy time contacting us when they need explanations about the circular economy's role and progress in Flanders. Additionally, we've noticed that the channels of communication between the Open Call subsidised projects and open and active, which features Circular Flanders' support. A selection of articles.

- **'Studios click together like Legos'**
Het Nieuwsblad
- **'Roeselare baby centre in the making'**
Het Laatste Nieuws
- **'Sustainable shopping using Cosh!'**
FashionUnited
- **'From now on, you can also borrow baby equipment. "Those things cost gobs of cash when you only need it for a little while."'**
Het Laatste Nieuws.
- **'230 companies and governments sign the Circular Construction charter'**
Het Laatste Nieuws
- **'Circular economy is here to stay'**
MO
- **'Pollution and vacancy make way for circular lab'**
Het Laatste Nieuws
- **'Bad news: Belgium suffers from severe water stress'**
MO
- **'Green Deal leads construction into the circular economy era.'**
Bouwkroniek
- **'Together towards a closed circular circuit'**
Smart Media Agency
- **'Our goal is to be a sustainable alternative to Bol.com'**
ATV
- **'Heavily polluted site in the city centre spectacularly features a huge square'**
Het Nieuwsblad
- **'Flemish circular economy projects take off.'**
Bouwkroniek
- **'Less and more efficient car use could reduce emissions by 35 percent by 2030'**
MO
- **OVAM: 'Focus on reducing CO₂ footprint focusses too much on energy consumption'**
DVO - iTel
- **'Twenty shops in Ghent start using cups-for-deposit'**
De Morgen
- **'Promising research into duckweed in feed pellets'**
Landbouwleven
- **'New online tool should make shopping in Belgium more sustainable'**
Het Laatste Nieuws
- **'Are HNST jeans the most sustainable? No fashion label can live up to transparency'**
MO
- **'A trip to the urinal by male visitors creates new life on the site'**
Het Nieuwsblad
- **'Men visiting the Kruitfabriek can contribute their urine to water the herb garden'**
Het Nieuwsblad
- **'These architects convert local soil – ready for the waste heap – into building material'**
MO
- **'Sustainable route planner COSH! receives subsidy'**
Retail Detail Belgium
- **'Circular construction as "next level" of sustainable design'**
Bouw & Wonen
- **'Leaders of circular construction, lights in the green dark'**
MO
- **'We aren't resigning ourselves to the worst'**
MO
- **'Billie, the plastic cup against throwaways'**
De Standaard
- **'For the first time, the non-profit Makelarij hosts the Heroes of Tongeren'**
Het Belang van Limburg
- **'Tongeren: Tongeren's Ambiorix barracks are transformed into a location for sustainable entrepreneurship'**
Limburgnieuws.be
- **'Edo Collective: "We want to build a business model that is self-directed and self-supporting"'**
FashionUnited
- **'Catalysts: matchmakers of circular chemistry'**
MO
- **'Teacher, how do you start transforming education (on a circular economy)?'**
MO
- **'Pig farmer Tim Keyzers wins third Ivan Tolpe Award'**
Landbouwleven
- **'Pro Natura: green, social hands close loops'**
MO
- **'Werflink is an online matchmaker for the circular construction economy'**
Bouw & Wonen
- **'Making the big picture happen with NPirriK'**
Landbouwleven
- **'The city of the future will be circular, or not.'**
Knack.be
- **'Limburg builds new training space for the provincial safety school'**
Bouwkroniek
- **'Pami is fully committed to a circular economy.'**
OfficeRepublic
- **'Governments give the circular economy a boost.'**
Trends
- **'Circular economy isn't finding enough funding'**
Trends
- **'How a circular economy slowly but surely is becoming the norm'**
Trends
- **'Over 130 companies and organisations embrace the circular economy.'**
Channel Z
- **'The #climate board: #decirculair - Brigitte explains why rubbish bins are becoming unnecessary'**
Canvas.be
- ...



‘If we wait until everything, really absolutely everything is ready, then we’ll never get started.’

Ivan Turgenev, Russian author



FEATURED STEERING GROUP PARTNER

VLAKWA + VMM



VLAKWA is the independent intermediary active throughout the entire water chain and advocates for an integrated approach with international connectivity, cooperation, knowledge building and exchange.

The Flemish Environment Agency (VMM) is a Flemish government agency that focuses on clean water, clean air, climate adaptation and environmental reporting.



‘Closing material and water loops simultaneously.’

Bernard De Potter, VNM Administrator General

OUR ROLE IN THE CIRCULAR ECONOMY

The main focus of the Flanders Water Knowledge Centre is to contribute to the greening of the economy and the socio-economic development of Flanders. To this end, we provide demand-driven, innovative solutions for sustainable use and reuse of water and accelerate the valorisation of these solutions. And this is always rooted in networking and multi-stakeholder cooperation.

The Flemish Environment Agency plays an indispensable role in the comprehensive water policy. They measure and monitor the quantity and quality of water, manage water systems, collect duties on water pollution and on groundwater extraction, provide advice on environmental permits and take care of the planning and inspection of the treatment infrastructure. VMM acts as a regulator for mains water.

OUR PLANS FOR 2020

- 1 We do our utmost to **encourage** the **reuse of water** in the business and agricultural sector and focus on the use of alternative water sources, such as rainwater.
- 2 We are building a **living lab** for innovative concepts and a **robust water system**, which we assist by means of the proper **legal frameworks** and appropriate **economic incentives**.
- 3 We are committed to **climate adaptation** and are implementing the **action plan for drought and flooding**. By focusing on smart technology, robust infrastructure and sufficient space, we are turning a sustainable water system into a reality.

OUR TOP 5 ACHIEVEMENTS

- 1 The **coordination of water re-use projects** on different scales (company, agricultural areas, urban) and between different types of users, which helped us capture several important lessons learned. ▶
- 2 Support by business consortia to **demonstrate circular water projects** (VLAKWA/VITO open call) or to introduce cross-company services (**re)use of water in business operations** (Drought Living Lab - VMM). ▶
- 3 Setting up a **Breweries Green Deal** and supporting breweries with taking concrete initiatives that enable the sector to implement a **more sustainable approach to water**. ▶
- 4 Continuing to develop and roll-out a **'Drought and Flood Action Plan'** with activities that promote water reuse; commitment to steady data build-up and exchange and an open data/legal framework for the reuse of liquid waste. ▶
- 5 The **study** on the **socio-economic importance of water** in Flanders and the expansion of the **Climate portal**, which stresses the significance of ensuring supply security, and closing loops. ▶



FEATURED STEERING GROUP PARTNER

VVSG (ASSOCIATION OF FLEMISH CITIES AND MUNICIPALITIES)



The Flemish Association of Cities and Municipalities (VVSG) is a representative, service provider and network organisation of and on behalf of the local authorities.

OUR ROLE IN THE CIRCULAR ECONOMY

Local authorities can also be a driving force and facilitator of circular developments within their territories and assist in expanding these (e.g. area or material flow oriented) beyond mere isolated initiatives. Leading cities and municipalities are requesting assistance to make the exchange of knowledge and experience a more fluid one, and VVSG is taking the reins in responding to this urgent need. It supports an accelerated transition to a circular economy and helps expand its support within cities and municipalities.

There are a variety of ways in which they get this done. For one, they make an assessment of which different local government actors and services have the potential to play a role in this process. Additionally, it works to remove boundaries within the municipalities, while also trying to forge new links with other municipalities. VVSG promotes chain cooperation and disseminates information about diverse opportunities and market players.

OUR PLANS FOR 2020

1 Correlating nicely with the EU's Urban Agenda, we are creating a **Flemish urban partnership based on the circular economy**. This urban partnership brings different national and international stakeholders together to discuss and work towards better **knowledge sharing**, improved **regulations** and access to **funding**. Both advanced and beginner local authorities will belong to the Flemish urban partnership.

2 We are starting an **innovation lab** that develops innovative projects in partnerships with different partners and cities. That's how the diverse opportunities associated with the upsurge of circular economy-related **digitisation** and innovative **technologies** are discovered. The results will be **scalable to** all cities and municipalities in Flanders.

OUR TOP 5 ACHIEVEMENTS

- 1** We **took stock of the various initiatives** taken by cities, municipalities and intermunicipal partnerships. A fact sheet was drawn up for each project, which can be accessed via our online practice database (from late 2019). The various projects serve as inspiration for other local authorities.
- 2** **Local authorities** were **encouraged** to work on the circular economy through several inspiration sessions. VVSG promoted cross-department work in its operations, which helped it introduce the circular economy on a wide scale among its members. For example, there was cooperation in terms of sustainable procurement, local food strategy, local housing, etc. We get them fired up to start up worthwhile, high-impact projects.
- 3** In line with the above, **we provide local authorities with support** in their projects. We respond to requests for advice and provide support **tailored to the local context**. Within the framework of the new legislature, we took a look at how the municipality could implement a circular economy realistically.
- 4** On 2 May 2019, VVSG organised a packed Climate Day, where it held a **master class on circular economy**. The master class focussed on how cities, municipalities and provinces can get the process started.
- 5** We are working on a **publication on the circular economy for local authorities**. In this way, we provide answers to questions such as 'What is the circular economy for local governments?', 'Why should a city or a municipality take interest in it?' and 'How can it be put into practice?'. We nudge local authorities to take a proactive approach towards this key theme.

Local authorities have the potential to be an engine and facilitator of their territory's circular development.'



7 / INTERNATIONAL

FLANDERS ON THE MAP



2019 WORLD RESOURCES FORUM

In February 2019, OVAM hosted the [World Resources Forum](#). The conference's purpose was to show how transitioning to a circular economy is possible. The conference was attended by some 700 participants from the Netherlands and abroad. Circular Flanders played an advisory role, hosted its own session on circular cities and regions, co-organised the E-loop Challenge, gave a presentation on the Green Deal on Circular Procurements, hosted an exhibition on Flemish eco-design and ran the central information stand on the circular economy in Flanders (with our coffee bar as one of the stars of the show).



DELEGATIONS AND LECTURES

As a unique hub, Circular Flanders is a highly sought-after guest at conferences and international missions.

Outgoing

Circular Flanders participated in several international trade missions and conferences to put Flemish initiatives and companies on the map. We travelled to Lisbon, Boston, Tallinn, Stockholm, Copenhagen, Adelaide, and more. Brussels was also often a frequent stop, where we provided input at several EU conferences and conventions.

Incoming

Taiwan, India, the Scandinavian countries, the Netherlands and Chile sent delegations our and OVAM's offices.



2019 CIRCULAR ECONOMY HOTSPOT

Belgium hosted the annual [Circular Economy Hotspot](#) in November 2019. The hotspot highlighted Belgian good practices and smart innovations, and Circular Flanders helped organise it.

[FIND OUT MORE >](#)

WHY ARE WE DOING THIS?

If something is a good thing, it deserves to be shared. We are convinced that Flanders has a spot-on policy for promoting the circular economy *and* we have sound organisations and companies to put that policy into practice. That Flemish know-how and the solutions that go with it can be applied beyond Flemish borders. And we want the world to know it. At the same time, we don't want to reinvent the wheel and are interested in learning from good practices abroad too.



8/ CE CENTER

THIS CHAPTER DISCUSSES

- A. RESEARCH AND EXPERTISE
- B. 8 RESEARCH PATHS
- C. PUBLICATIONS



A. RESEARCH AND EXPERTISE

The Circular Economy Policy Research Centre (CE Center) conducts policy-relevant research related to the circular economy and unites researchers from KU Leuven, Ghent University, the University of Antwerp and VITO. This research centre builds on the research results of the previous SuMMa research centre, which was active from 2012 to 2016.

OVAM and the Department of Economy, Science & Innovation (EWI) jointly finance the research centre.

Policy research

The research centre conducts scientific research on how government can monitor, stimulate and contextualise the circular economy. The goal is to translate scientific insights into policy support and recommendations and to make knowledge available to policy makers, stakeholders and the wider public. Moreover, the research centre is developing a scientific knowledge network with national and international standing as a circular economy knowledge hub.

Long and short-term assignments

The research centre combines long-term research with short-term assignments, making it possible for researchers to work with concrete cases that cut across diverse fields of research. For example, when it comes to bio-based materials, how can policy affect these products, from raw materials and product development to use and end of life?

WHY ARE WE DOING THIS?

Working without data is flying blind. Evidential value is essential for implementing the right kind of policies for advancing a circular economy. We need answers to questions like: 'What is the current state of affairs? What do we need? What works and what doesn't?' A particularly important task is and will be measuring 'circularity' and developing a set of indicators for Flanders. And that's what the CE Center is for. In consultation with the public authorities, its researchers are on a quest to find answers that will yield better policy.

B. 8 RESEARCH PATHS

The CE Center is dedicating its time and efforts to eight research paths for the 2017-2021 period. One path has been reserved for more ad hoc short-term assignments.



Measuring the transition

We are developing a tool in this project to measure the progress of Flanders towards a circular economy. This kind of tool makes it possible to track whether the transition is on course and to adjust that course where needed.



Circularity indicators

We develop tools to accurately capture the complexity of the circular economy and that properly grasp the processes best suited to it.



Modelling systems

We use Life Cycle Analysis (LCA) as a means of mapping the environmental impact circular economy-related activities, such as the sharing economy.



Learning Effects

Accurately assessing the potential of innovations for a circular economy is impossible without taking into account the associated learning effects. Through upscaling, these can significantly reduce economic and environmental costs.



Market acceptance

We need to obtain a clear impression of the insecurities related to investments and the anticipated profits to see where policy can facilitate market acceptance of the circular economy to a greater extent.



Financing and earning models

The objective of this project is to advise the government on which policy instruments can drive the transition to more circular business models.



Employment and actor analysis

This project focuses on employment-related research questions. Will it increase or decrease globally? How will current jobs change, will existing occupations disappear, and will new professions be created?



Short-term contracts

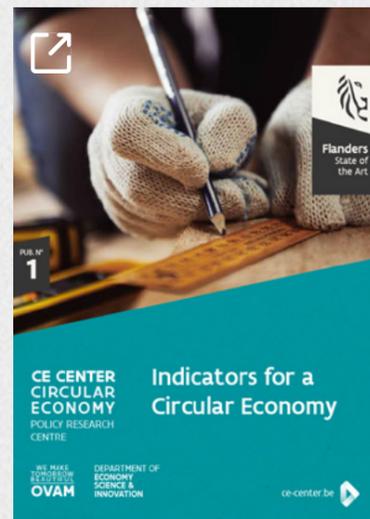
As long as the research centre is operational, space will be afforded to tackling new policy issues. As a partner, VITO is primarily responsible for this.



C. PUBLICATIONS

To date, the CE Center has published eight of its own reports and has also published articles in influential journals.

CE CENTER PUBLICATIONS



JOURNAL PAPERS

- [Towards a more direct policy feedback in circular economy monitoring via a societal needs perspective](#)
Resources, Conservation and Recycling, October 2019
- [‘Circular economy indicators: What do they measure?’](#)
Resources, Conservation and Recycling, July 2019
- [‘Using material flow analysis and life cycle assessment in decision support: A case study on WEEE valorization in Belgium’](#)
Resources, Conservation and Recycling, March 2019
- [‘Impact of Bio-Based Plastics on Current Recycling of Plastics’](#)
Sustainability, May 2018



C. PUBLICATIONS

Researchers at the CE Center often act as an independent and critical voice in the debate on waste and circular economy.

IN THE PRESS

- [‘This is the only way to reduce our mobility carbon footprint by 51%’](#)
Susanova, 3 September 2019
- [‘Less and more efficient car use could reduce emissions by 35 percent by 2030’](#)
Mondiaal nieuws 25 June 2019
- [‘Biodegradable plastic still ends up in the incinerator’](#)
Het Belang van Limburg, 3 May 2019
- [‘The crisp bag is a recycling disaster’](#)
De Standard, 30 April 2019
- [‘Impact of Circular Economy on achieving the climate targets: Case mobility’](#)
Circular Flanders, March 2019
- [‘Renting is new buying, from bikes and jeans to washing machines and aircraft engines’](#)
Knack, 20 March 2019
- [‘Flanders has got to do an even better job of recycling waste and reusing materials’](#)
RTNWS, 26 Feb 2019
- [‘The circular home is under construction’](#)
Trends, 21 Feb 2019
- [‘Nespresso is counting on you especially to reduce the waste mountain.’](#)
De Morgen, 21 Feb 2019
- [‘How do you prevent the circle from turning square?’](#)
Campuskrant, 24 January 2019
- [‘Flemish people ask more than 10,000 scientific questions’](#)
Het Laatste Nieuws, 14 December 2018
- [‘Fact check: plastic bags are 20,000 times more environmentally friendly than the cotton eco totes’](#)
Knack, 14 November 2018
- [‘The circular economy versus the economics of enough.’](#)
Oikos magazine no. 88 p 4-14, September 2018. www.oikos.be
- [‘Litter is the number one nuisance in Ghent’](#)
De Morgen, 15 September 2018
- [‘Expert: ‘40 percent of litter could be eligible for a deposit.’](#)
De Morgen, 15 September 2018
- [‘The role of Flanders in the transition to a circular economy’](#)
Apache, 24 August 2018
- [‘The circle... of life’](#)
Fokus, Smart Media Agency, 12 June 2018
- [‘The recycling industry ignores plastic waste’](#)
Eos Science, 7 June 2018
- [‘Plastic-free May, towards a closed plastic loop in June?’](#)
MO Magazine*, 17 May 2018
- [‘The future of plastic: “Recycling is good, but avoiding plastic is better”](#)
Weekend Knack, 16 May 2018
- [‘Circular economy can create up to 100,000 new jobs’](#)
Trends, 25 April 2018
- [‘Deposits are not an end in themselves – “they’re a means of closing the loop”](#)
MO Magazine*, 5 April 2018
- [‘We can only achieve a circular economy together’](#)
MO Magazine*, 08 March 2018
- [‘Less VAT, less disposable. Is it that simple?’](#)
De Morgen, 5 January 2018



9/ OUR TEAM



AT YOUR SERVICE

THE OPERATIONAL TEAM



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