

Accelerating circular innovation in urban landscapes



Agenda

Welcome and introduction Simon Clement, Head of the Circular Economy Team, ICLEI Europe



From local to global: small and medium-sized cities as pioneers of circular practices Kristin Strandberg, Cities Strategist, Circle Economy

Inspiring stories of circular urban transformation and open discussion

- Dieter DeSmedt, Investment and Tech Innovation Manager, City of Ghent
- Manuel Semedo, Mechanical Engineer, specialized on Urban Sustainable Technologies, City of Porto
- Open discussion on the challenges and lessons learnt

Building together for circularity: Opportunities for Project Development Assistance and Networking

- Project Development Assistance in European Cities: Definite-CCRI and CircularInvest–Dora Fazekas, Head of the European Territorial Cooperation Unit, INOVA+

- Introducing the Circular Investment Readiness Network - Kristin Strandberg, Cities Strategist, Circle Economy

- Q&A Session



Housekeeping rules



This session will be recorded. The option to disable camera is available.



Your microphone is muted. During the <u>open discussion</u> raise your hand to pose a question and enable your microphone.



For asking questions during the presentations, please use the Chat and name the speaker to whom you address the question.







How much waste does each EU inhabitant generate in a year?

① Start presenting to display the poll results on this slide.





How much waste is recycled in the EU?

① Start presenting to display the poll results on this slide.

From global to local Small and medium-sized cities as pioneers of circular practices

Kristin Strandberg Cities Strategist Circle Economy



Cities are at the centre of EU's economy

75%

of EU's population lives in urban areas

of innovation and creativity

hotspots

85%

of Europe's GDP generated in cities





But also the driver of environmental degradation

70% of EU's waste is generated by cities

80%

of EU's energy is used in cities

EU cities account for **70-75%** of EU's GHG emissions

70-75 %

Of EU's resources are used in cities









Definite

THE POTENTIAL OF CIRCULAR CITIES ECONOMIC, SOCIAL, AND ENVIRONMENTAL RESILIENCE

CIRCULAR INVESTMENT READINESS NETWORK



Job creation



Better air quality



Value

creation

Competitiveness in global markets

Reduced CO2 emissions



Reduced resource use







Small and mid-sized cities dominating the EU





Benefits of small and mid sized cities

- A smaller scale enables **closer connections** across the local administration, but also to local businesses and the community.
- More **adaptable and flexible** for change and innovation compared to larger cities, paving the way for local experimentation.
- Easier access to local resources like agriculture, manufacturing, and materials enabling localised circular supply chains.





> **CIRCLE** ECONOMY

> > ELLEN MACARTHUR FOUNDATION

CLEI

What can cities do?

The circular city actions framework





Definite CCRI

5

circular

invest

METABOLIC

How can cities enable action? Cities can take on different roles

- **Promoters**: Cities can promote the circular economy acting as a role model, providing clear information and establishing a vision, goals and targets
- Facilitators: Cities can facilitate connections and dialogue and provide soft and hard infrastructure for new circular businesses
- Enablers: Cities create the enabling conditions for the transition to a circular economy and trigger circular change through regulations and incentives





City of Ghent Inspiring stories of Circular urban transformation and open discussion

Dieter DeSmedt Investment and Tech Innovation Manager City of Ghent





HOW A CITY CAN SHAPE CIRCULAR INNOVATION

Accelerating circular innovation in urban landscapes

Dieter De Smedt - manager invest in Ghent

INVEST IN GHENT



ACCELERATING CIRCULAR INNOVATION

Collaborative and differentiated city policy

- enviromental
- citizens
- economical
- procurement

Focus on our current strengths

Building our innovation ecosystems

Focus on strenghtening our circular ecosystem within the whole city

HOW A CITY CAN SHAPE CIRCULAR INNOVATION

DARE TO CHOOSE



Invest in technologies that have a positive impact on society and develop flagship projects to help and create urban circular transformation

DARE TO CHOOSE



HOW A CITY CAN SHAPE CIRCULAR INNOVATION

> MAKING THE MOVE FROM LINEAR TO CIRCULAR

Cleantech



MAKING THE MOVE FROM LINEAR TO CIRCULAR





+1000

cleantech actors in Flanders



4,500

employees in our circular economy

125,000 tonnes

carbon capture utilisation a year



€ 4,5 billion

cleantech EBITDA value



OUR CLEANTECH POLICY

Setting up strong ecosystem and partnerships Stimulate knowledge and experimentation Create dedicated space and top-notch infrastructure for circular innovation

HOW A CITY CAN SHAPE CIRCULAR INNOVATION

CONNECT THE ECOSYSTEM





66

In Ghent, there is an atmosphere of openness, togetherness and – above all – the willingness to do things together.

> Jan Arends, Industrial Liaison Circular Economy CAPTURE





66

Ambition is something I see among entrepreneurs in Ghent. We have a lot of start-ups here, a lot of future do-gooders. In itself, it creates a hip atmosphere, a start-up. But make no mistake: it is very hard work. You have to make sure, day in and day out, that your concepts works.







Circular innovation doesn't only come from the city or the cool startups

ArcelorMittal: billion-euro green steel project in Flanders

Of all ArcelorMittal plants worldwide, few perform at a higher level than the in Ghent (Flanders). The Ghent site has an annual production capacity of 5.5 million tons per year and will be the location for a major investment of mothan EUR 1 billion towards the reduction of CO2 emissions.





Stora Enso looking into production of recycled packaging cardboard in its factory in North Sea Port

Published on Fri 10 Jun 2022

The Finnish-Swedish paper and cardboard company Stora Enso is conducting a study into the conversion of its Ghent plant at North Sea Port. The proposed investment amounts to €400 million.

Circular Transition Pathway:

Krijtlijnen voor een klimaatneutraal en welvarend Gent



HOW A CITY CAN SHAPE CIRCULAR INNOVATION

THE VALUE OF KNOWLEDGE



CREATE KNOWLEDGE BY TRIAL AND ERROR

Stad Gent



Resourcing Plastics from the City PRIORITY AXIS Resource Efficient Economy SPECIFIC OBJECTIVE Circular Economy LEAD PARTNER CONTACT

URBCON - By-products for sustainable concrete in the urban environment

Isabelle Sioen



INVEST IN GHENT

HOW A CITY CAN SHAPE CIRCULAR INNOVATION

CREATE DEDICATED SPACE AND INFRASTRUCTU RE FOR CIRCULAR INNOVATION



ArcelorMittal Belgium and North Sea Port are to build the North-C Circular industrial estate on ArcelorMittal's Ghent site in order to contribute to a climate-neutral port

Published on Fri 27 Jan 2023

North Sea Port, ArcelorMittal Belgium and all the port companies have committed themselves to a climate-neutral port by 2050. This will be achieved by reducing CO2 emissions and further developing the circular economy. To this end, the North-C Circular industrial estate is being developed in Ghent.



BBEPP turns waste into bio-resources in Flanders

Turning food waste into a raw material for the bio-industry: that's what the Waste2Func project is all about. Led by Israeli company TripleW, the project unites a consortium of partners including Bio Base Europe Pilot Plant (BBEPP) in Ghent (Flanders). It's a twofer for the Flanders-based pilot plant: they can propose a solution for the 88 million tons of food thrown away annually in the EU, and also offer a circular alternative for products from the (petro)chemical industry.



4 KEY INSIGHTS

- 1. Dare to choose
- 2. Connect connect connect connect
- 3. Value your knowledge
- 4. Location and infrastructure is key



GHENT, BIG ENOUGH TO COPE, SMALL ENOUGH TO CARE.

THANK YOU

invest@stad.gent@Invest in Ghent
City of Porto Inspiring stories of Circular urban transformation and open discussion

Manuel Semedo Mechanical Engineer, specialised on Urban Sustainable Technologies City of Porto





Porto's support to innovators on a circular city

EU Week for Regions and Cities | 16.10.2023



FOOD LOOP Uma ideia alimenta a outra.



Este projeto beneficiou de financiamento do Programa-Quadro de Investigação e Inovação Horizonte 2020 da União Europeia ao abrigo da convenção de subvenção n.º 821033.







Areas of intervention





Oportunities and prize



- ✓ Idea > Pilot project
- ✓ Impact business models
- Measurement of social and environmental impacts
- ✓ Circular economy concept
- ✓ Team work and management
- ✓ Expertise guiding



- Organisational diagnostic
 (business model, impact model, management model)
- ✓ Growth, business and development plan adapted to each idea
- ✓ Thematic Master classes

Oportunities

Training, support and investment

- Contact with experts (circular economy, biowaste, public procurement, business models, funding oportunities)
- Contact with potential investors (food sector, circular economy and social economy)
- ✓ Participation in Demo Day



Winners

Portotype – small scale and localized anaerobic digestion producing hydrogen, energy and fertilizer.

Ground4Food - Collection of coffee grounds to produce fresh vegetables.

Simbiose agricultura indústria - Implementing green houses in industrial facilities allows heat and carbon dioxide to be directed to the plants, increasing photossynthesis.

UPCYCLING Porto - A social economic model was developed democratising food access with Porto city card.

AgriTech4Youngsters – promote robotic education with urban smart farming on a local and small scale for the school canteen.



asprela + sustentável

as pre a + sustentável



Working together for a green Europe



Х

Definite CCRI

5

circular

invest

why Good Food Hubs?

- food system + resilient + sustainable + human + rational
- food waste
- city + circular + participatory and carbon neutral
- + innovation + research

100 kg of wasted food per person per year food travels, in average, 2.000 km who produces our food?



What is Good Food HUBs?

• Sustainable Food Practices Network (sustainable procurement criteria in cantines)

2. Research projects connected to food system

3. *Pop-up* events for food sale and delivery



4. Activities, workshops, talks, conferences

[digitalization of fresh organic markets]

- ~ Joint development according to Porto's needs
- ~ Continuous discussion and improvement
- ~ Direct contact between producers and consumers
- ~ High alignment between Porto and Hortee
- ~ Adaptation and investment
- ~ <u>https://hortee.co/</u>





asprela + sustentável

as pre a + sustentável



Working together for a green Europe



why ReBOOT?

+ extended life cycle for IT equipments

+ sustainability

+ sharing

- + sustainable businesses
- waste of resources
- infoexclusion
- + circular city
- + participation



Repara o teu computador. Transforma o mundo.

Descobre como podes ajudar o reBODT a doar computadores a quem mais precisa e contribuir na transição para uma economia circular, justa e responsável na cidade do Porto, começando pela Asprela.



continuous repair dynamics

[flows and partners on ReBOOT]



[Public Procurement practices]

- ~ Porto Municipality will not have ownership over the equipments in the long term
- ~ Environmental, social and economical value
- ~ Recycle Geeks startup with aligned business model
- ~ Pre-tender negotiations
- ~ Continuous monitoring and support



Repara o teu computador. Transforma o mundo.

Descobre como podes ajudar o reBOOT a doar computadores a quem mais precisa e contribuir na transição para uma economia circular, justa e responsável na cidade do Porto, começando pela Asprela.



www.porto.pt



Open discussion



PDA in European Cities: Definite-CCRI and CircularInvest

Building Together for circularity: opportunities for project development assistance and networking

Dora Fazekas Head of Unit INOVA+



What are the PDAs for?

- Cities, regions and other promoters have begun to roll out the research, testing, and implementation of circular projects
- Developers of new circular solutions often face several challenges and barriers that hinder their progress in making circularity a reality (e.g. regulatory issues, market, investment/financial difficulties).
- The EU activated project development assistance instrument (PDA) under the <u>Circular</u> <u>Cities and Regions Initiative (CCRI)</u> to help overcome these barriers. The CCRI focuses on implementing the circular economy across Europe's cities and regions and the CCRI-PDA is a tool to advance this process by contributing to the delivery of a series of sustainable circular economy projects.

What are the PDAs for?

- CCRI-PDAs provide advisory support to circular project promoters on technical, financial, legal aspects, increasing the circular projects' maturity towards their market deployment.
- 7 CCRI-PDAs have initiated support services.









Definite - CCRI



https://definite-ccri.eu/







What are the services of CircularInvest?

CircularInvest helps local and regional circular economy projects from across Europe become investment-ready and access financial resources.

CircularInvest free PDA includes:

- Mentoring/coaching services including technical, business, legal and operational support.
- **Peer-to-peer support**: selected projects are clustered/matched for exchanging best practices and experiences.
- Networking: selected projects are invited to join events/workshops to meet stakeholders, investors, circular practitioners and experts.



What are CircularInvest's coaching/mentoring services?



Who can benefit from CircularInvest services?

Circular Economy Project Promoters



Examples:

- Utility companies (e.g., waste and water management enterprises);
- Local municipalities & regional authorities;
- Intermunicipal management services;
- Universities & research centres;
- Environmental, technology and R&D organisations;
- SMEs/startups and corporates;
- Non-profit associations.
- And **consortia** of all the above!



How can you participate?

- Beneficiaries selected via open calls
- Next Call for Eol: opening on 17 of October 2023 (closing on 15 December, 2023)

You can apply via www.circularinvest.eu

How can you participate?



CONSORTIUM





Funded by the European Union. Views and opinions expressed are how ever those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the European Research Executive Agency can be held responsible for them.

circular invest



info@circularinvest.eu www.circularinvest.eu

🤰 @CircularCityEU



www.definite-ccri.eu





Thank you!



Community of Practice

Building Together for circularity: opportunities for project development assistance and networking

Kristin Strandberg Cities Strategist Circle Economy



Joint initiative

- With joined forces DEFINITE and CircularInvest have set up a shared community of practice - bringing more circular projects together and reaching a wider EU network of stakeholders.
- Five sessions across the two projects (Nov 23 - April 25) followed by five additional sessions in CircularInvest (June 25 - Oct 26)
- First session will take place online on November 21st at 10 am.

Circular Investment Readiness Network

Learn how to attract funding for your circular project



What to expect

- Through collective learning, the community of practice aims to support the development of bankable, high-impact and low-risk circular projects while creating lasting relationships.
- The network will touch upon topics such as:
 - getting started with circular projects
 - measuring and ensuring impact
 - investment readiness and development of business models
 - pitching to investors, and more.

Circular Investment Readiness Network

Learn how to attract funding for your circular project

Network, exchange knowledge with your peers and find new partners and investors via our community of practice!





Target Audience

- The main target audience is:
 - Project owners
 - Local and regional governments
 - SMEs and startups
 - Investors
 - PDA's
 - External service providers
- In addition, experts will be invited to provide knowledge and experiences through e.g. panel discussions, presentations or facilitating breakout sessions.

Circular Investment Readiness Network

Learn how to attract funding for your circular project

Join our groundbreaking initiative uniting circular project owners, investors, governments, SMEs and PDA service providers.



Join our network!







Q&A



Thank you!

