

CIRCULAR AND THE CITY: WHAT WORKS?

Thursday, 4 May | 11.00 – 12.15









Panellists



Oriana Romano
Head of Unit, Water
Governance and Circular
Economy Unit, OECD



Claudia Eggert-Köster
Expert for Green Economy
Ministry for the Environment,
Climate, Energy and
Agriculture
Hamburg



Kerstin Kuchta
Professor, Circular Resource
Engineering and Management
(CREM), Hamburg University of
Technology



Dina Padalkina Founder & CEO Circular Berlin



Andrea Accorigi
Project Manager, Circular Cities and
Regions Initiative – (CCRI)
Coordination and Support, Ecorys



Moderated by
Nicola Brandt, Head of Berlin Centre,
OECD



A CIRCULAR TRANSITION IN CITIES AND REGIONS

Oriana Romano Ph.D Head of Water Governance and Circular Economy Unit Cities, Urban Policies and Sustainable Development, CFE









The OECD Programme on the Circular Economy in **Cities and Regions**



- Groningen, Netherlands (2020)
- Umeå, Sweden (2020)
- Valladolid, Spain (2020)
- Granada, Spain (2021)
- Glasgow, UK (2021)
- Ireland (2022)
- Montreal, Canada (2022)
- Tallinn, Estonia (ongoing)
- Italy (ongoing)
- · Israel (ongoing)
- · LAC (ongoing)
- Europe (ongoing)



OECD Roundtable on the Circular **Economy in Cities** and regions:

- 1st RT (July 2019)
- 2nd RT(March 2020)
- 3rd RT(1May 2021)
- 4th RT (April 2022)
- 5th RT (June 2023)



⟨♠⟩⟩ OECD

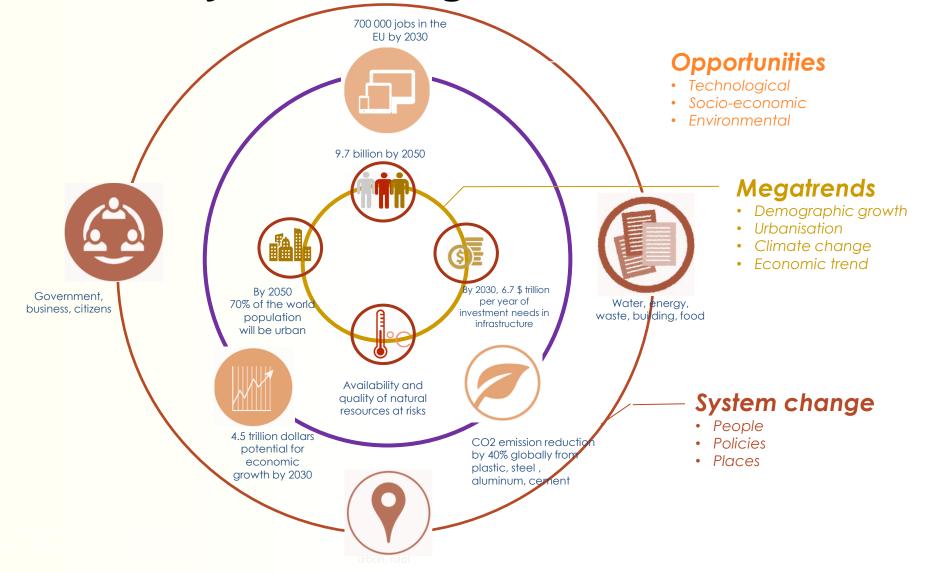
The Circular Economy in Cities and

◎»OECD

Source: http://www.oecd.org/cfe/regional-policy/Circular-economy-brochure.pdf

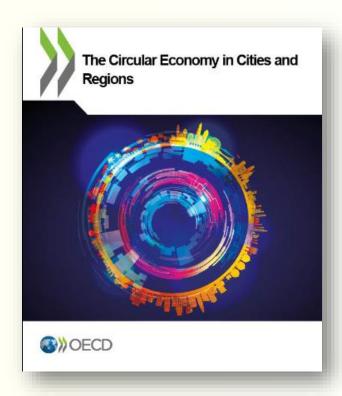


Drivers for a system change





Key messages



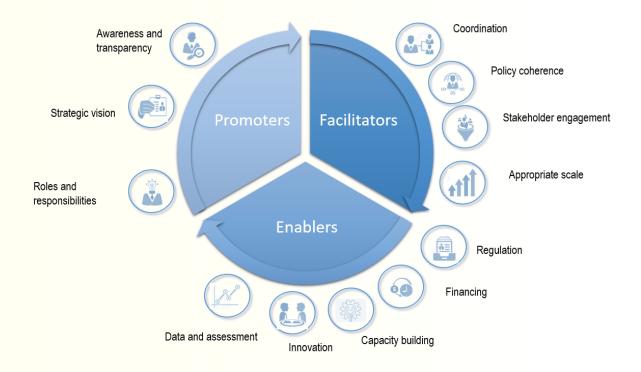
OECD (2020), *The Circular Economy in Cities and Regions: Synthesis Report*, OECD Urban Studies, OECD Publishing, Paris, https://doi.org/10.1787/10ac6ae4-en.

- ✓ Not new, but incipient
- ✓ It is about economy
- ✓ Governance is key
- ✓ Start up and scale up
- ✓ Promote, facilitate and enable

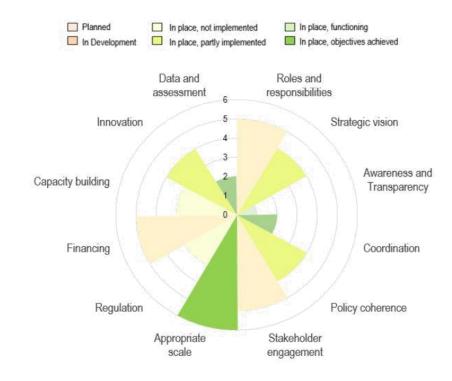


Promote, facilitate and enable

A Checklist for Action



The OECD Scoreboard on the Governance of the Circular Economy





From vision to implementation



Groningen

 Presented the OECD recommendations to the local political leaders to start working on the implementatione: Circular Groningen

Valladolid

- Valladolid Local CE Plan;
- Metabolism and material flows analysis
- · Collaboration agreements with universities
- Approval the OECD recommendations in the Council

<u>Umea</u>

- Coordinator for the circular economy
- Implementation of **Green Public Procurement**

Glasgow

Informed the Circular Economy Route Map of Glasgow.

Ireland

Informed the Whole of Government Circular
 Economy Strategy 2022 – 2023



5th OECD Roundtable on the Circular Economy in Cities and Regions

5-6 June 2023

SAVE THE DATE and REGISTER

The OECD Programme on the Circular Economy in Cities and Regions, in collaboration with Tallinn Green Capital 2023 and the European Committee of the Regions (CoR) Commission for the Environment, Climate Change and Energy (ENVE), and the European Commission Circular Cities and Region Initiative (CCRI) is delighted to invite you to the:

5th OECD Roundtable on the Circular Economy in Cities and Regions

Accelerating the Transition to a Circular Economy in Cities and Regions

5 June 2023 7 15:00 – 18:00 EEST

6 June 2023 7 09:00 – 16:00 EEST

🥊 Venue: Nordic Hotel Forum Conference Centre, Viru väljak 3 (Tallinn, Estonia)

Thank you

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Basics and main questions

- Cities are polluters and solution at the same time
- Cities combine civil society, economy, science, municipality
- Cities are living labs
- Circular Economy is complex, it covers all parts of life and society
- So who will steer the tranformation?
- Will it develop bottom-up?
- Who wins and who looses?
- What are the barriers?
- What governance conditions do we need?
- What is the role of a Ministry for the Environment in this process/tranformation?





Where we start from – regulations and frame conditions at a glance

- EU Circular Economy Action Plan
- Recycling management and waste law, Germany
- Coalition Agreement Germany: Development of a National Circular Economy Strategy, ProgRess (German Programme for Ressource Efficiency)
- Hamburg coalition agreement
- Climate Masterplan for Hamburg
- Circular material use rate in the EU declining in 2021
- Many actors in different areas worldwide, in the EU, in Germany, in Hamburg





Who are we?

- Ministry for the Environment, Department of Energy an climate,
 Unit for ecology and economy
- NOT Unit for waste legislation, but in close cooperation
- NOT Ministry of Commerce, but cooperating
- Responsible for <u>Hamburg eco-partnership</u> with about 1.600 companies, voluntary environmental measures, existing since 2003
- Partners in the eco-partnership: Hamburg Senate, Hamburg Chamber of commerce, Hamburg Chamber of crafts, Hamburg industrial association, Hamburg harbor association
- Current working programme (2023 2028): Green Economy, Circular Economy, sustainable finance, sustainable procurement, green events, energy transition (+in heating), sustainable mobility, to be continued....





What is our specific role? How can we contribute?

To find this out:

Survey on potentials of circular economy within a green economy in Hamburg, 2021-2023 (Wuppertal Institut + Institute for Innovation, Climate Protection, and Circular Economy (HiiCCE), stakeholder analysis, international best practices, economic system in Hamburg, material flows, recommended actions for BUKEA To be published soon...

- Findings:
- ✓ much is happening but it is not well coordinated
- ✓ There is a lot of knowledge but it is not shared
- ✓ Actors do not know each other
- ✓ Companies need help in specific areas, e.g. digital material passport, supply chain act, multi-way offer obligation regarding returnables for food to go, sustainability reporting
- ✓ Potential roles for BUKEA to support circular economy: coordinating platform, supporter, contact point, funding authority, driver for awareness raising, interface to administration



Where we stand at the moment



Networking + information

- Circular Hub Project (German federal association of the sustainable economy, BNW), circular hubs.
 BUKEA and impact hub Hamburg as initiators circular hub north
- LAGRE chair for Bundesländer working group on resource efficiency
- Fab City Hamburg: cooperation e.g. regarding circular textiles
- To be developed: expert groups on circular economy within the eco-partnership
- For free consultation for companies regarding environmental measures by the eco-partnership

Funding

- Funding programme PROFI Umwelt Transfer <u>PROFI Umwelt und PROFI Umwelt Transfer | IFB Hamburg (ifbhh.de)</u>
- Funding programme UfR (Companies for resource efficiency) <u>UfR Unternehmen für</u> <u>Ressourcenschutz | IFB Hamburg (ifbhh.de)</u>



Where we stand at the moment



Hamburg Projects

- 50 plastic-free companies
- Idea: reduction of single use plastic in health care
- Returnables for food best practices for district exchanges

EU-Projects

Various project ideas in the pipeline (coordinating: Senate Chancellery Hamburg)

Science and Data

• Project ESTEM together with 4 other federal states and the federal ministry for the environment <u>ESTEM (ressource-deutschland.de)</u>: development of a standardized method to assess the potential co2 reduction by material efficiency measures



Where we stand at the moment



....to be confirmed by head of Ministry:

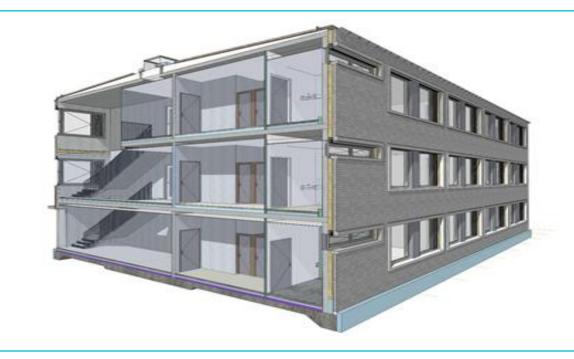
- Online platform for knowledge management
- Participating in the project "Kreislaufstadt Chancen für Resilienz und Wertschöpfung" (Circular City – Chances for resilience and added value), Difu (German institute for urbanistics)
 Development of a Hamburg circular strategy for Hamburg, focus on business development

Future dreaming.... Establishment of a Circular Center in Hamburg

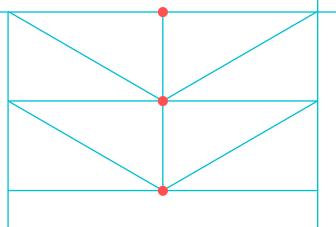


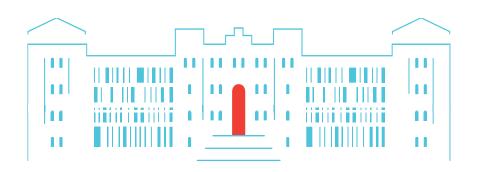


Circular Cities



TUHH Technische Universität Hamburg





Prof. Dr.-Ing. Kerstin Kuchta Circular Redsurce Engineering and Managem





Circular Cities



"... where the value of **products**, **materials and resources** is maintained in the economy for as long as possible, and the generation of waste minimized... <u>to</u> develop a low carbon, resource efficient and competitive economy"



- Complex Multi-Material Products
 - Re-Materials into new products
 - Quality, Compliance, Quantity
- Complete value chain collection, reuse, recycling, recovery, production
- Business case



Circular Economy und Circular Cities











Environmental impact along the entire value chain:

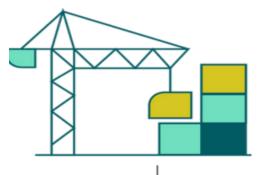


Building materials represent 25%-40% of all waste in the EU

It is the largest waste stream in the EU









Facts to Urban Stock and Demolition Waste

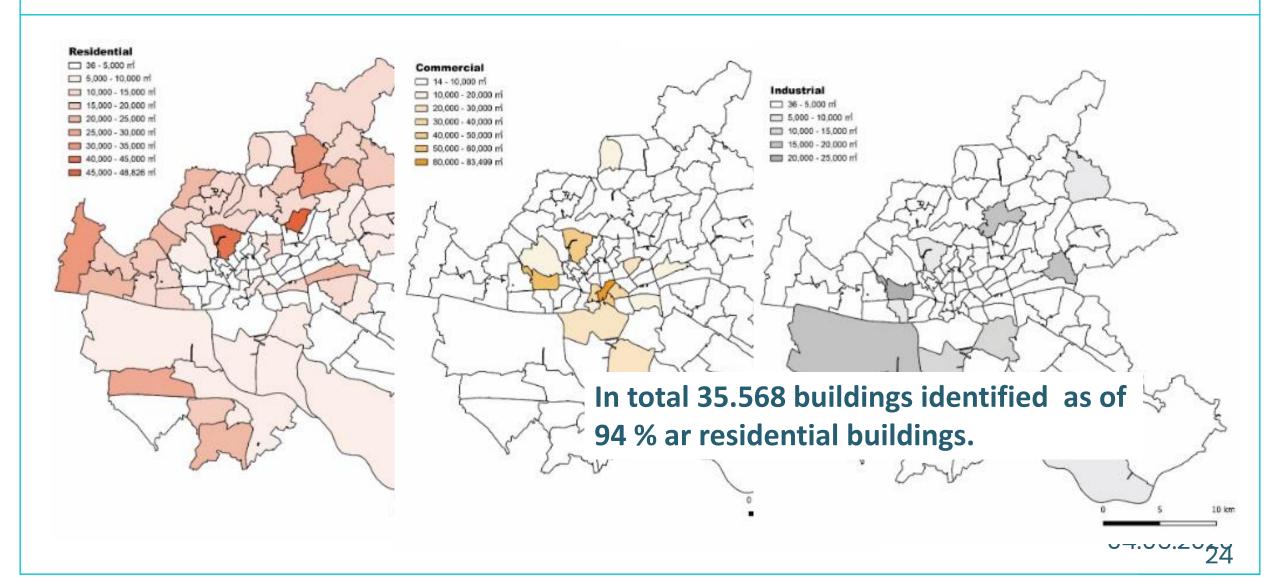
- Urban Stock Buildings, Infrastructure:
 28 Mrd. t (incl. 248,1 Mio. t c
- Demolition waste: 200 Mio. t /a (incl. 0,5 Mio. t Plastic/a)
- Demand on building material in Hamburg ca. 15 Mio. t/a
- Demolition waste in Hamburg ca. 2 (-10) Mio. t/a





Demolition activity over the next 10 years



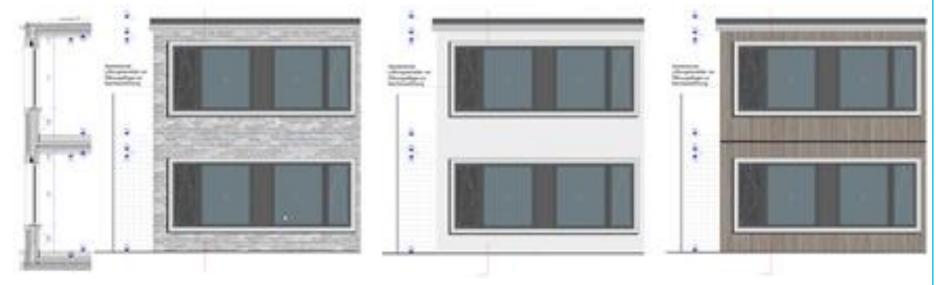




Hamburger Klassenhäuser



In this demonstrator, the environmental impacts of a wooden and a brick façade is calculated.



The installation of façade is not considered in the calculations because they were done manually.



OUR MISSION

We envision Berlin as a resilient, citizen-oriented region. Resources are sourced locally if possible, used only if truly needed, and their value is maintained as part of a continuous loop — within the limits of our planet. Waste and pollution are non-existent.

People's lives and jobs positively affect their neighbourhoods and communities.



We aim to support our local communities: businesses, NGOs, and citizens and municipalities

1.

Development of collaborative projects, that involve different partners from the business environment

2.

Providing visibility to the Berlin Circular Economy network and working with the connected members 3.

Sharing knowledge and raising awareness about the circular economy topic for the early stage innovators and established entities

4.

Providing financial opportunities through the solution development in the area of circular economy



Project: Circular City Challenge to progress with the implementation of the circular economy in cities

A cross-city challenge that seeks innovative solutions in the field of circular economy to support cities in the transition to climate-neutrality. Involved cities in 2022: Berlin, Stuttgart, Munich, Vienna

2023 Application is open for municipal partners - right now

http://www.circular-city-challenge.com

BENEFITS

- Publicity
- Connection to the city needs and support in the implementation













Project: Development of the circular public procurement platform

Public Service Platforms for Circular, Innovative and Resilient Municipalities through Pre-Commercial Procurement is the EU funded project.







The solution is to support business processes and workflows to plan, procure and implement innovative CE-solutions across Europe more quickly and at larger volume – a scalable as-a-service Public Service Platform.

























FOR WHOM

City organisation (Circular City Platform: CCP) Local market economy and businesses (Circular Market Platform: CMP).

BENEFITS

Gives an opportunity to apply for IT solution providers and circular economy focused companies for the R&D grant of €5.64 million.

Open Market Consultation

09.05 (Berlin) Many other international events



The circular systems approach requires a top-down strategy and bottom-up activities

The transformation to the Circular Economy must be accompanied by broad communication campaigns to create **awareness and acceptance** in society.

Circular economy needs **network thinking** and ideally the involvement of producers, businesses, citizens, municipalities and waste management.

The implementation of **pilot projects** to test experimental approaches is necessary. The goal is to replicate and further scale positive examples.





Thank you. We look forward to hearing from you.



Dina Padalkina Founder dina@circular.berlin +4915901434511





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Circular Cities and Regions Initiative (CCRI)

Andrea Accorigi CCRI Coordination and Support Office (CCRI-CSO) Project Manager

Research and Innovation

In a nutshell

CCRI services

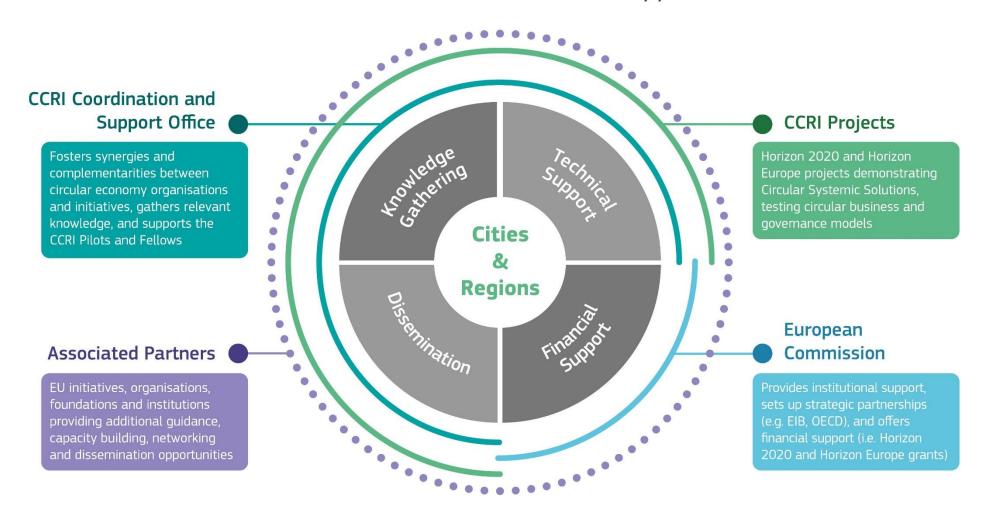
- Support to implement circular economy projects and policies at local and regional scale.
- <u>CCRI Horizon projects</u>: Demonstration, project development assistance, Coordination and support actions.
- Laboratory for CE implementation: <u>Pilots</u> and <u>Fellows</u>.
- Test beds for CCRI Horizon projects.
- Significant actors operating on CE at local and regional scale involved in CCRI: Associated partners.





About the Circular Cities and Regions Initiative (CCRI)

A Multi-stakeholder Collaboration & Support Scheme



CCRI in Austria and Germany

Germany

- Munich (Pilot)
- <u>Berlin</u> (Fellow)
- <u>Southeast Lower Saxony</u> (Fellow)











helpdesk@circular-cities-and-regions.eu



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Thank you!