

Circular economy in cities

Simon Clement, ICLEI

ABOUT

ICLEI - Local Governments for Sustainability is a global network of more than **1,750 local and regional governments** committed to **sustainable urban development**.

Active in 100+ countries, we influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development.

Our Members and team of experts work together through peer exchange, partnerships and capacity building to create systemic change for urban sustainability.



CIRCULAR ECONOMY IN CITIES

THE CIRCULAR CITY



A city of closed loops

A city of low-emissions,
regenerated natural systems
and improved urban health

A city that maintains and
generates value

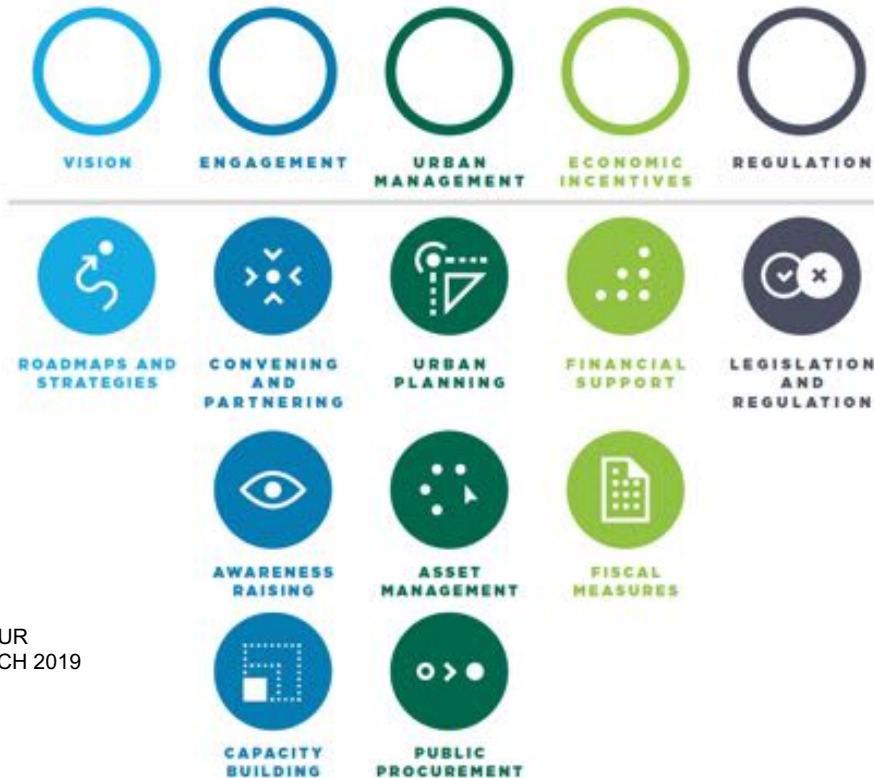
A city of circular integration

WHY WORK WITH CITIES?

Cities....

- House 75% of the EU population
 - Consume 75% of natural resources
 - Produce 50% of global waste
 - Produce 60-80% global GHG emissions
- Cities are cradles of innovation
 - Cities offer a scale for demonstration and experimentation
 - Local governments hold key legislative and management functions

CITY LEVERS



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FOUNDATION, MARCH 2019

https://www.ellenmacarthurfoundation.org/assets/downloads/CE-in-Cities_Policy-Levers_Mar19.pdf

CITY EXAMPLES

A GROWING MOVEMENT...



AMSTERDAM – A BOTTOM UP APPROACH

Stimulating innovation based on Material Flow Analysis (MFA)

- Comprehensive MFA in the Region identified 14 major waste streams (volume based), including
 - Data servers
 - Nappies
- Based on the results, Amsterdam created a stakeholder working groups in each supply chain and organised „circular commitment events“



AMSTERDAM – SERVERS & NAPPIES

- 0.5 million servers discarded in NL – 37% in Amsterdam
- City brought together key supply chain stakeholders, who committed to working together on a circular supply chain
- Result: two main waste incineration facilities now have facilities for dismantling the electronic and electric equipment



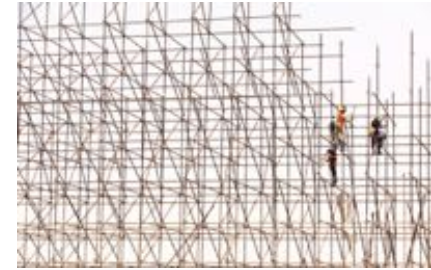
- 57,100 tons of nappies thrown away in the region - 99% incinerated
- The material is recyclable
- 33 municipalities in the Area contributed to the development of a recycling plant in the region for nappies
- Smart collection points to support the plant were piloted

PARIS – FACILITATING CIRCULARITY



<http://metabolisme.paris.fr/>

HELSINKI – CIRCULAR CONSTRUCTION



1. Landmass co-ordination

- Requirements for municipal planning and individual construction projects
- City landmass co-ordinator appointed
- Requirements on identification, tracking, handling

2. Demolition

- Checklists and guidance under preparation for all actors in demolition process
- Requirements on auditing, tracking, and handling materials
- Pilots currently underway

3. Construction

- Piloting circular requirements for new buildings
- Minimum requirement for 5% recycled/reused materials
- Use of LCA calculation
- Material passports/bank

MALMÖ – CIRCULAR FURNITURE



- 70 tonnes furniture wasted per year
- Framework contract procured with several suppliers for reused furniture, and furniture refurbishment services
- Hierarchy of options established – reuse, refurbish, purchase used furniture, purchase new
- Internal awareness raising & market engagement crucial elements

CITYLOOPS – CE FOR EVERYONE!



- Implementing demonstration actions in 7 small and medium sized European cities (2019 – 2023)
 - Focus on construction and demolition waste (including soil), and organic waste
 - Urban circularity assessments
 - Circular procurement scans
 - Funded under EU Horizon 2020 programme
- Apeldoorn (NL) • Mikkeli (FI)
 - Bodø (NO) • Roskilde (DK)
 - Høje-Taastrup (DK) • Porto (PT)
 - Seville (ES)
- www.circularcities.eu (forthcoming)

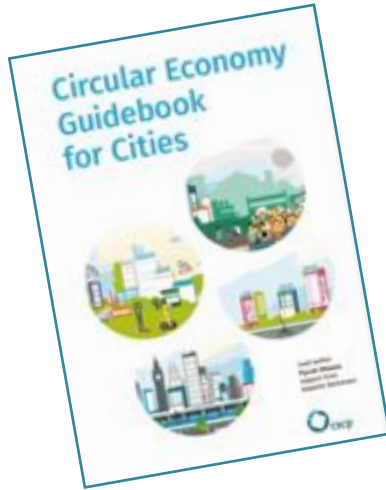
CITYLOOPS – CE FOR EVERYONE!



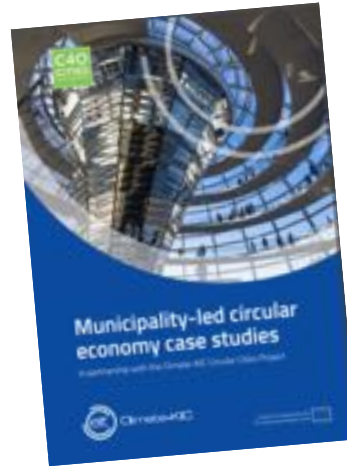
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GUIDANCE

CE GUIDANCE FOR CITIES



https://www.scp-centre.org/wp-content/uploads/2019/03/Circular_Cities_Publication.pdf



<https://www.c40.org/researches/municipality-led-circular-economy>



https://www.eib.org/attachments/thematic/circular_economy_15_steps_for_cities_en.pdf



https://ec.europa.eu/environment/gpp/pdf/CP_European_Commission_Brochure_webversion_small.pdf

USEFUL LINKS

- European Circular Economy Stakeholder Platform
<https://circulareconomy.europa.eu/platform>
- EIB Circular City Financing Guide
www.circularcityfundingguide.eu
- Ellen MacArthur Foundation Circular Economy in Cities Programme
www.ellenmacarthurfoundation.org/our-work/activities/circular-economy-in-cities
- OECD Circular Economy in Cities and Regions
www.oecd.org/regional/regional-policy/circular-economy-cities.htm

CONNECT WITH US

ICLEI EUROPE

The ICLEI European Secretariat is based in Freiburg (Germany) with offices in Brussels (Belgium) and Berlin (Germany).

Circular Economy:

www.circularcities.eu (forthcoming)

Sustainable & Circular Procurement:

www.sustainable-procurement.org

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