Circular Cities for Nature
Protecting biodiversity through local and regional circular economy strategies

Date: Monday, 09 December 2019
Time: 14:00-15:30
Venue: Polytechnic University of Madrid, room D
Organized by: ICLEI World Secretariat for the Global Platform for Sustainable Cities (GPSC)
Language: English
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Background

Wasteful consumption as well as polluting and extractive production patterns are responsible for the majority of the biodiversity collapse currently underway. At least 8 million tons of plastic end up in our oceans every year (IUCN, 2018). About a quarter of the Earth’s ice-free land area is subject to human-induced degradation, mainly due to soil erosion from agricultural fields (IPCC, 2019). 300-400 million tons of heavy metals, solvents, toxic sludge and other wastes from industrial facilities are dumped annually into the world’s waters. In addition fertilizers entering coastal ecosystems have produced more than 245,000 km2 of ocean ‘dead zones’ (IPBES, 2019).

As global hubs of resource consumption and waste generation, cities are key actors of the transition towards consumption and production patterns that protect natural ecosystems and the services human life depends on. Such transition can be operationalized through the circular economy (CE), which contributes to biodiversity protection through three main avenues:

- **Reducing demand for primary resources**: Much like nature, the circular economy aims at operating in closed loops and maintaining resources at their highest utility at all time, through strategies such as reusing, recycling or cascading materials across different sectors. This decreases pressure on raw materials, energy, water, air, land and products that are made of and depend upon ecosystems and their services (e.g. less sand extraction through buildings disassembly and construction materials reuse).

- **Avoiding the generation of waste and other pollution**: The circular economy aims at ensuring products and infrastructures are reusable and adaptable by design, so as to decrease waste outputs across the full lifecycle (e.g. compost to replace synthetic fertilizers and avoid nutrients runoff). Remanufacturing and reusing processes are also less polluting and emissive than primary production.

- **Prioritizing regenerative resources and nature-based solutions**: The circular economy aligns itself to the regeneration rate of renewable resources and leverages nature-based
solutions where possible. This allows protecting ecosystems while increasing the productive
of resources (e.g. “Sponge city” initiative to recycle rainwater).

The circular economy framework clearly holds great promises for localizing biodiversity protection in
systemic ways, but tradeoffs and challenges remain. What is the role of bio-resources in a circular
economy and how can cities ensure biodiversity protection remains a priority throughout the value
chain? How can the lifecycle biodiversity impacts of circular economy solutions be monitored by
cities? How can circular economy interventions based on nature-based solutions be best financed at
the city level? Finally, how can cities ensure local and traditional knowledge is leveraged?

This Peer Exchange Session organized by the Global Platform for Sustainable Cities (GPSC) will
bring continuity to the presentations that have been discussed during the “COP25 GPSC Session:
Integrating biodiversity, climate and land management” scheduled for Saturday 07 December 2019 at
10:30-11:30 in the NDC Partnership Pavilion with a particular focus on the integration of circular
economy into urban planning in cities.
Methodology

An introductory thematic framing will explore the linkages between the circular economy and biodiversity protection through concrete examples.

An interactive panel discussion will explore current opportunities, challenges and tradeoffs in ensuring the circular economy has positive biodiversity impacts.

Finally, the session will then look into how four cities from four world regions have used circular economy solutions to protect local and regional biodiversity. Cities will present the co-benefits these solutions have yielded and the key success factors that have allowed their operationalization.

Session breakdown

Moderator: Ariel Dekovic, Head of Communications, ICLEI

Panel discussion: The challenges ahead (24 min)
- Aloke Barnwal, Sr. Climate Change Specialist, Programs Unit, Global Environmental Facility (GEF)
  Linking the circular economy and biodiversity (8 min)
- Mirko Kruse, Hamburgisches WeltWirtschaftsInstitut gemeinnützige GmbH; Hamburg Institute of International Economic (HWWI)
  Financing nature-based solutions for CE (8 min)
- Jeannette Gurung, Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN)
  Incorporating gender considerations into resource management in CE (8 min)

Short round of Q&A for the panel (10 min)

Presentations: Experiences on biodiversity and circular economy at the local, regional, and national levels (36 min)
- Minna Arve, Mayor, City of Turku, Finland (6 min)
- Pedro Hipolito Herrero, Mayor, City of Xalapa, Mexico (6 min)
- Alexandra Gonzales Marin, Director of Environmental Affairs, City of Campeche, Mexico (6 min)
- Pamela Lucía Bravo Ortiz, Deputy Secretary of Environmental Planning and Information, City of Lima, Peru (6 min)
- Mercè Rius, Director General, Environmental Quality and Climate Change, Government of Catalonia, Spain (6 min)
- Ulises Lovera, Director Climate Change, Ministry of Environment and Sustainable Development, Government of Paraguay (6 min)

Short round of Q&A for the panel (10 min)

Conclusion and wrap up (5 min)

Evaluation of session – complete evaluation form (5 min)
Bibliography