

Theme: Strengthening circular economies at different scales

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Industry, innovation and infrastructure (SDG 9) along with responsible production and consumption (SDG 12) depends on the full institutionalisation of circular economy principles. If the operating systems of the economy and built environment (SDG 11) are repositioned to support a circular economy and generate decent jobs (SDG 8), it could have dramatic implications for the advancements of the environmental goals captured in SDGs 13-15.

A useful working definition is offered by Preston and Lehne (2017),

The basic idea of the circular economy (CE) is to shift from a system in which resources are extracted, turned into products and finally discarded towards one in which resources are maintained at their highest value possible. This might involve reusing and repairing products, or recovering their component materials at the end of each product's life for repurposing into new goods or for new uses. Equally, the CE might mean restructuring an industrial or agricultural system so that waste from one process becomes the feedstock for another, or replacing non-renewable materials with renewable and biological materials. Overall, CE approaches could significantly reduce the need for extraction of primary resources and use of energy inputs.

Thus, the CE implies a fundamental challenge to how production and consumption is currently conducted, the cultural acceptance of zero waste and the prospects of new economic activities, infrastructure systems and innovation. The CE brings a horizon line to difficult discussions about environmental destruction, waste, unsustainable greenhouse gas emissions and the disappearance of work. It even offers conceptual entry points to rethink the service delivery models that underpin essential infrastructure for the provision of energy, water, food, and wellbeing as determined by the optimal functioning of neighbourhoods and communities. To date the CE has been mainly an applied development discourse with limited sustained academic reflection and expansion. By bringing together experts, practitioners and scholars, the full potential of the CE for Africa's transformation will be explored with an eye on developing a research, teaching and advocacy agenda.

Workshop 1: 17 August 2021, 14.00-16.15 CET

Theme: Setting the scene

The purpose of this session will be to explore the definitional debates around the circular economy with an emphasis on the state of macro scholarship and policy positions adopted by select African governments and civil society actors. The evidence base on material resource consumption trends globally and in Africa will be used as an empirical reference point to anchor the discussion.

It is recognized that the circular economy is a relatively new and under-explored conceptual domain, especially in the fields of urban studies, development economics, governance, trade policy, and sustainable development. To spark discussion, the first session will be anchored by five scene setting presentations:

- Definitional approaches to the circular economy and implications for achieving the SDGs—global academic reflection (Prof Ester van der Voet, Leinden University & International Resource Panel) TBC
- 2. Big picture: Global and African economy gauged in Megatonnes: Linear and circular flows towards circularity (Dr Willi Haas)
- 3. African Circular Economy Network Country Studies. (Bezawit Eshetu, African Circular Economy Network)
- 4. African advocacy platforms on the Circular Economy (African Circular Economy Alliance) (Dr Mao Amis)
- 5. Efforts to strengthen research on the circular economy in Africa (Reniera O'Donnell, Higher Education Lead, Ellen MacArthur Foundation)

Workshop 2: 31 August 2021, 14.00-16.15 CET

Exploration CE applications through case studies with an eye on research questions and issues.

Case study presentations (12 min each)

- Waste (Prof Christina Trois, UKZN) TBC
- South Africa Plastics Pact case study (Green Cape)
- ICLEI Circular Economy case studies (Paul Currie, ICLEI)
- Sanitation models for low-income communities (Jay Bhagwan, Water Research Commission) TBC
- Construction and demolition waste (Prof Harro von Blottnitz, UCT)

Interim output: Working paper summarizing key inputs/learnings from workshops 1 and 2, to inform participants joining parts 3 and 4 in the summit.

Part 3 (session during the SDG Summit): 13 September 2021, 14.00-16.30

Theme: Regulation and governance dimensions of advancing the circular economy

- Government perspective: Implications of advancing the African Circular Economy Alliance (ACEA) (DEFF or DSI [Dr Henry Roman] tbc
- Private sector perspective: Dr. Avashnee Chetty, Sustainability Manager at Safripol. (Plastics focus)
- Potential intersections between industrial strategy imperatives and the circular economy (UNECA? tbc)
- African Circular Economy Network perspective (tbc)
- Rudy Ackerman (African Leadership University) tbc

Part 4 (session during the SDG Summit): 14 September 2021, 14.00-16.30

Theme: Towards a research agenda on the circular economy and the realization of the SDGs in Africa

The session will draw on the insights of the group to generate a potential research agenda based on research gaps identified through the previous sessions. If there is time, explorations of potential collaborations will be identified.

Governance, regulation and incentivization

- Cultural adaptation
- Technological dimensions of circular economies
- Evidence base
- Institutional drivers of system innovation at different scales
- (Note: Other issues will be generated with the group during this session.)

The conclusions and recommendations from the two workshops and the two summit sessions will be compiled for a report back during the plenary of the SDG Summit on the 15 September.

Resources for CE stream:

- 1. An extensive depository of applied research on the circular economy: https://www.ellenmacarthurfoundation.org
- A useful overview of the definitional debates on the circular economy and how it relates to the human development index can be consulted here: Schröder, P., Lemille, A. and Desmond, P. (2020) Making the circular economy work for human development. Resources, Conservation & Recycling, No. 156. URL: https://doi.org/10.1016/j.resconrec.2020.104686
- 3. Useful exploration of definitional aspects and policy implications for developing countries can be found in the following briefing paper: Preston, F. and Lehne, J. (2017) A Wider Circle? The Circular Economy in Developing Countries. Briefing Paper. London: Chatham House. Url: https://www.chathamhouse.org/sites/default/files/publications/research/2017-12-05-circular-economy-preston-lehne-final.pdf
- 4. World Economic Forum (2021) Five Big Bets for the Circular Economy in Africa. Geneva: WEF.
- 5. Footprints Africa (2021) The Circular Economy: Our journey in Africa so far. URL: https://www.footprintsafrica.co/
- 6. World Economic Forum (2018) Circular Economy in Cities Evolving the model for a sustainable urban future. Geneva: WEF.
- 7. Von Blottnitz, H., Virag, D. Wiedenhofer, D. & Haas, W (2021) Challenging but promising: South Africa's transition towards a circular economy. Briefing Note. Cape Town & Vienna: UCT & University of Natural Resources and Life Sciences (BOKU).
- 8. Kirchherr, J. and van Santen (2019) Research on the circular economy: A critique of the field. Resources Conservation and Recycling, 151(2-3): 104480. DOI: 10.1016/j.resconrec.2019.104480
- 9. An authoritative overview of the importance of achieving resource efficiency and sustainable urbanisation can be found in this policy report by the UNEP International Resource Panel: IRP (2018). The Weight of Cities: Resource Requirements of Future Urbanization. Swilling, M., Hajer, M., Baynes, T., Bergesen, J., Labbé, F., Musango, J.K., Ramaswami, A., Robinson, B., Salat, S., Suh, S., Currie, P., Fang, A., Hanson, A. Kruit, K., Reiner, M., Smit, S., Tabory, S. A Report by the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya. Url: https://www.resourcepanel.org/reports/weight-cities

For further background information on the SDG Africa Summit convened by the University of Cape Town, see: http://www.sdgsafricasummit.uct.ac.za/