

Circularity in Africa: Electronics Workshop



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Case Study

TCB

Tracey Gilmore
South Africa

Taking Care of Business (TCB) is a nonprofit company that has developed various programmes using retail waste as a solution to support the circular economy through Resell, Repair, Remake and Reskill opportunities that generate a decent income for micro-entrepreneurs while supporting a healthy planet. TCB has experienced that when you take care of small businesses you take care of families.



Case Study

Quadloop

Dozie Igweilo
Nigeria

Quadloop is a social enterprise company that aims to develop affordable solar lanterns and home systems produced with a lower environmental impact. They are determined to be at the forefront of the technological renovation that will lead to a responsible, carbon – neutral product era. They're operations are based around principles of circular economy which close the loop on battery production. They commit on employing their technical capabilities to innovate production methods that reduce waste and properly dispose of all materials employed.

African Workshop Series

As a co-host of the **World Circular Economy Forum 2022** (WCEF2022), the **African Circular Economy Network** (ACEN) is running **Preparatory Workshops** based on the African Circular Economy Alliance (ACEA)'s five big bets. These workshops aim to create an enabling environment for the transition to a circular economy and to create momentum toward the main forum and **African Studios** taking place in 2022.

Session Summary

E-waste is one of the fastest growing waste streams, which has a complex material composition including precious metals, plastics and rubbers, thus having the opportunity to re-enter the economy. However, mismanaged e-waste creates environmental and social challenges, which can be witnessed in many African countries.

This workshop explored WEEE from all circular angles, including investigating opportunities for keeping equipment and components in circulation for longer to create real benefits for Africans.

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The session started with two case studies. Firstly, Taking Care of Business (TCB), formerly known as the Clothing Bank from South Africa, equips entrepreneurs with skills and resources to unlock their talents and to create self-employment, focusing in particular on entrepreneurs with families. One of the projects is focusing on e-waste, where post-consumer electronics are collected, repaired or polished and redistributed to electronics traders. Entrepreneurs not only repair and resell e-waste from partners, but they also use their skills to repair e-waste in households.

Secondly, Quadloop from Nigeria turns e-waste into solar lanterns and solar home systems to reduce environmental footprints. The products are created from 70% e-waste, including laptop screens and wires. The products are, in particular, focused on rural communities that do not have access to solar systems. The products are designed with circular principles, which allow batteries to be replaced once the end-of-life has been reached.

Resources and Case Studies:

- African Circular Economy Alliance's Report: **The Five Big Bets for the Circular Economy in Africa**
- Ellen MacArthur Foundation Report: **Electronics and e-waste**
- Footprints Africa e-waste hotseat session: **E-waste: Our fourth hotseat session**

“Any country in Africa wanting to implement an EPR system needs to wake up to the fact that informal sector integration can make or break an implementation.”

- **Susanne Karcher**

The panel discussion started with the need to reconsider design principles when designing electric and electrical equipment, but the problem with circular design principles is that they should be applied at the source, and Original Equipment Manufacturers (OEMs) are not based in Africa. Therefore, Extended Producer Responsibility (EPR) can support the transition to a circular economy by pressuring manufacturers to integrate circular principles. It was concluded that EPR is not a one size fits all solution, but it can support the inclusion of all stakeholders in the industry under one umbrella.

There is a need to play into the strength of the informal sector by creating accessible working spaces, continuous dialogue, and awareness and giving recognition to all parties involved. Collaboration is needed to build win-win solutions between the formal and informal sectors and understand the landscape and the needs of partners. Therefore, it was concluded that partnerships are key to transitioning to a circular economy in electronics in Africa on a national and regional level.

[Full Recording](#)

For more information or to get involved, contact us at:
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