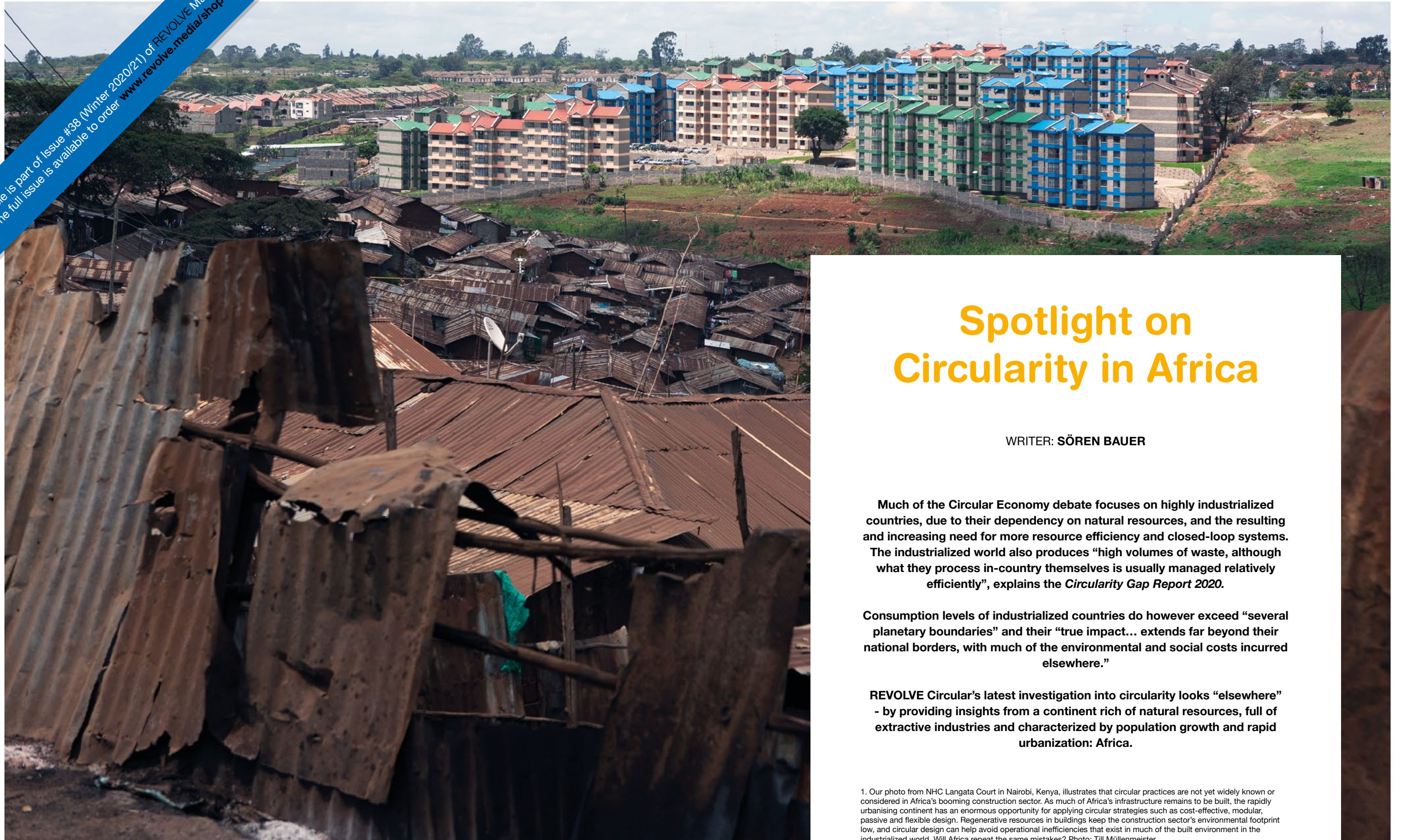


This article is part of Issue #38 (Winter 2020/21) of REVOLVE Magazine.
The full issue is available to order www.revolve.media/shop



Spotlight on Circularity in Africa

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Much of the Circular Economy debate focuses on highly industrialized countries, due to their dependency on natural resources, and the resulting and increasing need for more resource efficiency and closed-loop systems. The industrialized world also produces “high volumes of waste, although what they process in-country themselves is usually managed relatively efficiently”, explains the *Circularity Gap Report 2020*.

Consumption levels of industrialized countries do however exceed “several planetary boundaries” and their “true impact... extends far beyond their national borders, with much of the environmental and social costs incurred elsewhere.”

REVOLVE Circular’s latest investigation into circularity looks “elsewhere” - by providing insights from a continent rich of natural resources, full of extractive industries and characterized by population growth and rapid urbanization: Africa.

1. Our photo from NHC Langata Court in Nairobi, Kenya, illustrates that circular practices are not yet widely known or considered in Africa’s booming construction sector. As much of Africa’s infrastructure remains to be built, the rapidly urbanising continent has an enormous opportunity for applying circular strategies such as cost-effective, modular, passive and flexible design. Regenerative resources in buildings keep the construction sector’s environmental footprint low, and circular design can help avoid operational inefficiencies that exist in much of the built environment in the industrialized world. Will Africa repeat the same mistakes? Photo: Till Müllenmeister.

Pineapple leather? Plastic buildings? What is driving Africa's circular agenda?

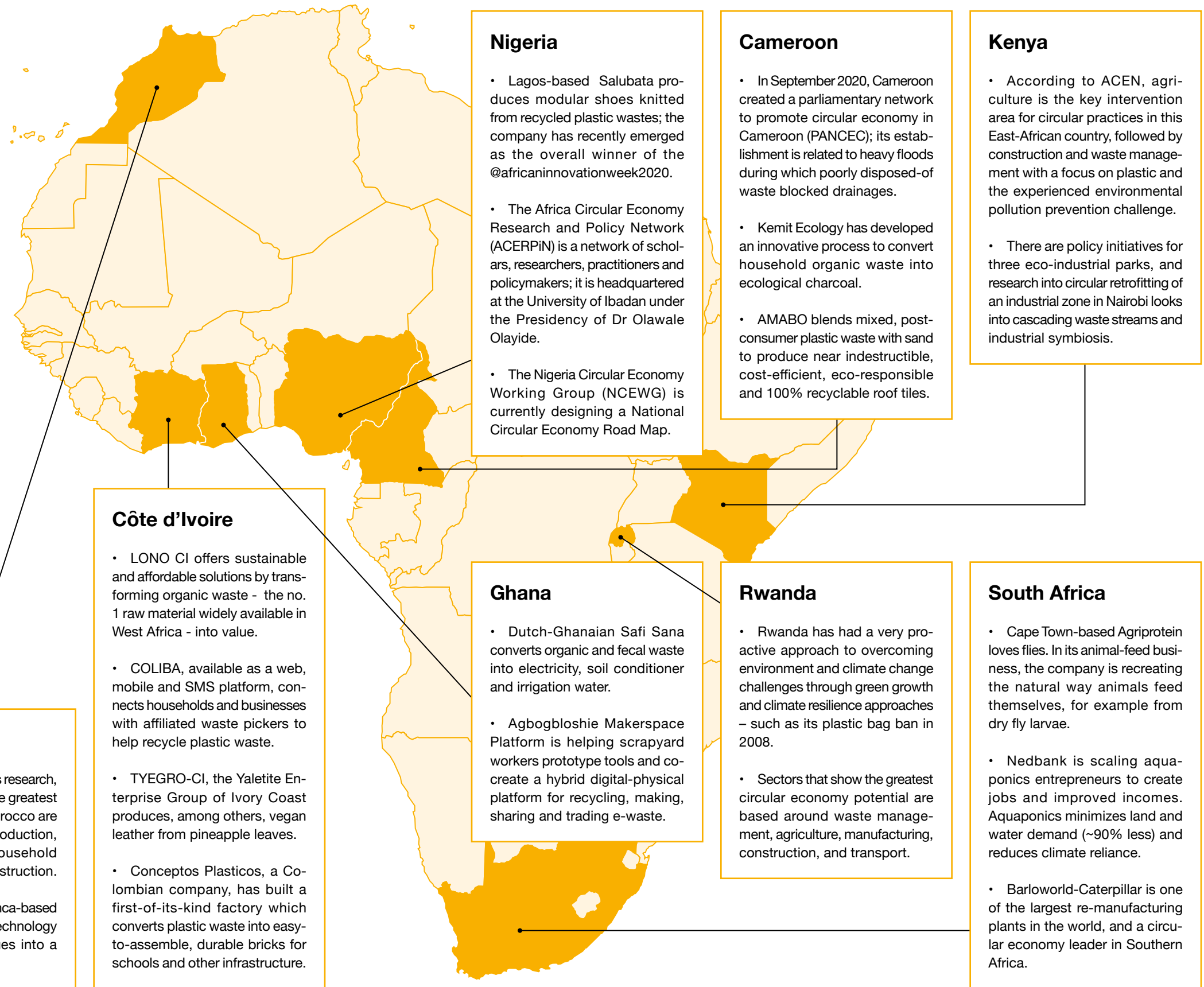
Circular practices have always existed across the African continent, and are now gaining traction. Gracia Munganga from the African Circular Economy Network (ACEN) explains: "Strong emphasis is seemingly on agri-food and forestry related topics, and includes food security and access to required information and infrastructure."

Part of the circular movement is also the African Circular Economy Alliance (ACEA), co-founded by Nigeria, Rwanda and South Africa. Dr. Nyong of the ACEA explains that Ghana and Côte d'Ivoire joined the Alliance in 2020 and "other countries such as Niger, Senegal, Malawi, Cameroon, and the DR Congo have indicated an interest to join."

These organizations bode well for a more circular Africa - but what exactly are individual governments, businesses and other stakeholders doing? Where are circular business models already playing a role?

From organic waste for producing pineapple leather to plastic buildings and industrial symbiosis in eco-industrial parks, Africa is finding its own way to advance circularity in the 21st century.

Discover what some active businesses and individual governments in selected countries are already doing.



Morocco

- According to ACEN's research, the four sectors with the greatest circular potential in Morocco are agriculture and food production, waste (particularly household waste), water, and construction.
- Ecofertil, a Casablanca-based company, is using biotechnology to turn organic residues into a range of fertilizers.

Côte d'Ivoire

- LONO CI offers sustainable and affordable solutions by transforming organic waste - the no. 1 raw material widely available in West Africa - into value.
- COLIBA, available as a web, mobile and SMS platform, connects households and businesses with affiliated waste pickers to help recycle plastic waste.
- TYEGRO-CI, the Yaletite Enterprise Group of Ivory Coast produces, among others, vegan leather from pineapple leaves.
- Conceptos Plasticos, a Colombian company, has built a first-of-its-kind factory which converts plastic waste into easy-to-assemble, durable bricks for schools and other infrastructure.

Nigeria

- Lagos-based Salubata produces modular shoes knitted from recycled plastic wastes; the company has recently emerged as the overall winner of the @africaninnovationweek2020.
- The Africa Circular Economy Research and Policy Network (ACERPIN) is a network of scholars, researchers, practitioners and policymakers; it is headquartered at the University of Ibadan under the Presidency of Dr Olawale Olayide.
- The Nigeria Circular Economy Working Group (NCEWG) is currently designing a National Circular Economy Road Map.

Cameroon

- In September 2020, Cameroon created a parliamentary network to promote circular economy in Cameroon (PANSEC); its establishment is related to heavy floods during which poorly disposed-of waste blocked drainages.
- Kemit Ecology has developed an innovative process to convert household organic waste into ecological charcoal.
- AMABO blends mixed, post-consumer plastic waste with sand to produce near indestructible, cost-efficient, eco-responsible and 100% recyclable roof tiles.

Kenya

- According to ACEN, agriculture is the key intervention area for circular practices in this East-African country, followed by construction and waste management with a focus on plastic and the experienced environmental pollution prevention challenge.
- There are policy initiatives for three eco-industrial parks, and research into circular retrofitting of an industrial zone in Nairobi looks into cascading waste streams and industrial symbiosis.

Ghana

- Dutch-Ghanaian Safi Sana converts organic and fecal waste into electricity, soil conditioner and irrigation water.
- Agbogloboshie Makerspace Platform is helping scrapyards workers prototype tools and co-create a hybrid digital-physical platform for recycling, making, sharing and trading e-waste.

Rwanda

- Rwanda has had a very proactive approach to overcoming environment and climate change challenges through green growth and climate resilience approaches - such as its plastic bag ban in 2008.
- Sectors that show the greatest circular economy potential are based around waste management, agriculture, manufacturing, construction, and transport.

South Africa

- Cape Town-based Agriprotein loves flies. In its animal-feed business, the company is recreating the natural way animals feed themselves, for example from dry fly larvae.
- Nedbank is scaling aquaponics entrepreneurs to create jobs and improved incomes. Aquaponics minimizes land and water demand (~90% less) and reduces climate reliance.
- Barloworld-Caterpillar is one of the largest re-manufacturing plants in the world, and a circular economy leader in Southern Africa.

Circularity and social inclusiveness for a different Africa

REVOLVE Circular got together with the eight current members of the ACEN Executive Team **Susanne Karcher (South Africa), Sally-Anne Kasner (South Africa), Murielle Diaco (Côte d'Ivoire), Sarah O'Carroll (UK), Alex Lemille (France), Peter Desmond (UK), Chris Whyte (South Africa) and Gracia Munganga (DR Congo).** The answers are an amalgamation of the team's responses.

ACEN is the African Circular Economy Network, a civil society network of Circular Economy thinkers and do-ers advocating for a more circular economy in Africa. ACEN is registered as a Non-Profit Company in South Africa and has around 100 representatives in over 30 African countries. In summer 2020, ACEN published its new membership policy and regulations, now accepting corporate, media and civil society organizations as its members. In 2021, ACEN is planning to organise a series of five online workshops for different geographical regions of Africa, culminating in "Africa Circular" as a pan-African summit and in-person event planned for 2022.

Let us talk about the early days of ACEN - when did you establish ACEN, and what were your main objectives at the time?

ACEN was established in July 2016 when a group of circular economy experts came together in Cape Town to discuss how to accelerate the circular transition in Africa. The main vision is

still the same today: the association of circularity with social inclusiveness. We aim to build a restorative African economy that generates well-being and prosperity for all. To achieve this, we must utilise new forms of economic production and consumption which maintain and regenerate environmental resources. We have been inspired by sustainability visionaries from the Global North such as Gunter Pauli, Walter Stahel, and Ellen MacArthur as well as practices that have been seen across Africa for decades.



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One might argue that much of Sub-Saharan Africa has always been or is already circular – would you agree? What are the most important needs – and the biggest opportunities – for African countries and businesses to consider and embrace circularity?

Indeed, we strongly believe Africa is one of the most 'ready-for-circularity' continents, mainly because its ecological footprint is still very low. The chances of moving into a circular business model are easier than in other continents where most infrastructures are already built without their next life cycles in mind. One

of the biggest opportunities for Africa is remanufacturing and refurbishment. Imagine a network of remanufacturers in charge of restoring products back to their original state to send back to their markets or to resell to Europe and the Middle East. Remanufacturing hubs can be created in many African countries and would generate countless jobs.

- 2. Workers are melting down metal scraps to be recycled. Empowering the informal sector is one of three main recommendations for African countries by the Circularity Gap Report 2020. Photo: ACEN.
- 3. During agroboscamps such as in Tori-Bossito in the Republic of Benin, young Africans learn about closed loop farming practices that recycle nutrients and organic matter material back to the soil. Circular practices are essential in Africa's agriculture development, particularly to protect the fertility of soils, avoid further decline of biodiversity and ensure sustainable water management. Photo: AgroBootCamp.
- 4. Kemit Ecology in Cameroon produces eco-friendly charcoal from household waste. Photo: Kemit Ecology.
- 5. 400 kg of organic waste can be turned into 150 kg of compost; here, a collaborator of the Ivorian company LONO explains their Kubeko composter to cocoa farmers. Photo by LONO.

Looking towards the future: what are your most important plans for 2021 and beyond?

Our next big step is to secure funding for "Africa Circular" and its preparation via five online workshops on circular practices which we aim to conduct in 2021. They will provide input to this main event planned for 2022 – this is a journey, not a destination, towards helping to create a just transition to a circular economy in Africa which will contribute to achieving the Sustainable Development Goals and mitigating the negative impacts of climate change.

Read the entire conversation and the full answers at www.revolve.media/circular-africa

How public finance supports Africa's circular transformation

REVOLVE Circular met up with Dr Anthony Nyong, Director of Climate Change and Green Growth at the African Development Bank (AfDB). In this position, Dr. Nyong is also responsible for the secretariat of the African Circular Economy Alliance (ACEA).

ACEA is the African Circular Economy Alliance, a government-led coalition of African nations and global partners committed to advancing the circular economy transition at the national, regional and continental levels. Today, the ACEA serves as a centralized platform for knowledge-sharing and best practices identification, the creation of enabling legal and regulatory frameworks, as well as the building of partnerships for financing and the creation of circular economy projects in Africa. The Alliance is open to membership from public sector entities, international organizations, funding institutions and research centres. The ACEA Secretariat is hosted by the African Development Bank with support from the World Economic Forum.



Dr Nyong, tell us a bit about how ACEA came to be? Is it correct to say that the governments of South Africa, Nigeria and Rwanda were the driving forces? Which other countries are already involved?

Yes, that is correct. The African Circular Economy Alliance (ACEA) was founded by Rwanda, Nigeria, and South Africa who currently serve as the Co-chairs of the Alliance. It was conceived in 2016 during the World Economic Forum on Africa in Kigali and formally launched at the COP 23 in Bonn in 2017. This year, Ghana and Côte d'Ivoire joined the Alliance and other countries such as Niger, Senegal, Malawi, Cameroon, and the DR Congo have indicated an interest to join.

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What are the main challenges for more circular policies and practices in Africa? Which questions do African governments ask?

The main challenges in establishing more circular policies and practices are around: the understanding of the concept as most people easily equate it to waste collection and recycling, the lack of business support programs, availability of data and knowledge, adequate financing, access to technology and necessary infrastructure. Each of these plays an important role to developing the continent's circular economy. For instance, business support services, access to technology and adequate financing are key activities in scaling circular businesses while increased availability of data and knowledge on Circular Economy will support advocacy

and increased awareness. The main question that governments and other stakeholders ask is "How do we mobilize the technical and financial resources to demonstrate that the incorporation of circular economy principles will actually create decent jobs and stimulate the entire economy?"

What do you see for the future of ACEA?

Through the ACEA's Theory of Change, we envision our short to medium term goals around policy development, leadership and advocacy, and the scaling of circular economy businesses and projects. This will include three main activities: One, development of country work streams for the Alliance's priority areas and the harmonization of policies across countries. Two, increase country membership, development of Circular Economy academia and exploration of circular innovations and businesses in

member countries; and three, support to existing circular economy projects in member countries and fostering of partnerships between organizations working in the Circular Economy space.

We are already piloting the operationalization of our Theory of Change through a Nigeria Circular Economy Working Group (NCEWG). This voluntary working group is currently designing a National Circular Economy Road Map.

Read the entire interview and the full answers at www.revolve.media/circular-africa ●

5. Dr Anthony Nyong, Director of Climate Change and Green Growth at the African Development Bank (AfDB).

6. The Yaounde Sanitation Project (Cameroon) is a project of construction of drainage canals aimed at cleaning up the city and improving the living conditions of its inhabitants. Due to drainages blocked by waste, Cameroon recently established a parliamentary circular economy network. Photo: African Development Bank.

7. Transport Facilitation programme for corridors in between Chad, Cameroon and the Central African Republic. Photo: African Development Bank



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