

# JUST2CE

A Just Transition to Circular Economy



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# CHAPTER 21

## Circular Economy (CE) in African countries

## Chapter 21. Circular Economy Transitions in Africa: a policy perspective

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### Abstract

To effectively implement the circular economy in Africa, it is crucial to tailor its principles to address Africa's unique developmental challenges. This requires a citizen-focused approach that prioritizes social equity, quality of life,

access, and improved service delivery. Engaging with the aspirations of Africa's growing middle class is of utmost importance. African cities, as they urbanize, offer ideal opportunities to implement holistic circular economy models that can inspire new and sustainable urban living. This paper acknowledges the diverse voices and perspectives in Africa, and presents an overview and does not claim to represent the only viewpoint. Merely adopting a technocratic approach to implementing the circular economy in African cities is inadequate. Proponents of the concept must prioritize people and equity as indispensable elements in achieving a circular economy. Many instances and examples already demonstrate the implementation of circular economy principles in African contexts. The question arises: Can policies further support and retain these approaches, or are alternative strategies required to avoid simply following the development path of Europe and other more advanced economies?

**Keywords:** circular economy, Africa, regenerative, policy, informal sector

This contribution addresses the unique developmental challenges in African cities through the lens of circular economy principles, while prioritizing social equity and citizen engagement.

### 21.1 Introduction: The Circular Economy in the African context

In the GN, particularly Europe, the circular economy (CE) narrative has primarily focused on waste management, recycling, and cost savings, with product redesign and remanufacturing emerging as recent developments (Desmond and Asamba, 2019). Multinational organizations such as Philips, Desso, Interface, and Renault have

# JUST2CE

## A Just Transition to Circular Economy

implemented CE principles in their business models, incorporating concepts like "Pay Per Lux", "carpet tile renting", and remanufacturing (Ellen MacArthur Foundation, 2013a).

In contrast, Africa's development path has primarily emphasized conventional industrialization, neglecting high-value activities and advanced processing methods (United Nations Economic Commission for Africa, 2016). This has resulted in a heavy reliance on imported high-value products and weak linkages with the knowledge economy, research and development, and advanced technology (ibid).

To address this issue, several African countries are now shifting towards developing "greener" economies by focusing on local product design, promoting reuse and repair practices, and reducing negative environmental impacts and ecological scarcities. While discussions on the benefits of a CE approach are still emerging in Africa, many argue that Africa has been naturally practicing CE principles for decades through repair and reuse practices, sustainable farming, and material beneficiation.

The CE is increasingly recognized as a policy framework that maximizes the value of resources for economic development and job creation, rather than solely focusing on waste management and environmental outcomes. As few CE related policies have been developed on the continent (e.g., Extended Producer Responsibility) and Africa needs to find its own CE narrative the question arises: Can policies further support and retain these approaches, or are alternative strategies required to avoid simply following the development path of Europe and other more advanced economies?

Global trade plays a significant role in shaping Africa's engagement with the CE. Africa, as a continent rich in natural resources, has historically been positioned as a supplier of raw materials to the global market. This reliance on exporting raw materials perpetuates a linear economic model with limited value addition and insufficient linkages to local industries and economies.

However, there is growing recognition of the potential benefits of the CE in Africa's trade dynamics. Adopting CE principles can enable African countries to maximize the value of their resources, promote local manufacturing and processing, and reduce dependency on imports of high-value products. By transitioning towards a more circular approach, Africa can strengthen its position in global trade by adding value to its own resources and retaining economic benefits within the continent. There is recognition that the transition to renewable energy will need large supplies of critical metals such as cobalt, lithium, and nickel, and mineral extraction is set to increase by about 500% (The World Economic Forum, 2022). At the World CE Forum 2023, discussions have been initiated in earnest around investigating alternative business models linked to materials extraction and using blockchain to retain ownership and value so that the economic benefits of beneficiating these mineral resources are not lost to the African economies from which they are extracted. This is a developing area.

Moreover, the CE can contribute to addressing Africa's trade imbalances by promoting intra-African trade and regional integration. By developing local CE ecosystems, African countries can enhance economic cooperation, exchange circular products and services, and establish sustainable supply chains within the continent. This can foster economic diversification, work opportunities, and improved resilience to global market fluctuations.

International collaboration and partnerships are also crucial in advancing the CE in Africa's global trade. Knowledge sharing, technology transfer, and investment support between both industrialised and emerging economies can facilitate the adoption of circular practices and promote sustainable trade networks. This collaboration can enable

# JUST2CE

A Just Transition to Circular Economy

Africa to leverage as well as share its resources, talents, and innovative solutions to become a key player in the global CE movement.

The African Continental Free Trade Area (AfCFTA) (African Continental Free Trade Area, 2023) is an initiative under Agenda 2063<sup>37</sup>. It is a comprehensive trade agreement encompassing various sectors, including digital trade and investment protection and remove trade barriers within Africa.

The AfCFTA includes 55 African Union member countries and eight Regional Economic Communities with the aim to boost intra-African trade, particularly in value-added production, enhance Africa's competitiveness, and economic integration by promoting trade and investment across the continent.

The AfCFTA officially came into effect on May 30, 2019, following the deposit of Instruments of Ratification by 24 member states. It was launched during the 12th Extraordinary Session of the AU Assembly of Heads of State and Government in Niger in July 2019. Trading under the AfCFTA commenced on January 1, 2021, marking an important milestone in Africa's journey towards economic integration and regional cooperation.

Seemingly missing from the AfCFTA is the inclusion of the CE or any reference to sustainable development. Van der Ven and Signé (2021) authored a Policy Brief proposing that it is not too late for the AfCFTA to be an instrument for advancing green growth into the agreements and the ongoing market access negotiations under Phase I (tariff concessions and services schedules). Whilst the term of "green growth" was stated by Van der Ven and Signé, perhaps the CE principles should be included instead?

## 21.2 Africa's circular economy policy landscape

Unlike the European Union, Africa currently lacks continent-wide specific CE policies. However, there are opportunities within the African Union and national policy frameworks to promote the CE, and there is growing political will to support its implementation.

Agenda 2063, officially adopted by the African Union Assembly in 2015, serves as a collective vision and roadmap for a prosperous and united Africa. While the CE is not explicitly mentioned in Agenda 2063, certain actions within the agenda, such as transforming economies through value addition and addressing climate change and the environment, can pave the way for CE initiatives.

Following this, there is a rising political will to implement the CE in Africa, evident through its inclusion in various international and pan-African initiatives. The African Circular Economy Alliance (ACEA), formed by South Africa, Rwanda, and Nigeria, aims to advance CE practices through policy frameworks and regulations. Supported by organizations like the World Economic Forum, the Global Environment Facility, and the African Development Bank (AfDB), the ACEA plays a crucial role in promoting CE principles.

In November 2019, the African Ministerial Conference on Environment (AMCEN) endorsed the Durban Declaration, the first continent-wide policy explicitly incorporating the CE. Supported by the ACEA, the Durban Declaration

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<sup>37</sup> Agenda 2063 – The Africa we want - is the continent's strategic framework that aims to deliver on its goal for inclusive and sustainable development and is a manifestation of the pan-African drive for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance. The development of Agenda 2063 was inspired by previous work undertaken The Organisation of African Unity (OAU), the precursor of the African Union; to prioritise inclusive social and economic development, continental and regional integration, democratic governance and peace and security amongst other issues aimed at repositioning Africa to becoming a dominant player in the global arena. Source: African Union. Agenda 2063: Africa we want. [Online]. Available at: <https://au.int/agenda2063/overview> [12 Nov 2023]

# JUST2CE

## A Just Transition to Circular Economy

acknowledges the value of the CE in driving economic development, job creation, and environmental sustainability. It calls for increased awareness, policy development, capacity building, and private sector investments to accelerate the transition to a CE in alignment with Agenda 2063.

Research undertaken in 2020 for ACEA by Dalberg identified five sectors in Africa with immediate opportunities for increased circularity, jobs creation, and environmental protection. These were published in a report referred to as the "Five Big Bets for the Circular Economy" (African Development Bank Group, 2021) and includes:

- **Food systems:** This bet focuses on reshaping the food production and consumption cycle to reduce waste, improve resource efficiency, and promote sustainable agricultural practices. It involves initiatives such as reducing food loss and waste, promoting regenerative farming, and adopting circular approaches in the entire food value chain.
- **Packaging:** The packaging sector aims to transition from a linear model of single-use packaging to a circular model that emphasizes reuse, recycling, and sustainable packaging materials. This includes promoting packaging design that enables easy recycling, implementing effective waste management systems, and encouraging the use of recycled materials.
- **Built environment:** This bet revolves around creating a circular approach to construction and infrastructure development. It involves adopting sustainable building practices, utilizing renewable and recycled materials, promoting energy efficiency, and encouraging the reuse and recycling of construction waste.
- **Electronics:** The electronics sector focuses on improving resource efficiency, reducing electronic waste, and promoting the sustainable management of electronic products throughout their lifecycle. This includes initiatives such as designing products for durability and repairability, promoting responsible e-waste management and recycling, and encouraging the adoption of circular business models in the electronics industry.
  
- **Fashion and textiles:** This bet aims to transform the fashion and textile industry by promoting sustainable and circular practices. It involves promoting responsible sourcing of materials, reducing textile waste through recycling and upcycling, adopting circular business models such as clothing rental and repair services, and raising awareness about sustainable fashion choices.

Currently, there is limited specific legislation targeting the CE in Africa. Existing regulations and policies primarily focus on climate change mitigation, the green economy, and waste management. The UN 2030 Agenda for Sustainable Development and the UNFCCC COP 21 Paris Agreement serve as foundational global agreements guiding relevant policy and legislation development. However, many proposed CE initiatives are still awaiting incorporation into government policies and legislation.

An initiative that has gained some traction within Africa is the "green economy". "A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services" (UNEP, no date). African countries are at different stages of implementing the green economy, with some integrating certain aspects, while others, like Ethiopia, Kenya, and Rwanda, have established green economy strategies. However, the legal and regulatory framework to foster the green economy is still

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## A Just Transition to Circular Economy

underdeveloped in many African countries, and mechanisms for facilitating the transition are not yet fully in place. The most promising markets for the green economy often revolve around agriculture, bio-trade, sustainable tourism, and renewable energy. This can be attributed to the social and economic challenges in Sub-Saharan Africa, where rapid adoption of new concepts may conflict with development and growth objectives (Klein and Reiher, 2016). The green economy provides a good segway to the CE, so countries that have good green economy strategies in place, will find it easier to move to circular practices.

There are few systematic studies of CE policies in Africa and so the identification of policies currently relies on informal research approaches. **Figure 21.1** summarises some of the CE-related policies that are in existence for a selection of African countries, however, is two years old (GRID-Arendal, 2021 as sourced from Chatham House 2021).

- National CE policies include any national CE policies already in place as well as national green growth or sustainable development strategies which integrate CE principles.
- Product policies are any policies that support circular practices relating to the design, manufacture, distribution or import of specific products and materials (mostly plastic bans or levies).
- Extended producer responsibility policies place the responsibility for the environmental impacts of products throughout the product life cycle on producers and is often applied to the collection, processing and reuse of waste.
- Waste management and recycling policies encourage circular practices relating to the management of waste covering generation, segregation, transfer, sorting, treatment, recovery and disposal.
- Fiscal policies include government tax and spending policies that incentivize circular practices.

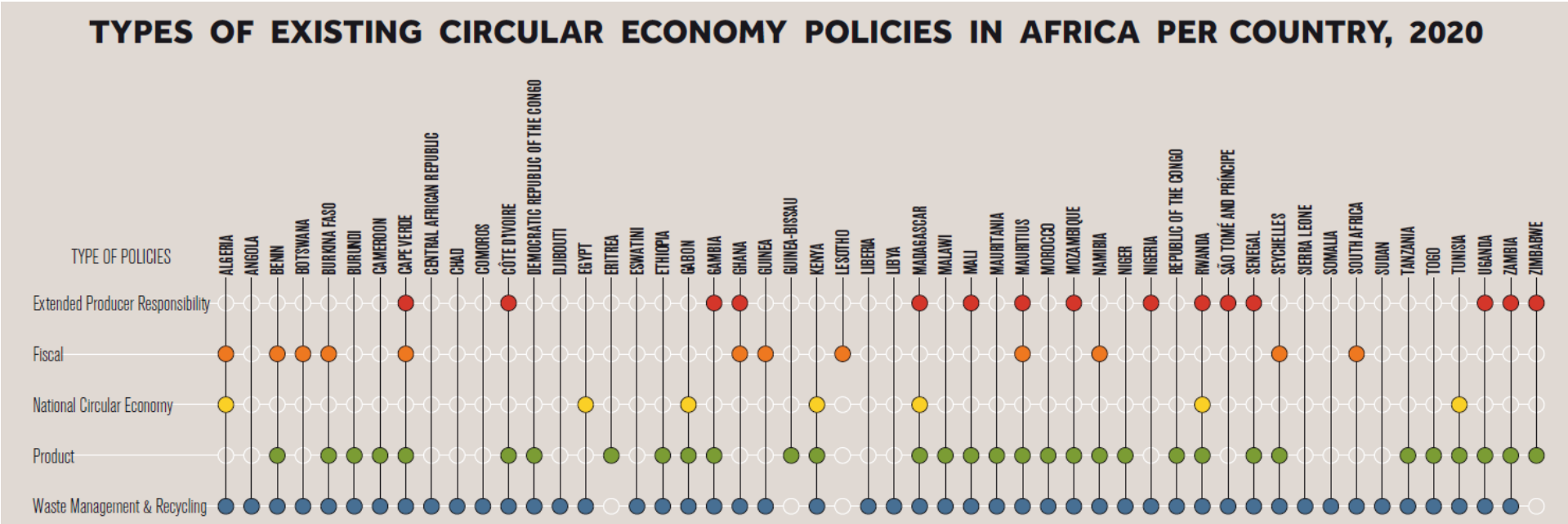


Figure 21.1 CE-related policies, regulations and initiatives in a selection of African countries (Source: GRID-Arendal, ACEN, Footprints Africa and ICLEI, 2021)

## 21.3 Current status of the circular economy

Although large businesses like Unilever, Nestle, Veolia, and Caterpillar are engaged in CE activities in Africa, the transition to a CE is primarily driven by private business and practitioners on the ground, including NGOs, consultancies, entrepreneurs, and small and medium enterprises (SMEs). These local innovators and SMEs have developed some of the continent's most notable CE innovations and technologies, designed with the local context in mind, emphasizing decentralization, labor-intensive processes, and cost-effectiveness.

The private sector, particularly SMEs, play a leading role in driving the CE transition in Africa. Industrial symbiosis, facilitated by programs like the Switch Africa Green Programme and the British High Commission Prosperity Fund Project, is one of the fastest-growing CE activities on the continent. The African Circular Economy Network (ACEN) is a key organization that brings together CE practitioners from across Africa to share knowledge and build an evidence base. With representation from 42 countries, ACEN plays a significant role in promoting the existing CE case studies from Africa as well as assisting to drive further transition.

The transition to a CE is seemingly driven by changes influenced by trade with global markets and the shifts required by EU Directives and not necessarily changes in policy on African soil.

Organisations that have influence on Africa's transition and promoting the CE include the ACEA, the European Union, the governments of Nigeria, South Africa, Rwanda, Ghana, and Morocco, the District of Abidjan in Ivory Coast, the World Economic Forum and its PACE platform, ICLEI Africa, and UNEP Africa. By embracing a CE strategy, Africa has the opportunity to leapfrog and avoid the linear lock-in (Sopjani, et al, 2020) of resource-intensive practices associated with the linear economy, which has historically driven growth in the GN (Desmond and Asamba, 2019). Chatham House developed "circular economy.earth" (Chatham House, 2021) to allow users to explore the policy and trade dynamics associated with transitioning from linear to circular economic models as well as provide analyses of the opportunities and trade-offs associated with such transitions. Chatham House has initiated a process to develop a global CE roadmap with the specific focus to be **(Figure 21.2)**:

- Developing a shared vision for an inclusive CE
- Identifying and acting on essential areas for mutual collaboration and coordination.
- Raising global ambition.



## Why do we need a global circular economy roadmap process?

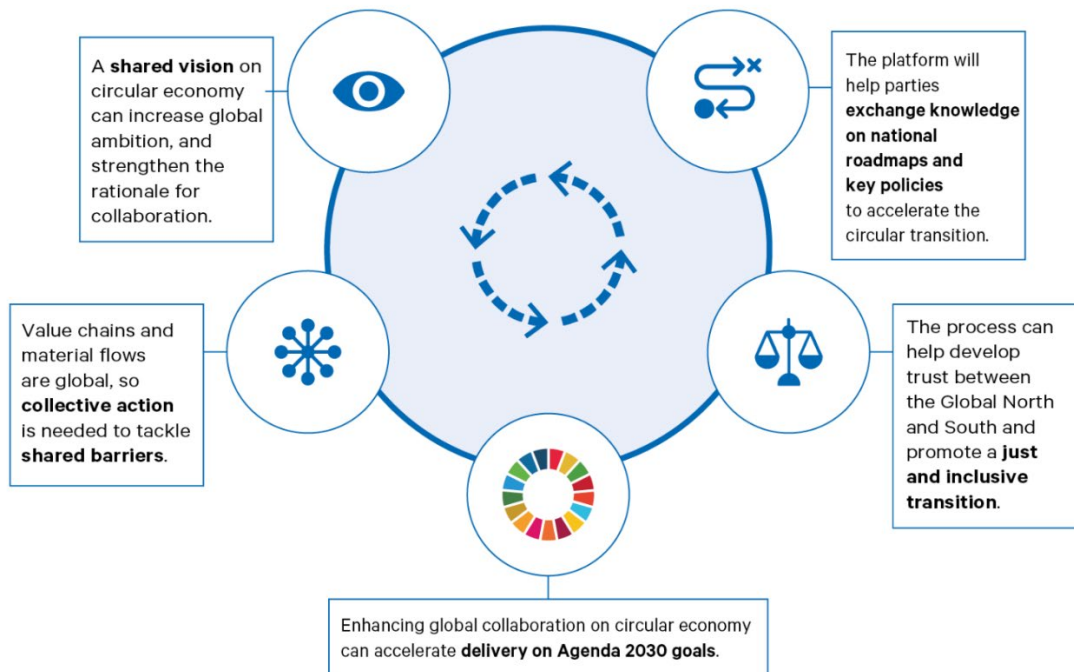


Figure 21.2 Global inclusive CE roadmap process (Source: Chatham House, 2021)

In addition to trade and the effect and impact that trade has on the growth and development of African economies, urbanisation plays a vital role in terms of how cities develop. Urbanization is a significant global trend shaping the 21st century, with the urban population projected to reach 66% by 2050, primarily driven by Africa and Asia. Africa, the second-largest continent, consisting of 54 countries, is expected to have an estimated population of 1.5 billion by 2025 and nearly 2.5 billion by 2050, with approximately 55% living in urban areas. This represents a substantial increase compared to less than 10% in 1950 (United Nations, 2018). However, Africa's urbanization varies across countries and income levels, and the urban-rural welfare gap does not necessarily narrow with urbanization (**Figure 21.3**).

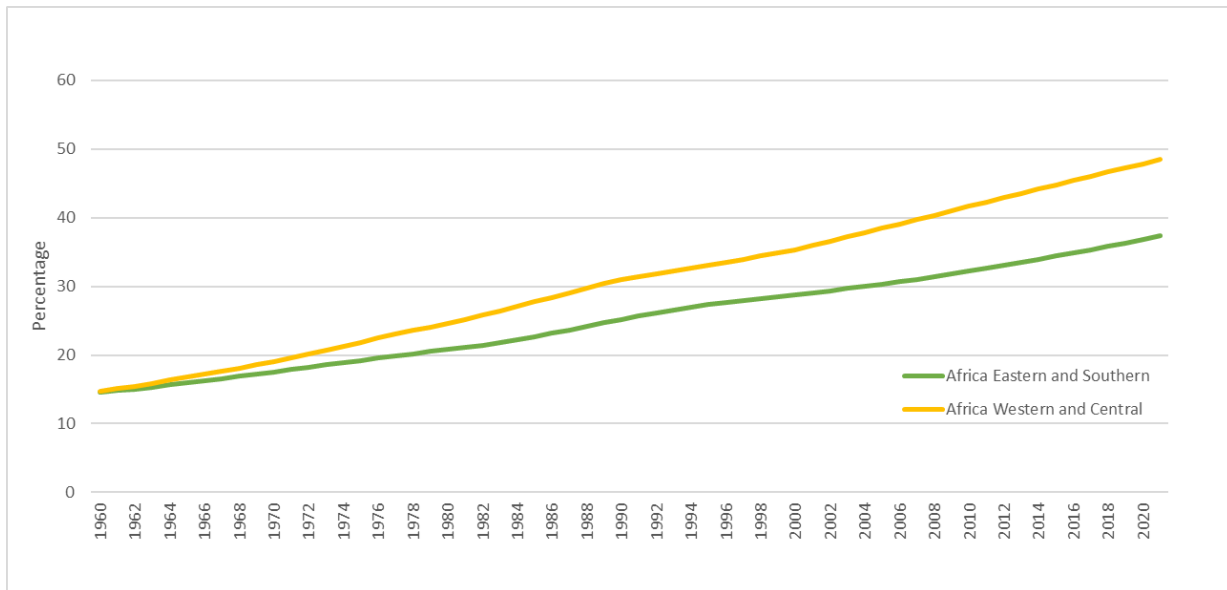


Figure 21.3 Urban population (% of total population), 1960-2020 (World Bank, 2021)

The rapid and unplanned nature of urbanization in Africa poses numerous challenges, as many municipal authorities lack the capacity to accommodate growing urban populations and provide basic services (World Economic Forum, 2017). Poor governance, inadequate infrastructure, historical institutional arrangements, and political instability contribute to the deficiencies in urban services and the proliferation of slums and sprawling residential areas (Güneralp, et al., 2017). These complexities present both challenges and opportunities for implementing CE principles in African cities.

Proper urban planning and development (including adequate infrastructure and taking distance into account) with a focus on circular material flows can mitigate the negative environmental impacts of urbanization while maximizing its potential benefits, such as reduced travel distances and preserved land. However, African cities are characterized by a dominant informal economy, with a significant proportion of non-agricultural workers engaged in informal employment, particularly women in self-employment.

Overall, the urbanization trend in Africa necessitates comprehensive planning based on CE principles for infrastructure development to ensure inclusive and environmentally conscious urban growth.

## 21.4 Considerations for a Just transition to a circular economy in Africa

Several critical enablers are required to facilitate the transition to a CE in Africa, including:

- **Political will and leadership:** Strong political commitment and leadership are essential to drive the CE transition. Governments and policymakers need to prioritize and support the development of CE policies, strategies, and initiatives. This has been demonstrated by the African Circular Economy Alliance.
- **Stakeholder collaboration and engagement:** Collaboration among various stakeholders is crucial for a successful transition. This includes cooperation between governments, businesses, civil society organizations, academia, and local communities. Engaging all relevant stakeholders in the decision-making process ensures a comprehensive and inclusive approach. Many initiatives are underway in South

# JUST2CE

## A Just Transition to Circular Economy

- Africa, Rwanda, Ghana and others, however additional integration would be encouraged. The African Circular Economy Network is attempting to bridge the gaps.
- Policy and regulatory frameworks: Developing and implementing supportive policy and regulatory frameworks is vital, from a continental, regional to a local scale and international agreements. This involves creating an enabling environment that incentivizes CE practices, such as through tax incentives, subsidies, and extended producer responsibility programs. Clear and consistent regulations are necessary to address barriers, facilitate investment, and encourage innovation. Along with this though is the requirement for consistent enforcement, which is not always the case in many African countries.
- Access to finance and investments: Adequate financing mechanisms and investments are needed to support CE initiatives. This includes access to affordable capital, funding for research and development, and support for small and medium-sized enterprises (SMEs) and startups working on CE solutions (existing or proposed). Finance and investments can be in various forms, for example, the European Green Deal. While it offers opportunities for Africa in terms of sustainable investments and technology transfers, there are also concerns about potential negative impacts on African economies. It is crucial for African countries to engage actively with the European Green Deal, ensuring that their interests are protected and that they can benefit. Collaboration between Europe and Africa is essential to address climate change and achieve sustainable development goals (Usman et al, 2021).
- Capacity building and education: Building the necessary skills, knowledge, and capacities is crucial for the successful implementation of a CE. This includes training programs, educational curricula, vocational training, and awareness campaigns to promote understanding and adoption (and in some cases the continuation) of circular practices among individuals, businesses, and communities.
- Infrastructure development and technology transfer: Developing and upgrading infrastructure, including material management facilities, recycling centers, and renewable energy systems, is essential. Technology transfer and knowledge sharing, both domestically and internationally, can accelerate the adoption of appropriate and sustainable technologies for circular practices.
- Research and innovation: Encouraging research, development, and innovation is vital for advancing CE solutions tailored to the African context. Research institutions, universities, and innovation hubs play a crucial role in generating knowledge, developing new technologies, and fostering entrepreneurship in the CE sector.
- Access to markets and value chains: Facilitating access to markets and integrating African businesses into regional and global value chains is essential. This requires strengthening trade networks, promoting market linkages, and creating platforms for collaboration and knowledge sharing among businesses operating in CE sectors.

By addressing these critical enablers, Africa can foster a conducive policy and fiscal environment for the CE to thrive, unlocking economic opportunities, promoting sustainable development, and addressing environmental challenges.

## 21.5 Concluding remarks

In summary, the risks posed by deglobalization and geopolitical conflict highlight the importance of targeted coordination and collaboration at the global level for a globally inclusive CE. Collaborative efforts in areas such as circular finance, supply chain transparency, standards, trade policy, and knowledge exchange can overcome challenges and create opportunities.

Clear and consistent policies at national, regional, continental and international levels are crucial for creating an enabling environment for CE practices. The African Circular Economy Alliance is a positive step to harmonise and focus the transition to circularity for the continent. The current policies related to the CE in Africa tend to focus on the environment and waste management and implementation across the continent varies.

Africa is a resource rich continent with countries dependent on the extraction of materials traded globally. Often changes in the economy is linked to change in trade policy or renegotiated trade relations. Specific changes in policy alone is not likely to transition to circularity. Greater collaboration and consensus-building among the global community is therefore necessary. These include fair and equitable trade policy, supply chain transparency and traceability, circular finance, and harmonised standards and definitions. Facilitating knowledge exchange on circular roadmaps and policies would also be highly beneficial in promoting best practices and shared learning.

Despite the clear benefits of enhanced coordination and collaboration, there is currently no single multilateral process or organization specifically dedicated to fostering a more harmonized and coordinated global transition to a CE. Establishing such mechanisms would help facilitate international cooperation and provide a platform for addressing common challenges and pursuing collective action.

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# JUST2CE

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A Just Transition to Circular Economy

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