

# Circular economy in Africa: examples and opportunities

PUBLIC POLICY



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This article is part of a collection of insights on the circular economy in Africa. The goal of this collection is to explore the potential of the circular economy in a selection of key economic sectors in African countries and highlight examples of the circular economy in action. The sectors explored in this study are: food and agriculture; fashion and textiles; plastics; e-waste; automotive; and the built environment. The collection also considers the key role of public policy and the financial sector in creating the conditions needed for the transition to a circular economy.

The collection is the result of a joint effort led by four organisations: Chatham House; the Ellen MacArthur Foundation; ICLEI Africa; and the University of Lagos, who worked closely to combine their complementary knowledge and expertise on this broad topic. While the collection was curated by the Ellen MacArthur Foundation, it reflects a plurality of views and analyses.



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# Introduction

The adoption and implementation of policies that can accelerate the transition to a circular economy are still in their early stages in African countries but momentum is growing. Policymakers are increasingly recognising that the circular economy can help to deliver on broader environmental, economic, and job creation objectives alongside meeting a wide range of the Sustainable Development Goals (SDGs), particularly SDG12 – Responsible Consumption and Production.<sup>1</sup> As a result, the integration of the circular economy into policy developments at the local, national, and intergovernmental levels is underway, and political leadership that can set a clear pathway will be crucial to accelerate the transition.

# The current state of play of circular economy policy in Africa

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## At the national level...

National governments are increasingly taking a lead in shaping the circular economy policy agenda for Africa. Several African countries have integrated the promotion of circular economy principles at some level in their national sustainable development or 'green economy' strategies, policies, and legislation. For example, in 2019, Rwanda revised its Environment and Climate Change Policy, which calls for the establishment of a legal and institutional framework on the circular economy.<sup>2</sup> In terms of Nationally Determined Contributions (NDCs), both Cameroon and Ivory Coast include the promotion of the circular economy as part of their adaptation commitments.<sup>3</sup> Moreover, work to develop comprehensive overarching national-level circular economy action plans or roadmaps is also emerging, with Senegal and Morocco currently in the process of developing such plans.<sup>4</sup>

African governments are also engaging in national initiatives that are part of international efforts to support the transition to a circular economy, for example with regards to plastics:

In 2019, Ghana joined the international Global Plastic Action Partnership convened by the World Economic Forum (WEF). As part of this, Ghana established the Ghana National Plastic Action Partnership – a national platform for multi-stakeholder cooperation between government, business, and civil society with the aim of setting a regional model for managing plastics and transitioning to a circular economy.

In 2020, a group of stakeholders in South Africa including businesses from the plastics value chain, the government, and NGOs launched the South African Plastics Pact led by GreenCape. The South African

Plastics Pact is part of the Ellen MacArthur Foundation's Plastics Pacts – a network of national and regional initiatives that brings together key stakeholders behind a common vision, tailored to each geography, with an ambitious set of local targets. Lessons learnt and best practices are exchanged across regions to accelerate the transition to a circular economy for plastics.

Rwanda and Peru (with support of Costa Rica, Ecuador, European Union and its member states, Guinea, Norway, Philippines, Senegal, Switzerland) prepared a draft resolution on an internationally legally binding instrument on plastic pollution that they intend to submit for adoption at UNEA 5.2. This would be the formal process that would allow intergovernmental negotiations on a new treaty to begin in 2022.



In terms of circular economy policy development related to specific sectors and resources, three policy areas have risen to the fore in African countries recently:

**1**

Bans on  
single-use items

**2**

Extended Producer  
Responsibility  
(EPR) policies

**3**

Policies  
enabling digital  
transformation

**1**

## Bans on single-use items (e.g. plastic bans)

In Africa, bans and restrictions are being applied to address pollution stemming from single-use items such as plastic bags or packaging. At the national level, there are currently 37 countries with some type of plastic bans, most with a focus on plastic bags.<sup>5</sup> In addition, in 2017 the East African Community (EAC) adopted the regional Polythene Materials Control Bill intended to control the use, sale, manufacturing, and import of polythenes within the region. The impact of the latter has yet to be evaluated.<sup>6</sup> At the national level, these policies have had largely mixed results in curbing the influx of plastic products into the waste stream with various levels of enforcement. This highlights that plastic bans and restrictions alone are insufficient in addressing the main drivers of the plastic pollution problem and need to be complemented by a wider set of policies such as taxes or fees on single-use plastics, as well as deposit-refund schemes (DRS) and extended producer responsibility (EPR) systems.

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## 2

### Extended Producer Responsibility (EPR) policies

These are an emerging policy focus area in Africa, in particular in relation to policies and legislation on packaging or electrical and electronic equipment (EEE).

**EPR for packaging:** EPR policies will play a key role in creating the dedicated, ongoing, and sufficient funding that can support collection, sorting, and recycling at scale. These policies can also ensure the overall economics of the system work.<sup>7</sup> However, it is critical that the design of these schemes fits the local context. In particular, in countries that do not have formal collection systems in place there are questions to be resolved on how to best design and implement EPR schemes, specifically around how to include the informal sector in a way that ensures a just transition that enhances the livelihoods and wellbeing of all those involved. South Africa and Kenya are two countries currently implementing EPR schemes for packaging.<sup>8</sup> In South Africa, besides collection and sorting infrastructure, under the EPR regulation the industry will also be responsible for funding a salary scheme for workers in the informal sector. South Africa's EPR plan also outlines its intention to expand the existing Packa-ching project – a scheme that incentivises people in informal settlements to sort their waste. Other national schemes are currently in development, for example in Senegal.

**EPR for electrical and electronic equipment (EEE):** Kenya, Nigeria, and Rwanda have already drafted national e-waste management policies, in which EPR for electrical and electronic equipment is key. In Kenya, the National Environment Management Authority (NEMA) drafted the 'Environmental Management and Co-ordination (E-waste Management)' regulations. In 2019, 13 countries in Africa had a national e-waste policy, regulation or legislation in place,<sup>9</sup> and the majority of these incorporate the concept of EPR. While EPR for e-waste is a necessary and vital part of the solution, it needs to be supported by a wider set of policies that work towards a circular economy. For example, most end-of-life products, including electronics, are currently manufactured outside of the African continent, which requires local licensing for handling products and creates issues for reverse logistics. Through the transition to circular product design and business models for reuse, repair and remanufacture, and relevant upstreams policies to support this, EPR mechanisms can be further supported. You can read more about the circular economy for electronics in Africa and EPR for e-waste in Nigeria [here](#).

## 3

### Policies enabling digital transformation

Many countries in Africa have and are developing and implementing digital policies – be it with regard to enabling widespread digital access, the long-term management of digital equipment, and/or the use of digital technology. Examples include South Africa's National e-strategy: digital society South Africa (2017), Kenya's National information & communications technology policy (2016), or Rwanda's Smart Rwanda masterplan 2015–2020. Each of these take a different angle, but all of them have the potential to contribute to scaling the circular economy – whether through enabling new business models that support circularity or through supporting the management, maintenance, and repair of equipment.<sup>10</sup> The policies can also support youth employment and skill development.<sup>11</sup> As access to the Internet remains out of reach for most people in the continent (with only 22% of people reporting having access in 2017<sup>12</sup>), supportive policies can include free or subsidised access to the Internet for educational institutions, local and community centres, and public spaces. Kenya has emerged as a leader of digitalisation in Sub-Saharan Africa, due to strategic steps taken by the public and private sector.



## At the city and local government level...

### ...considerable activity is also underway.

By 2050, it is estimated urban Africa will be the second largest consumer of materials. Based on current resource consumption patterns, UNEP estimates that 18 billion tonnes of materials will be needed each year to support transport, housing, water supply, energy, and waste management infrastructure in African cities. There are several city and local governments across the continent that are initiating circular economy pilots and exploring how circular economy principles can be embedded into urban policy and investments, including the development of roadmaps, urban planning, public procurement, economic incentives, and regulation and legislation.<sup>13</sup> For example:

- **The City of Cape Town funds an industrial symbiosis programme**,<sup>14</sup> launched its Green Procurement Action Plan<sup>15</sup> in 2020, and has committed to developing a Circular Economy Action Plan for the city.<sup>16</sup> This would be the first circular economy action plan for an African city
- **Nairobi Metropolitan Services and the Nairobi City County Government launched the Nairobi City County Environmental Sustainability and Circular Economy Awareness Campaign** in June 2021<sup>17</sup> to support the city's ambitions to become a zero-waste city
- **Lagos State organised the Lagos State Roundtable on Circular Economy** in December 2020 and has since committed to embedding the circular economy in the State's 30-year Development Plan as well as developing incentives for circular economy activities<sup>18</sup>





## On a continental level...

**...a number of international institutions including UNEP, UNIDO, UN-Habitat, and the African Development Bank have been working with countries to support and deliver circular economy projects and programmes on the ground.** This work has also included providing the secretariat to national government convenings. For example, UNEP provides the secretariat to the African Ministerial Conference on the Environment (AMCEN), which brings together 44 Environment Ministers from across the continent. In November 2019, AMCEN announced the [Durban Declaration](#) for environmental sustainability that marked the first pan-African policy announcement to include circular economy ambitions for the continent. Meanwhile, the African Development Bank provides the secretariat to the African Circular Economy Alliance (ACEA) – a government-led coalition founded in 2016 by Rwanda, South Africa, and Nigeria

together with UNEP and WEF for best practice exchange regarding circular economy policy development (see case study, page 12).<sup>19</sup> The African Development Bank has also created a funding facility for circular economy projects across the continent.<sup>20</sup>

Also on the continental level, in 2020, the African Union and AMCEN set up an Africa Union Circular Economy Expert Working Group, following the Durban Declaration and a mandate from the African Union Specialised Technical Committee on Agriculture, Rural Development, Water, and Environment. The Expert Working Group's aim is to generate a roadmap for the development of the Circular Economy Action Plan for Africa and promote partnership building in support of the implementation of the African Circular Economy Action Plan.<sup>21</sup>

In addition, organisations such as ICLEI Africa support best practice knowledge exchange

across the continent between cities and local governments, while new organisations such as the African Circular Economy Network (ACEN), are also emerging. ACEN is a network of practitioners established to support awareness-raising and knowledge-sharing between practitioners from across the public and private sector, with the ultimate aim of enabling businesses on the continent to transition to circularity.

Partnerships, knowledge exchange opportunities, and policy developments that reach beyond the continent are also developing, for example through UN processes, bilaterally with the European Union, through exchanges with Latin America and the Caribbean Circular Economy Coalition or the Global Alliance for Circular Economy and Resource Efficiency (GACERE). This international dimension will be key to ensuring a circular economy that can work globally and locally.

# Moving forward...

The transition to the circular economy is multifaceted and can therefore be complex. As the momentum builds, a range of focus areas for policy have emerged from our research. We note only three selected areas here, but further considerations are explored in the other articles across the collection:

1

Comprehensive circular economy policy strategies, including ones to support post-pandemic economic recoveries

2

Participatory, multi-stakeholder policymaking

3

The role of trade policies

## 1

### Comprehensive circular economy policy strategies, including ones to support post-pandemic economic recoveries

Although the circular economy is gaining prominence among local, national, and international policymakers, the majority of reported policy initiatives related to the circular economy remain focused on waste management and are fragmented. As governments are developing policies to support the transition to the circular economy, and particularly in light of the focus on building low-carbon and resilient economic recoveries following the pandemic, it will be critical to agree on a clear direction of travel that reduces fragmentation, includes upstream considerations, and takes into account the global nature of supply chains. This common understanding of the opportunity

can in turn help to guide the development of national circular economy policy strategies that draw across departments to create a whole-of-government approach, are customised to the local context and deliver on economic development objectives, as well as offering solutions to the global challenges of climate change, biodiversity loss, and pollution. These circular economy policy strategies can be developed in a collaborative manner to support upstream and downstream circular economy needs, aligning economic incentives and public investment with a circular economy transition.<sup>22</sup>

## 2

### Participatory, multi-stakeholder policymaking

Effective circular economy policy developments can be strengthened, dependent on and supported by wide-ranging stakeholder engagement from public, private, and civil society. Leadership from the public sector in co-developing visionary economic development policy strategies for circularity will be key.<sup>23</sup> It is also vital that vulnerable and disadvantaged groups, such as informal sector operators working in waste management and secondary materials sectors, are included in the process, in order to develop circular economy policies that result in the fair distribution of benefits. Additionally, campaigns that highlight the economic and environmental benefits of transitioning to a circular economy can increase the support for and participation in circular economy policies by local industries and citizens.

## 3

### The role of trade policies

How trade policies are developed will also play an important role in scaling circular economy opportunities in African countries and globally. Currently, considerable volumes of second-hand products from a range of sectors including clothing, electronics, and vehicles, of varying quality, are exported to African countries. Recent estimates indicate that almost 70% of garments that are donated globally end up on the African continent<sup>24</sup> and 40% of a total 14 million used light-duty vehicles exported from Europe, USA, and Japan between 2015 and 2018 went to African countries.<sup>25</sup>

Improving the quality of this second-hand import market will play a critical role in scaling repair, remanufacturing, and reuse opportunities in African countries, while also reducing the volume of imports that burden waste management. For exporter countries that means ensuring that their exports meet certain standards. Although African countries are not the main global destination for plastic waste, it will be important for governments to keep hazardous and non-recyclable plastic waste out of their markets. Internationally, the recently adopted plastic waste

amendments to the Basel Convention<sup>26</sup> provide one such framework to cooperate across jurisdictions and restrict waste imports. Multilateral dialogues on trade, the environment, and reshaping the Aid for Trade agenda are also ongoing at the World Trade Organisation (WTO).<sup>27</sup>

In addition, the announcement of the African Continental Free Trade Area (AfCFTA) in January 2021 presents a momentous change by unifying the 54 countries into one trade area.<sup>28</sup> As one of the world's largest free trade areas and a 1.2 billion-person market, the African continent can create a regional trade system, which could be developed to have the potential to support the circular economy. For example, trade agreements could include specific provisions for the development of regional standards for secondary materials and goods. Through regional trade, industrial development in African countries could be shaped towards circularity, taking into account the demands of the neighbouring countries. Such an approach could create stronger regional economies and higher value products by harnessing the potential of the continent's domestic resources and people.



## Case study

# The African Circular Economy Alliance (ACEA)

Accelerating the transition to a circular economy

As a relatively young initiative, the The African Circular Economy Alliance (ACEA) brings together member countries and institutions with the ambition of accelerating Africa's transition to the circular economy. Member countries currently include Nigeria, South Africa, Rwanda, Ghana, Burkina Faso, Benin, Sudan and the Ivory Coast and several others have indicated interest in joining including Niger, Senegal, Malawi, Ethiopia, Cameroon and the Democratic Republic of Congo.<sup>29</sup> A range of international institutions and partners are supporting the alliance by offering their expertise as Strategic Partners, Observers, or Working Group Members.<sup>30</sup>

Following a recent study of key opportunities for ACEA to focus on, it intends to support circular economy policy development, leadership, and the scaling of circular economy opportunities across five thematic areas:

1. Converting food waste to organic fertiliser to increase circularity in food systems
2. Recycling plastic packaging to increase circularity within the packaging industry
3. Promoting e-waste collection and recycling to increase circularity in the large and growing electronics sector
4. Promoting the use of mass timber as an input resource for the built environment
5. Recycling clothing and textiles waste into garments for commercial export

In addition, the African Development Bank has secured a EUR 4 million seed funding facility alongside its support of the alliance. Half of this funding will be used to establish the continent's first circular economy incubator, which will provide technical and grant funding to 10-15 start-ups per year. The remaining funding will be used to provide support to national governments in the design of national circular economy roadmaps and policies.



# City of Cape Town Green Procurement Action Plan

Embedding circular economy criteria in public procurement

**Public procurement is a powerful tool that city governments can use to enable the transition towards a circular economy.**

City governments have a large purchasing power, which enables them to create demand and shift the market to new ways of providing goods and services, from the individual product level to the system level. With public procurement accounting for up to 30% of GDP in developing countries,<sup>31</sup> African city governments can accelerate the demand for circularity by embedding circular economy criteria into public procurement policies and tenders for goods and services.

The City of Cape Town's Green Procurement Action Plan<sup>32</sup> is an example of an African city incorporating circular economy principles into its procurement practices.

The City of Cape Town had already committed to green procurement in its Environmental Strategy (2017) and its Supply Chain Management Policy (2017), but the Green Procurement Action Plan, which was finalised in 2020, sets out the specific actions that need to take place to meet these policy commitments. The circular economy is included as one of the Action Plan's Green Procurement Principles and states that:

**“Procurement decisions should ensure products and services take into account the three principles of circularity, namely: design out waste and pollution; keep products and materials in use by purchasing for durability, reuse, remanufacturing, and recycling; and regenerate natural systems.”<sup>33</sup>**

A wide variety of goods and service categories have been identified to develop green procurement guidelines and specifications for, including:

- Clothing and footwear
- Furniture and appliances
- Stationery, printer cartridges, and office accessories
- Events and communication goods, including promotional items and signage
- Various tools and equipment, including firefighting equipment, safety equipment, and traffic signal equipment
- Large capital projects, buildings, and various building hardware, including electrical cables and accessories, lighting and fixtures, and air conditioning

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