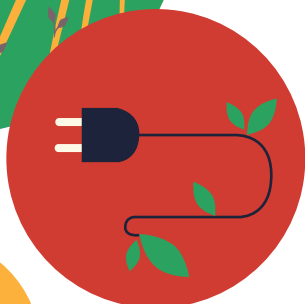


# Guidelines for accelerating the **CIRCULAR ECONOMY TRANSITION IN AFRICA**

January 2023





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## ACKNOWLEDGEMENTS

This report provides the essential guidelines for advancing a circular economy in Africa. The non-prescriptive guidelines were informed by deep dives into the opportunities for a circular economy and the challenges and critical enablers in advancing a circular economy on the continent. This report is accompanied by an assessment of green financing mechanisms for Micro, Small, and Medium Enterprises (MSMEs) in Africa.

The initiative stemmed from recommendations received during the implementation of the SWITCH Africa Green programme, the 17th session of AMCEN where the Environment ministers of Africa recognized the value of the circular economy, and UNEA 5.2 Resolution 11 on Enhancing Circular Economy as a contribution to achieving sustainable consumption and production. During the development of the report, regional, sub-regional and national consultations were held both virtually and in person (June - August 2022) with stakeholders and experts from academia, industry and/or trade associations, technical agencies, national government ministries and institutions, non-state actors, NGOs, development partners and various UN agencies. The findings were validated through a multi-stakeholder regional validation workshop held on 24-25 August 2022 in Accra, Ghana. The guidelines were validated and endorsed by the African Union Commission Expert Working Group (EWG) workshop held on 20-21 October 2022 in Kasane, Botswana. UNEP is grateful to the Agriculture, Rural Development, Blue Economy, and Sustainable Environment (ARBE) of AUC for convening the Expert Working group, members are listed in Annex 2.

Development of the report was coordinated by Rhoda Wachira (Programme Management Officer, UNEP) and Patrick Mwesigye (Regional Resource Efficiency Sub-Programme Coordinator, Africa Office, UNEP), with the overall guidance of Frank Turyatunga (Regional Director, Africa office, UNEP). Administrative support was provided by Sylvia Munuhe (Africa Office, UNEP).

UNEP would like to thank Dalberg, the lead authors of this report. The team was led by Devang Vussonji (Partner, Dar es Salaam), Rym Keramane (Associate Partner, Rabat), Bertrand Assamoi (Associate Partner, Abidjan), and Fadzai Chitiyo-Kunaka (Project Manager, Johannesburg). UNEP appreciates the continued support and collaboration of our partners in the development of this report notably, AUC, UNECA and AfDB.

UNEP is grateful for the financial support provided by the European Union (EU) for the implementation of the SWITCH Africa Green programme.

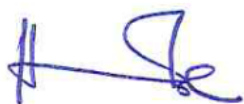
## FOREWORD BY THE AFRICAN UNION COMMISSION

Africa is making steady progress in implementing Africa's 50-year blueprint, Agenda 2063. The African Union Commission (AUC) is tackling sustainable economic development from different angles in its priority areas and flagship initiatives, guided by the First 10-Year Implementation Plan of Agenda 2063.

**However, Africa's current consumption and production practices pose a clear challenge to the sustainability agenda.** The resource-intensive linear economy approach of "take, make and waste" intensifies the continent's environmental challenges, including waste, pollution, and biodiversity loss, among others. Unsustainable waste generation is also creating health concerns. Adopting a circular economy approach in Africa entails taking a much broader lens in addressing these crises beyond waste management, focusing instead on transforming entire value chains, thereby supporting the achievement of Africa's inclusive and sustainable economic growth and development, as outlined in Agenda 2063.

**The 3rd Specialized Technical Committee (STC) on Agriculture, Rural Development, Water and Environment and the 17th Session of the African Ministerial Conference on the Environment (AMCEN) endorsed the circular economy approach.** In response, the Expert Working Group (EWG) was established in 2020 to support the development of an AU Circular Economy Action Plan. The EWG developed a roadmap to guide its activities, including the process of creating the action plan. The AU Circular Economy Action Plan intends to facilitate Africa's transition to a circular model and help set the continent on a competitive and cleaner development pathway. The action plan will set out the continent's key guiding principles, priorities, and intervention areas for an enhanced circular economy approach to development.

The second convening of the EWG in October 2022 embraced the guidelines for accelerating the transition towards a circular economy included in this report, recognizing that they provide much-needed instruction for African countries in their journey to adopt a circular economy and will serve as a valuable resource to build on in the development of the AU Circular Economy Action Plan.



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**Harsen Nyambe Nyambe**  
Director,  
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## FOREWORD BY THE UNITED NATIONS ENVIRONMENT PROGRAMME

The concept of a Circular Economy is not new to the African way of life. At the national level, many African countries have introduced policies related to the circular economy, albeit more focused on waste management. Increased circularity presents significant opportunities for not only economic development but also for dealing with the current and imminent crises that the continent will face. At current growth rates, a quarter of the world's population will be from Africa, putting increasing pressure on the continent's resources.

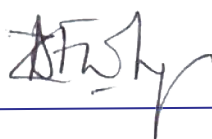
The 17th session of the African Ministerial Conference on the Environment (AMCEN) held in South Africa in November 2019 identified the circular economy as one of the areas where action needs to be taken to promote environmental sustainability and prosperity in Africa. The discussions specifically highlighted the importance of contextualizing the circular economy to the needs and resource profiles of African countries and, on that basis, of developing a regional programme to promote and scale up the circular economy in the region. What is currently missing, and which informs the AMCEN decision, is to scale up and replicate the efforts across the continent in a more organised approach.

Circular economy approaches galvanize and spur green investments, partnerships and continued innovation. To this end, a system-wide approach and behavioural change is required to transition towards a more circular economy. This entails countries having very strong political messaging systems, awareness and capacity development programmes to drive the circular economy agenda. It also requires galvanising public and private financing mechanisms to ensure access to capital for firms of all sizes and a critical mass of people with the capacity to implement the circular economy principles.

UNEP, through the SWITCH Africa Green programme, developed these circular economy guidelines as part of efforts to support countries to transition into a circular economy and as a major step towards the realization of the AUC's Continental Circular Economy Action Plan. The guidelines will enhance and compliment circular economy activities in the region with the African Union Commission, the African Circular Economy Alliance (ACEA), the African Development Bank (AfDB), the United Nations Economic Commission for Africa (UNECA) and other national and regional partners in promoting circularity in Africa.

It is estimated that within the next 30 years, the amount of waste we produce globally will outpace population growth by more than double. Circular economies are one of the most transformative solutions available to us. They directly tackle the biggest drivers of the global waste crisis - the unsustainable levels of consumption and production we see today. The guidelines identify several priority sectors, including agriculture, manufacturing, tourism and integrated waste management. In addition, five thematic focus areas (built environment, electronics, food systems, fashion and textiles, and packaging, mainly focusing on plastics) are highlighted, and these are interrelated with the four priority sectors. Notably, by adopting and implementing these guidelines, Africa will be at the fore front of executing the UNEA 5/14 Resolution to End Plastic Pollution from the terrestrial and marine environment.

We hope the guidelines will be utilized as a framework to help African countries understand how a transition to a circular economy can take shape. The guidelines outline the role of various stakeholders across the region in supporting the continent to make this transition. We encourage African countries to adopt and tailor these guidelines to their countries' context and extent of adoption of a circular economy.



**Frank Turyatunga**

Director and Regional Representative for Africa,  
UN Environment Programme (UNEP)



## FOREWORD BY THE UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA

African economies need to grow to create jobs and lift around 460 million people out of poverty still living below the extreme poverty line of \$1.90 per day. The challenge is to meet the needs of all people within the means of our planet. That is why it is now widely recognized that to tackle this challenge, we must transform our systems of consumption and production. In the words of the United Nations Secretary General, Antonio Guterres, “It is time to flick the ‘green switch’. We have a chance to not simply reset the world economy, but to transform it.” A circular economy is integral to such a transformation.

Adopting circular economy approaches in many of Africa’s priority development sectors will drive the transformation of economies in the region to realize inclusive, green, and climate-resilient development. For example, boosting sustainable industrialisation is a top policy priority for Africa to meet the objectives of Agenda 2063 and the 2030 Agenda. Green and circular economy approaches will be key to realizing sustainable industrialisation in a global and regional economy constrained by growing resource scarcity, climate change and driven by competitive supply chains and complex supply and demand dynamics.

In the energy sector, estimates by the International Energy Agency (IEA) are that reaching the goals of the Paris Agreement would require a fourfold increase in critical mineral requirements for clean energy technologies by 2040. To hit net zero globally by 2050 through an even faster transition would require six times more mineral inputs in 2040 than today. To meet this surge in demand, the mining of critical minerals and the manufacture of green energy technologies will need to scale up circular economy approaches, including eliminating waste from mining and recycling batteries.

How should Africa pursue its green and circular economy transition? ECA’s recent analyses have contributed to enriching the pool of options of policies and interventions needed to unlock the potential of the private sector to drive green growth and job creation and to build forward for an African Green Recovery from COVID-19. Such policy options include scaling up green and innovative financing, particularly for micro-, small- and medium-scale enterprises. As an integral part of this, it is important to mobilize financing through green bonds and debt for green investment swaps to support this transition. Other key policy options and interventions include developing green public procurement strategies to incentivise private sector investments to deliver green and sustainable commodities and services and strengthening policies and plans for circular and green economy transition, including policies and plans for the management of plastics.

These regional Guidelines to Accelerate the Transition Towards a Circular Economy in Africa reinforce the work of ECA and its partners. Several guidelines presented in this document are directly applicable and will support efforts to operationalize many recommendations emerging from the Commission’s analyses. ECA is confident that together, the set-out guidelines will support efforts and enable circular economy to take root at continental, regional, national and local levels as well as among business entities. ECA is fully committed to working with partners within the framework of the AUC-led Regional Expert Working Group to scale up support, including the implementation of these guidelines, to drive the transition to a green and circular economy in Africa.



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# EXECUTIVE SUMMARY



# EXECUTIVE SUMMARY

## THE CONTEXT FOR ADVANCING A CIRCULAR ECONOMY IN AFRICA

**The population of Africa is forecast to double its 2017 levels by 2050, increasing pressure on the continent's already stretched resources.**<sup>1</sup> Between 2015 and 2035, Africa will annually add 22.5 million new workers to the labour force and jobs will need to be created to sustain the economy.<sup>2</sup> The region's growing young and middle-class population will drive a higher standard of living and greater consumption including demand for food, decent-quality housing, and infrastructure — particularly in urban areas — to accommodate these needs.<sup>3</sup> There is an opportunity for Africa to adopt a circular economy to achieve “inclusive and sustainable economic growth and development”<sup>4</sup> in line with Agenda 2063 of the African Union Commission (AUC).

**Creating and optimising resource loops along value chains could help to meet the material needs of growing populations and maintain sustainable rates of per capita primary resource use.** A circular economy is defined as a holistic approach to socio-economic growth that maximises resource efficiency through promoting sustainable production and consumption practices. It involves rethinking how products are designed to extend product life and value, and reusing, repairing, or re-purposing end-of-life materials in manufacturing processes to reduce and ultimately eliminate waste. Across Africa, several sectors and thematic focus areas with high potential for circularity have been identified. Sectors such as agriculture (and broader food systems), manufacturing (including electronics, fashion and textiles, and packaging), tourism (including the built environment), and integrated waste management are making the most strides in increasingly advancing circular business models. Collaboration between governments, the private sector, experts, and financiers is required to replicate these business models at scale.

**Countries across the region are at various stages of adopting circular processes in their production and consumption practices.** Some countries do not have a holistic understanding of circular economy and its benefits for their economies. They have a fragmented implementation approach primarily anchored on integrated waste management initiatives, with limited exploration of circular economy opportunities in other sectors. They therefore require technical assistance to establish policies that have a clear vision aligned with national priorities, regulatory frameworks to advance a circular economy, and support to achieve sponsorship for implementation from the highest level of the state. Other countries are establishing national policies or laws that can advance a circular economy, with some national support (personnel and funding) to drive specific sector-wide initiatives aligned with national goals. However, countries at this stage of transition to a circular economy typically face challenges in promoting a private sector-led circular economy that can scale new business models with adequate growth capital support from private financial institutions. In other instances, whilst regulations may be in place, enforcement mechanisms are inadequate, with limited capacity to monitor progress on achieving national circular economy objectives.

**Regardless of their stage, it is critical for countries to ground their vision for a circular economy in the realities and specificities of their socio-economy context.** For example, when a sector primarily relies on imports, product substitution may be easier to pursue than re-design as a way to achieve circularity. Local content and innovation are core to a circular economy process. Box 1 provides select examples of such innovations across the continent. Box 1 provides select examples of such innovations across the continent (see box 1 in Annex III).

1. Worldometer, Africa Population (LIVE) 2. One.org, The African Century, 2017 3. World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021 4. African Union Commission, Agenda 2063: The Africa We Want., 2022

**Overall, African countries still face many challenges that hinder their ability to advance circular economy initiatives across different economic sectors. This report has identified five main challenges in advancing a circular economy in Africa, namely:**

- Lack of a holistic approach to adopting a circular economy which reflects opportunities in all sectors beyond waste management
- Limited awareness and communication of the benefits of a circular economy
- Market entry barriers for innovation and growth of circular economy business models developed by the private sector
- Limited coordination of circular economy strategies and action plans, as well as little monitoring of circular initiatives
- Insufficient and misaligned financing mechanisms and funding options

## **THE PURPOSE OF THE CONTINENTAL GUIDELINES**

African countries have been driving policy transitions to support circularity for years. In 2019, the ministers of environment from all African countries committed to advancing circular economy to spur sustainable socio-economic development and job creation whilst reducing waste, pollution, and the reliance on natural resources during the 14<sup>th</sup> session of the African Ministerial Conference on the Environment (AMCEN) held in Durban, South Africa.<sup>5</sup> Following this conference, AUC and AMCEN set up an African Union Circular Economy Expert Working Group seeking to draft a continental action plan to enable an integrated approach towards circularity.<sup>6</sup> In March 2022, the United Nations Environment Assembly (UNEA) adopted a resolution encouraging member states to integrate circularity into national, regional, and continental development plans, and create a conducive environment to increase access to affordable green financing and sustainable markets, particularly to micro, small, and medium-sized enterprises (MSMEs). Also in March 2022, the African Development Bank (AfDB) launched the Africa Circular Economy Facility (ACEF) to provide: (1) institutional capacity building to strengthen the regulatory environment for circular economy innovations and practices; (2) support to the private sector through a business development program; and (3) technical assistance to the African Circular Economy Alliance (ACEA). ACEA is a government-led coalition to advance a circular economy that was conceived in 2016 at the World Economic Forum on Africa in Kigali, Rwanda. It was formally launched at COP 23 in Bonn, Germany by Rwanda, South Africa, and Nigeria.<sup>7</sup> Many other initiatives, such as SWITCH Africa Green which supported seven countries to adopt sustainable consumption and production practices, have been implemented to promote a circular African economy.

**The transition to a circular economy must primarily be led by the private sector, with regional bodies and national governments providing the appropriate enabling environment to sustain the transition.**

These continental guidelines seek to accelerate the transition towards a circular economy in Africa through promoting coherence and collaboration amongst all African countries and the different Regional Economic Communities (RECs), thus establishing a common and suitable enabling environment across the continent to advance a circular economy.

5. AMCEN, Draft Durban Declaration for environmental sustainability and prosperity in Africa, 2019

6. Ellen MacArthur Foundation, Circular economy in Africa: examples and opportunities Public Policy, 2021

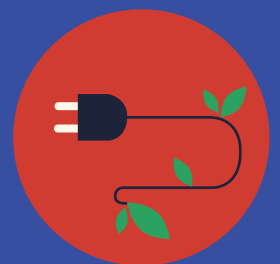
7. World Economic Forum, Transforming African economies to sustainable circular models, 2020

**Five non-sequential and mutually reinforcing guidelines have been identified as essential for advancing a circular economy. These guidelines, discussed in Section 5 of this report, are:**

- Guideline 1: Make the case for the circular economy by increasing awareness on its significance for sustainable inclusive development in Africa
- Guideline 2: Establish a roadmap for the development and adoption of circular economy policies and action plans, as well as the required governance structures to ensure that national, regional, and continental policies on circular economy are complementary
- Guideline 3: Strengthen market demand for circular economy products by providing effective incentives for firms to consider the impact on natural capital in their decision-making
- Guideline 4: Increase access to financing for circular business models, including risk capital, by supporting financial innovation and entrepreneurial skills development
- Guideline 5: Establish sector-specific priorities and policies, and ensure their coherence across countries and RECs



# I. INTRODUCTION



# INTRODUCTION: THE IMPORTANCE AND OPPORTUNITIES OF A CIRCULAR ECONOMY IN AFRICA

**Africa has a rapidly growing population, which will increase pressure on the continent's already stretched natural resources.** The population is forecast to reach approximately 2.5 billion by 2050, which will double the 2017 levels.<sup>8</sup> The youth population is expected to account for 51% of the total population during that same period.<sup>9</sup> Between 2015 and 2035, Africa will on average have 22.5 million new workers entering the labour force annually and jobs will need to be created to sustain the economy.<sup>10</sup> The region's fast-growing young and middle-class population is expected to drive a higher standard of living and greater consumption including demand for food, decent-quality housing, and infrastructure – particularly in urban areas.<sup>11</sup> This presents an opportunity for Africa to adopt the circular economy to achieve, “inclusive and sustainable economic growth and development”<sup>12</sup> as affirmed in Agenda 2063 of the AUC. A circular economy also has socio-economic benefits for the private sector (see Figure 1), mainly on meeting new sustainability requirements being demanded by consumers and unlocking new domestic and international markets.

Figure 1: Non-exhaustive breakdown of socio-economic benefits of a circular economy to the private sector

THEME	DESCRIPTION	CASE EXAMPLE
Business sustainability	The climate crisis and loss of natural capital have highlighted the urgency and need for businesses to adopt greener business practices. Hence, sustainability is becoming a determinant of business competitiveness.	In Sub-Saharan Africa, over 70% of the population depends on forests and woodlands for their livelihoods. Over 50% of total global GDP is estimated to be nature-dependent.
Alignment with consumer preferences	Growing consumer awareness of the importance of transitioning to sustainable business practices such as the circular economy has direct implications for the businesses and/or products they choose to support.	South African consumers are increasingly boycotting brands they deem unsustainable. In France, 60% of adult online buyers prefer to purchase eco-friendly products. In metropolitan China, 82% of online shoppers have this similar preference.
Access to finance	Investors and Development Finance Institutions are gradually using Environment Social Governance and sustainable development as key criteria in investment decision-making. Hence, businesses must align their objectives and activities with the investment mandates of the providers of capital.	Sanlam Investments partnered with Robeco to expedite the integration of Environment Social Governance criteria in Sanlam's investments. This deal will expand Robeco's activity in South Africa and the continent. To date, 97% of Robeco's EUR 201 billion AUM are managed under assets with integrated ESG policies.
Access to markets	The global regulatory environment is integrating sustainable development and circular business practices. Businesses seeking to operate in both domestic and international markets must therefore proactively comply with these requirements.	The European Green Deal introduced in 2019 to support the EU's goal to reduce Greenhouse Gas Emissions and be carbon neutral by 2050 requires suppliers to the EU to adhere to the market's sustainability standards.

Sources: African Law & Business, The continued rise of investor interest across Africa, 2022; Robeco, 2022; Funds Global MENA, Robeco signs Africa ESG deal with Sanlam, 2020; CBI, The EU Green Deal – How will it impact my business, 2021; World Economic Forum, Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy, 2020; UNEP, Our Work, 2022; Forrester, Global Consumers Drive The Market Toward Sustainable Retail, 2021

**A circular economy is a system-wide approach to adopting nature-positive practices that eliminate waste and maximize resource efficiency and value to develop strong and resilient economies. It is based on three principles<sup>13</sup>:**

- **Eliminating waste and pollution:** Designing out waste and pollution looks at revealing and removing the negative impacts of economic activity that cause damage to human health and natural systems.
- **Maximising resource efficiency:** Keeping products and materials in use focuses on activities that preserve value in form of energy, labour, and materials.
- **Promoting sustainable production and consumption:** Regenerating natural systems discourages the use of non-renewable resources and preserves or enhances the renewable resources.

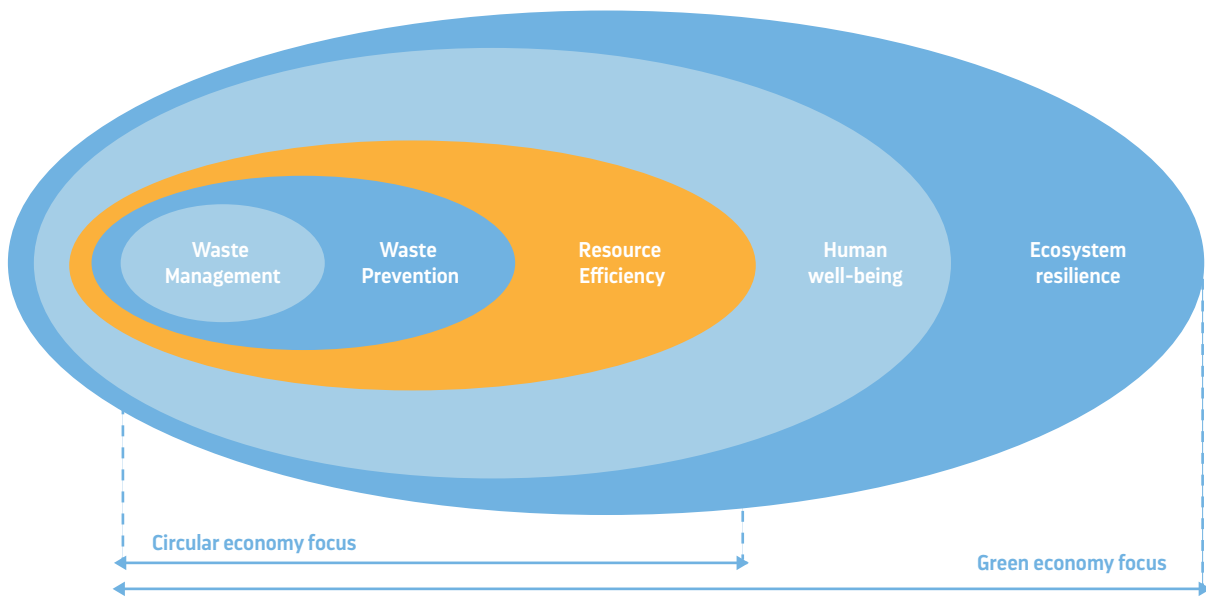
8. Worldometer, Africa Population (LIVE) 9. UN, The World Youth Report – Youth and the 2030 Agenda for Sustainable Development, 2018

10. One.org, The African Century, 2017 11. World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021

12. African Union Commission, Agenda 2063: The Africa We Want., 2022 13. Ellen MacArthur Foundation, Circular Economy Introduction

As demonstrated by the figure below, a circular economy is fully attained once the three principles have been implemented. Countries would first take the step to design out waste, then look at preventing waste from occurring at all during production and manufacturing, and ultimately ensuring efficiency by promoting use of renewable resources from the bottom to the top of the chain.

Figure 2: The conceptual background of circular economy



Source: European Environment Agency

**Circular economy and green economy are two approaches to achieving inclusive and sustainable development.** There are different perspectives on the interrelation between a circular economy and a green economy. On the one hand, the two are viewed synonymously; on the other, a circular economy is viewed as a subset of a green economy. The United Nations Environment Programme (UNEP) defines a green economy as follows:

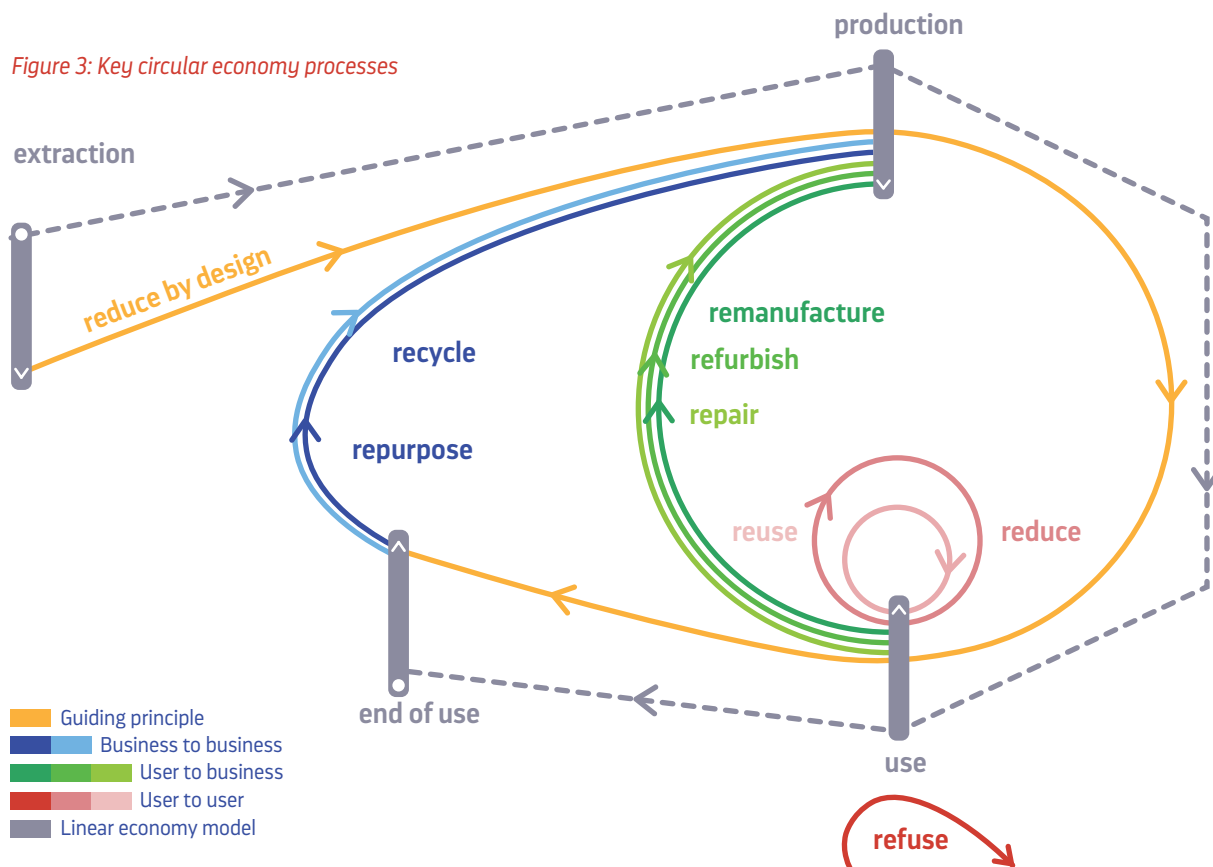
*A green economy is a low-carbon, resource efficient, and socially inclusive economy where income and employment growth are driven by public and private investment into economic activities, infrastructure, and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.*<sup>14</sup>

**A circular economy can therefore be viewed as a first and crucial step to achieving a green economy.**

**Circular processes can be grouped into four categories as outlined in Figure 3:**

- Reduce by design: reducing the amount of material used, particularly raw material, should be applied as an overall guiding principle from the earliest stages of product and service design
- From a user-to-user perspective: refuse, reduce, and re-use
- From a user-to-business intermediary perspective: repair, refurbish, and remanufacture
- From business-to-business: repurpose and recycle

Figure 3: Key circular economy processes



Source: UNEP circularity platform, 2022

For these guidelines, a circular economy is defined as a holistic approach to socio-economic growth that maximises resource efficiency through promoting sustainable production and consumption practices. It involves rethinking how products are designed to extend their useful life and value, and reusing, repairing, or repurposing end-of-life materials in manufacturing processes to reduce and/or eliminate waste

**Box 1** provides select examples of such innovations across the continent.

#### Box 1: Circular economy innovations across the continent

##### Safi Organics' fertilisers, Kenya

Safi Organics has introduced a solution to decentralise fertiliser production since most fertilisers in the African market are produced at a large scale in centralised facilities to then be imported to rural areas, which results in increased costs that farmers incur. Safi Organics produces organic fertilisers locally by using the residue of crops after harvest to make a product called Safi Sarvi. This product boosts crops by 30% and restores degraded land over time by restoring their soil pH and reducing plant toxicity.

Using the organic fertilisers has rejuvenated more than 7,000 acres and 60,000 tons of waste has been recycled to make these fertilisers to date. Safi Organics has impacted the lives of more than 10,000 farmers since its inception and it looks to expand its operations to increase its reach.

Source: Safi Organics. *Atlas of the Future, The fertile path to regenerative farming*, 2021. *SciTech Daily, Safi Organics: A Life-Changing Fertilizer for Rural Farmers in Kenya*, 2022

##### Cairo's informal waste collectors (Zabbaleen), Egypt

Cairo's waste collectors (often referred to as the Zabbaleen) have collected the city's waste from door-to-door for more than 80 years, and currently collect 50-60% of the city's waste. The Zabbaleen include over 50,000 waste processors, 150,000 collectors, sorters, traders, and truck drivers and they repurpose/recycle 80% of everything they collect. To use their services to fight the plastic problem, while improving rewarding their labour, a new government-backed scheme to recover packaging has been launched. Under this scheme, a reverse credit approach will be used whereby companies responsible for producing plastic waste pay the collectors, sorters, traders, and processors electronically for each consignment that is collected and sent for recycling. Through its 2020 Waste Management Law, the Ministry of Environment will also offer social protection to Egypt's informal garbage collectors.

Source: *World Economic Forum, How tech is helping Egypt's informal recyclers build a circular economy*, 2021



**Sugar Corporation of Uganda Limited, Uganda**

The Sugar Corporation of Uganda Limited (SCOUL) is one of the leading manufacturers of quality sugar in Uganda. It has worked on improving the use of its resources to maximise their lifetime. Originally, its bagasse, or the residue left after extracting juice from the sugar cane, was wasted but now it is used as a source of fuel to the boilers to generate steam and electrical power for internal use. Additionally, its molasses that used to be sold to local distillers as waste are now used in the dilution, fermentation and distillation processes in the distillery to make other products such as dry ice and even bi-compost manure that is fed back into the sugar cane fields.

*Source: UNEP/ Muwonge Timothy, Implementation of circular economy policies in the manufacturing sector, A case study of Sugar Corporation of Uganda Limited, accessed in 2022.*

**Western Cape Industrial Symbiosis Programme, South Africa**

According to the Western Cape Government, the Western Cape Industrial Symbiosis Programme (WISP) develops mutually profitable links between companies from all industrial sectors so that underutilised resources such as energy and water and/or materials from one company can be recovered, reprocessed, and re-used by others. This strategy has several economic and environmental benefits.

By 2020, the programme had diverted more than 104,900 tonnes of waste from landfill, while creating 218 economy-wide jobs, mainly in SMEs. By providing many new business opportunities, WISP has generated over ZAR 120 million (USD 8.50 million) in additional revenue, cost savings, and private investments.

*Source: Western Cape Government, Western Cape Industrial Symbiosis Programme, accessed 2022. Ellen MacArthur Foundation, Cape Town, Africa's first industrial symbiosis programme case study, 2020.*

**Coliba Africa, Côte d'Ivoire**

Coliba is a social enterprise that specialises in the recycling of plastic waste. Using technology, Coliba has a web, mobile, and SMS platform that connects households and businesses with Coliba-affiliated waste pickers. The company is in the process of building a training centre which will enable the full integration of 6,000 informal waste collectors into the value chain. Coliba already has 16 operational kiosks in the city of Abidjan and plans to expand to other places. It has processed more than 300 metric tonnes of plastic waste and collected plastic bottles from more than 4,500 monthly active users on its mobile app, recycling up to 2 metric tonnes of plastic a day.

*Source: Coliba Africa. World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021.*

**Eco-dôme Maroc, Morocco**

Eco-dôme Maroc is an ecological construction company of houses and infrastructure for the development of rural communities by exploiting local resources, in particular natural earth. They highlight the Moroccan heritage of earthen construction with an adaptation to the modern to create buildings that are both traditional and offer the various recent conveniences. Their constructions include Agouim Culture Centre, built in collaboration with Oum Qora local association, and the Enactus association of the Hassania School of Public Works. The Centre seeks to provide a place where 2,500 students in the region can practice extracurricular and intellectual activities even in the extreme climatic conditions.

*Source: Eco-dôme Maroc*

**Ghana Bamboo Bikes Initiative, Ghana**

The Ghana Bamboo Bikes Initiative manufacture high quality bamboo bikes from the abundant raw bamboo materials available in Ghana. These bikes are suitable for both export markets and road conditions in Ghana, and affordable to the poor. As the frames are light and stable, the bikes are suitable for rough terrain and for carrying large farm loads, passengers, water and even patients.

The Ghana Bamboo Bikes Initiative provides bikes that are a low carbon means of transport, while providing employment to women and the youth. For each bike sold, the Initiative also donates a bike to a child in school in the rural areas, to help them more easily reach school. Additionally, for every bamboo cut down to make the bikes, the Initiative plants ten more which directly contributes to the environment since bamboos absorb carbon.

*Source: Ghana Bamboo Bikes Initiative. United Nations for Climate Change, The Bamboo Bikes | Ghana, accessed 2022. World Economic Forum, Meet the woman making cycling even more sustainable in Ghana, 2020.*

**In Africa, interventions to reduce single-use plastic products and enhance integrated waste management have been the main drivers of the transition to a circular economy.**

On average, only 4% of municipal solid waste is currently being recycled in Africa.<sup>15</sup> Even so, Egypt, Nigeria, South Africa, Algeria, Morocco, and Tunisia are expected to double their imports of plastics by 2030.<sup>16</sup> In response to the threat of increased plastic waste, African countries are exploring opportunities to reduce and re-use plastics through Extended Producer Responsibility (EPR) programs.<sup>17</sup> There is also ongoing research and initiatives on the use of non-biodegradable waste such as plastics to create alternative building materials to replace the cement and steel traditionally used in construction. Recently, South Africa<sup>18</sup> and Kenya<sup>19</sup> launched national Plastics Pacts and are members of the Plastics Pact Network<sup>20</sup> aiming to strengthen public-private collaboration to facilitate the transition towards a circular economy across the entire plastic value chain. Mauritius is establishing waste collection centres where households and MSMEs can dispose of waste items such as paper, plastics, metals, construction and demolition wastes, waste oils, e-waste, and used tyres. Recyclers can then collect this waste and use it as inputs in production.<sup>21</sup> In Nigeria, Lagos state<sup>22</sup> has various Integrated Waste Management Initiatives co-funded by different international organisations including UNEP.<sup>23</sup> Despite these efforts, only 44% of solid waste in Sub-Saharan Africa is collected and 8% is recycled and/or composted.<sup>24</sup>

In some instances, the huge focus on waste recycling has detracted countries from identifying and taking advantage of the range of opportunities such as product design and remanufacturing across different sectors to derive the full socio-economic benefits of a circular economy. Box 2 highlights some socio-economic benefits of a circular economy for Ghana and Nigeria.

15. UNEP, Africa – waste management outlook: summary for decision makers, 2018 16. Babayemi, J.O., Nnorom, I.C., Osibanjo, O., et al., Ensuring sustainability in plastics use in Africa: consumption, waste generation, and projections, *Environ SciEur* 31, 60, 2019 17. EPR schemes for packaging are already being implemented in a number of countries including Senegal, the Gambia, and Zimbabwe, and are currently in development in Kenya and South Africa. 18. The South African Plastics Pact was launched in January 2020 with the support of the UK's Waste and Resources Action Programme. It aims to increase job creation in the country's plastics collection and recycling industry while also exploring new business models in plastic design and reuse. The Pact was founded by Coca-Cola Africa, Danone, SPAR, and Unilever, and partners with the World Wide Fund for Nature South Africa and South African Plastics Recycling Organisation and has ambitious targets to drive significant change by 2025. 19. The Kenya Plastics Pact was launched in October 2021 and is led by Sustainable Inclusive Business Kenya to integrate the plastics value chain and create collaborative solutions to plastic waste and pollution, with four ambitious targets to achieve significant change by 2030. 20. Ellen MacArthur Foundation, The Plastics Pact Network, 2022 21. Association for the Protection of the Environment and Consumers, Civic Amenity Centre, 2020 22. Lagos state has 16 waste and recycling companies and is setting the national standard for good waste management's practices. 23. Stakeholder consultations, 2022 24. Chatam House, Circular Economy Earth: Municipal Solid Waste, 2022

Box 2: Examples of the socio-economic benefits of the circular economy in Ghana and Nigeria

For Ghana and Nigeria, adopting a circular economy in sectors such as agriculture, construction, and integrated waste management could generate the following benefits by 2030:

#### Ghana

- **1.9 billion EUR added to GDP** – the equivalent to a 1.9% increase compared to business-as-usual levels
- **274 million EUR reduction in imports**, thereby improving the country's balance of trade
- **Enhanced agriculture value chain** to reduce post-harvest losses
- **61,000 additional jobs created (0.3% increase)** as compared to remaining in a linear economy
  - o The highest job creation potential is found in sectors such as agriculture, education, waste management, financial services, and telecommunications among others

#### Nigeria

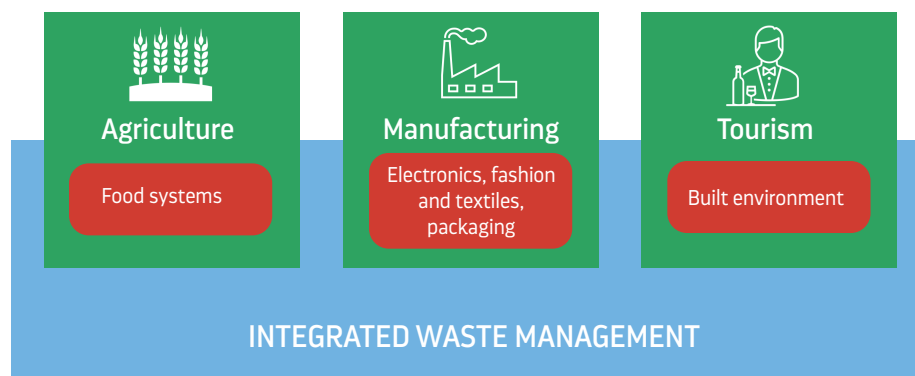
- **15.2 billion EUR added to GDP** – the equivalent to a 3.2% increase compared to business-as-usual levels
- **4.4 billion EUR reduction in imports**, thereby improving the country's balance of trade
- **Enhanced agriculture value chain** to reduce post-harvest losses
- **1.6 additional jobs created (3.9% increase)** as compared to remaining in a linear economy
  - o The highest job creation potential is found in sectors such as agriculture, manufacturing, waste management, and retail

Sources: 1. Hemkhaus, M.; Ahlers, J.; Kumi, E.; Boateng, P.; Hack, J.; Bauer, T.; Smit, Tycho; Akerji, L.; Van Hummelen, S. & McGovern, M. (2020) *Circular economy in the Africa-EU cooperation – Country report for Ghana. Country report under EC Contract ENV.F2./ETU/2018/004 Project: "Circular Economy in Africa-EU cooperation"*, Trinomics B.V., ACEN, adelphi Consult

**Although integrated waste management was commonly seen as the entry point to adopting circular economy principles, many other economic sectors have been identified as having high potential for circularity in Africa.**<sup>25</sup> A range of industries offers immediate opportunities for increased circularity in sectors to transform the economy, create jobs, and protect the environment. During the implementation of the SWITCH Africa Green programme, countries identified four sectors as being critical to accelerate the transition towards a green economy in Africa. These priority sectors are agriculture, manufacturing, tourism, and integrated waste management.<sup>26</sup> The African Circular Economy Alliance (ACEA) conducted a study that identified five thematic focus areas with high potential for circularity in Africa.<sup>27</sup> These thematic focus areas (built environment, electronics, food systems, fashion and textiles, and packaging) are interrelated with the four priority sectors. Figure 4 summarises the main areas where circularity presents high-value opportunities for public and private sector entities across the region.<sup>28</sup> Some key circular economy business opportunities in these sectors are explored in Section 5 (Opportunities, challenges, and best practices to advance a circular economy in select sectors).

25. Integrated waste management is a cross-cutting focus area that compliments efforts to reduce, reuse and recycle by-products from the waste generated from the agriculture, manufacturing, and tourism sectors 26. Switch Africa Green, accessed 2022 27. World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021 28. The ACEA thematic focus areas are discussed in more detail in: World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021

Figure 4: Mapping of high potential SWITCH Africa Green sectors and ACEA thematic focus areas



Specifically, across these three sectors, regional alliances driving circularity largely focus on: i) creating sustainable food systems that address national or regional food security challenges<sup>29</sup>; ii) re-cycling/up-cycling used clothing and promoting the re-use of textile products; and iii) re-designing the built environment to adopt more sustainable resources in construction and improve energy efficiency in a new architecture. However, when and where African economies primarily rely on imported products, they are not involved in the design decision-making process for the products they consume. In these cases, they cannot readily address re-design solutions or enact policies that lower certain types of waste (e.g., e-waste, single-use plastic packaging, and automotive waste) beginning from pre-production choices.

The transition to a circular economy requires collaborative effort between governments, industry associations, private sector players, and financiers to create a viable enabling environment. Taking advantage of circular economy business opportunities requires a holistic system transformation, with participation from multiple stakeholders at national, regional, and continental levels to raise awareness and create financing options and trading markets for circular products. Governments have a critical role to play in developing legislation and policies to provide a clear definition and purpose of a circular economy. Academia and the private sector are crucial in researching, innovating, and prototyping new circular business models that can be attractive investment options for private investors. These actors are also well-positioned to amplify the utilization of disruptive technologies such as Artificial Intelligence (AI), Machine Learning (ML) and Robotics in the circular economy, performing tasks such as detecting and efficiently sorting recyclable waste. Additionally, current public and private financing mechanisms need to be adapted to suit the needs of circular economy business models. Financing mechanisms also need to be cognizant that MSMEs are often leading the innovations in the circular economy. This includes considering financing opportunities for women in particular, who make up a significant portion of MSMEs in the region. With 50% of the African (non-agricultural) labour force, women are more likely to be self-employed than in other continents. However, financial institutions fail to adequately serve 70% of women-owned SMEs in developing countries.<sup>30</sup> Box 4 summarises the role of key stakeholders to coordinate efforts and accelerate the transition towards a circular economy.

29. For example, our current food systems produce about 50% of the total waste generated in Africa. There is an opportunity to convert food waste into organic fertiliser. Such regenerative agricultural practices alone could create over 1 million full-time jobs by 2030. Source: World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021<sup>30</sup>. World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021

### Box 3: Women in the circular economy

**Women are vulnerable to the effects of unsustainable consumption and production patterns in many ways.** This includes their high dependence on natural resources for subsistence. Women also disproportionately engage in unpaid work related to waste management, potentially exposing them to harmful products and chemicals.

The circular economy will offer opportunities for women across a range of sectors. For instance, women produce 70% of Africa's food but have significantly less productivity and resulting economic gains than men due to factors such as inequitable access to inputs. Circular agriculture inherently requires fewer inputs than conventional agricultural practices and can help lower the barrier for women. The circular economy also has job creation potential in sectors that are already saturated with women, such as fashion and textiles.

**However, gendered impacts in a transition to a circular economy need to be considered.** Women's current participation in sectors relevant to the circular economy varies, but it is likely to be informal and concentrated in lower-paying roles. Circular processes such as remanufacturing require technical skills. However, women are underrepresented in STEM fields in Africa, hindering their ability to take advantage of circular jobs. The tourism sector in Sub-Saharan Africa comprises a 69% women labour force and has the highest number of women in high-level leadership and management positions compared to other sectors. However, women still occupy fewer positions than men, at only 29% senior management level and 17% board seat level. Women are often taking on the roles of artisans and retail vendors or working for family businesses and are paid poorly or not at all. In Integrated Waste Management, women are concentrated in the lower skill and pay positions as informal waste pickers or sorters of recyclables. Gender discrepancies also manifest as women are unlikely to handle high-value recyclables or get compensated equitably for them and face greater exposure to health risks, and even morbidity, due to handling waste in unsafe environments. For example, over 65% of the individuals killed in the collapse of the Koshe garbage landfill in Ethiopia in 2017 were women and over 75% of those killed in the Hulene garbage landfill collapse in Mozambique in 2018 were also women.

**There is an opportunity for women to play a leading role in advancing the circular economy in Africa, if a gender-responsive approach is taken.** Women play a significant role in influencing household consumption habits and household waste disposal. In Ghana, women are responsible for 70–80% of consumer purchasing decisions in households. Women are also environmentally conscious, in some cases, more than men. In East Africa, women are more likely than or equally as likely as men to adopt climate-smart agricultural practices when they have the knowledge. Such factors indicate that women can be the entry point of efforts to instil behavioural changes in support of Africa's transition to a circular economy.

*Sources: OECD, Gender and the Environment: Building Evidence and Policies to Achieve the SDGs, 2021; World Economic Forum, Women grow 70% of Africa's food. But have few rights over the land they tend, 2018; UN Department of Economic and Social Affairs (DESA), UN/DESA Policy Brief #105: Circular agriculture for sustainable rural development, 2021; OECD, Gender-specific consumption patterns, behavioural insights, and circular economy, 2020; UN Women and AfDB, Green Jobs for Women in Africa, 2021; UN World Tourism Organization (WTO), Global Report on Women in Tourism, 2020; World Economic Forum, Five Big Bets for the Circular Economy in Africa, 2021; The Conversation, Women bear the brunt of Africa's urban disasters, such as the collapse of landfill, 2018; Ghana National Plastic Action Partnership, A Roadmap for Radical Reduction of Plastic Pollution in Ghana, 2021; Twyman et al., Adaptation Actions in Africa: Evidence that Gender Matters – Working Paper No. 83, 2014*

## Box 4: The role of different actors in advancing a circular economy



**Governments\***: Establish appropriate policy and regulatory environments to promote the transition to a circular economy, facilitate dialogue and coordinate national interventions across a range of stakeholders (research organisations, civil society organisations (CSOs), private sector, etc.), increase awareness and education on circular economy, and promote sustainable consumption and production including sharing, re-using, recycling, and eco-labelling.



**Businesses, industry associations, and trade unions**: Develop and invest in new business models, products, and services based on circular economy principles and/or industrial symbiosis, cooperate with regulatory and government entities in implementing initiatives, and aid in scoping visions for circularity at the continental, regional, national, and municipal levels. Also, work with governments and MSMEs to implement national circular initiatives and provide business development support to MSMEs to enable them to create commercially viable projects and access commercial financing instruments and consumer markets.



**Research organisations, cluster organisations, and universities**: Establish new training courses and academic curricula to embed circularity in the design of products and services, attract investments in research and development (R&D) for new and circular technologies, and create mass awareness on sustainable consumption, production, and procurement practices for circular goods and services.



**CSOs and non-governmental organisations (NGOs)**: Lobby for specific regulations or policies (e.g., integrated industrial policies aligned with sustainable national development goals), foster technological innovation for efficient circular industrial processes, invest in R&D for clean energy and energy-saving technologies, support environmentally-friendly and sustainable practices (e.g., recycling, eco-mobility,<sup>31</sup> and sustainable lifestyles), and collaborate on creating and testing new circular innovations with end users and civil society.

*\*In some countries such as Ghana, Kenya, Rwanda, South Africa, and Uganda, National Cleaner Production Centres (NCPCs) have been established to promote Resource Efficient and Cleaner Production (RECP). These institutions play a key role in helping governments identify context-specific policy and economic tools to facilitate investments in RECP activities, as well as in capacity development through disseminating technical information and sharing expertise. This model of using NCPCs can be replicated to accelerate the transition towards a circular economy.*

**The purpose of the proposed guidelines is to accelerate the transition of African countries towards a circular economy by providing a clear pathway to adopting its principles.** To develop these guidelines, multiple stakeholders across the public and private sectors were consulted to understand the current state of adoption of a circular economy across Africa, and the required interventions to encourage stakeholders to incorporate circular economy principles in their activities. A mix of virtual and in-person one-on-one interviews and focus group discussions in several African countries provided invaluable insights for this work. These engagements served as the first phase of validating findings and building consensus on what is required to accelerate the transition to a circular African economy. A complete draft of these guidelines was then shared with various stakeholders from countries across the continent ahead of a validation workshop held in Accra, Ghana on 24 – 25 August 2022. This workshop provided a platform for stakeholders to share their feedback on the draft guidelines and engage in an open, plenary discussion to validate the guidelines. In the process of developing these guidelines, however, little evidence was found on the mechanisms that are effectively advancing the transition to a circular economy in Africa as data is scarce and programs are still at a relatively early stage. Hence, it is important to note that this report is neither an exhaustive nor conclusive work to guide African countries as they transition towards a circular economy.

The rest of the report is arranged as follows:

- Section 2 assesses the challenges in advancing a circular economy in Africa;
- Section 3 discusses the critical enablers required to accelerate the transition;
- Section 4 explores the adoption of a circular economy in Africa;

31. This term refers to environmentally friendly, integrated, and socially inclusive modes of transportation including walking, cycling, carpooling in electric light electric vehicles, and using public transport



## II. CHALLENGES IN ADVANCING A CIRCULAR ECONOMY IN AFRICA



- Section 5 identifies key continental guidelines and best practices that countries can adopt and adapt to their specific context to advance a circular economy; and
- Section 6 provides recommendations on how countries can begin to adopt these guidelines.

## CHALLENGES IN ADVANCING A CIRCULAR ECONOMY IN AFRICA

African countries still face numerous challenges that hinder their ability to advance circular economy initiatives across different economic sectors. This report has identified five common challenges in transitioning to a circular economy in Africa, including:

- Lack of a holistic approach to adopting a circular economy which reflects opportunities in all sectors beyond waste management
- Limited awareness and communication of the benefits of a circular economy
- Market entry barriers for innovation and growth of circular economy business models developed by the private sector
- Limited coordination of circular economy strategies and action plans, and little monitoring of national initiatives
- Insufficient and misaligned financing mechanisms and funding options

### LACK OF A HOLISTIC APPROACH TO ADOPTING A CIRCULAR ECONOMY WHICH REFLECTS OPPORTUNITIES IN ALL SECTORS BEYOND WASTE MANAGEMENT

The connection between circular economy objectives and national development goals is often limited in African countries, and this is reflected in the sparsity of circular initiatives in national policy instruments and/or regulatory frameworks. The holistic understanding of a circular economy as a system transformation is still new in Africa. Although various institutions such as UNEP, ACEA, International Council for Local Environment Initiatives (ICLEI), ACEN, and Footprints Africa, to name a few, are implementing different initiatives to create linkages and coordinate efforts to facilitate Africa's transition to a circular economy, there persists limited knowledge of the full breath of opportunities offered by a circular economy. This is because a circular economy is usually solely associated with waste management. Hence, the mandate to develop and implement circular economy activities tends to be limited and isolated to the Ministries of Environment.<sup>32</sup> The regulatory environment remains insufficiently conducive to advance a circular economy. Limitations include a lack of strong commitment to circular initiatives such as sustainable public procurement (SPP), regulations, and technical standards that support the innovations (both technological and non-technological) required to support the transition.<sup>33</sup>

### LIMITED AWARENESS AND COMMUNICATION OF THE BENEFITS OF A CIRCULAR ECONOMY

Limited awareness, capacity building, and education on the socio-economic benefits of a circular economy make it harder to translate circular economy ideas into investable business models. A circular economy is often perceived as a trade barrier resulting from stringent transnational trade regulations on product types and quality. Moreover, as a circular economy concerns product design, production, use, and what happens to them at end of life, it tends to be perceived as a system that limits production capacity. However, the production of many goods that end up in African markets largely occurs outside the continent, meaning design decisions are made without the engagement of African stakeholders. Consequently, a circular economy tends to be reduced to recycling and/or reusing

32. To illustrate this point, ACEA was founded by the ministries of environment of Nigeria, Rwanda, and South Africa. 33. UNECA, Unleashing of the Potential of the Private Sector in Driving Green Growth and Job Creation in Selected African Countries, 2022 [Draft Report - Under Review]



products with minimal investment in R&D for product re-design. Also, many MSMEs, particularly those in the waste management sector, are unable to articulate their scaling plans, including how the technologies they are developing can be applied to other aspects of the economy beyond recycling, for example. Coupled with limited consumer awareness of circular products, this impairs the perceived competitiveness of these products relative to their linear counterparts.

**There is also a pervasive lack of awareness of the various circular economy business opportunities that exist and how the transition would benefit businesses, society, and the economy at large.**

Information sharing among African companies is very limited and serves as a barrier to circular economy acceleration and scaling up. There is a lack of education programs on circularity for primary and secondary schools, as well as vocational and tertiary education levels, communication about the economic and environmental benefits of a circular economy, knowledge exchange, and sharing of best practices in the space. There is also no time for market actors to follow informative courses about the benefits of the circular economy and lack of consumer and investor awareness and interest in this approach. To unlock circular economy opportunities, stakeholders throughout the value chain need education and more awareness to shift their mindsets and behaviours.

## **MARKET ENTRY BARRIERS FOR INNOVATION AND GROWTH OF CIRCULAR ECONOMY BUSINESS MODELS DEVELOPED BY THE PRIVATE SECTOR**

**African countries are adopting circular designs at slow rates due to several market barriers that inhibit the development and sustaining of circular business models and initiatives.** Prevailing market barriers in Africa include low costs of virgin material which make reusing resources an unattractive alternative; limited subsidies or market incentives for secondary materials and products to be incorporated into production processes; high upfront investment costs for identifying and establishing circular business processes; and lack of substantial market volumes or economies of scale for new and innovative circular products. Lack of technical knowledge on circular business opportunities, limited facilities to implement circular business models, and limited access to finance for these business models are additional key barriers that are hindering widespread private sector involvement. Furthermore, most businesses are reluctant to invest in circular business models as clear evidence that costs will be recovered through higher sales revenues (often referred to as the ‘green premium’) is not yet available. The limited data on circular business processes also inhibits the scaling of initiatives. Across the continent, the scarcity of information on the availability, quality, and location of circular materials, as well as on environmental footprints, technical performance, tracking, and reuse planning, all result in most projects and businesses remaining small in scale.<sup>34</sup>

## **LIMITED COORDINATION OF CIRCULAR ECONOMY STRATEGIES AND ACTION PLANS, AND LITTLE MONITORING OF CIRCULAR INITIATIVES**

Poor coordination and monitoring of circular economy initiatives result in entities, both public and private, working in silos, duplicating efforts, and inefficiently utilising the limited resources at their disposal. Some incumbent industries are resistant to changing business-as-usual and adopting circular economy practices. For example, South Africa has an Extended Producer Responsibility (EPR) policy<sup>35</sup> for plastic packaging implemented and enforced through seven Producer Responsibility Organisations (PROs) which developed separate mandates for their respective members.<sup>36</sup> Initially, membership was voluntary, which restricted the adoption and implementation of this policy as some producers opted out of the EPR scheme. Consequently, not all producers within the PROs were

34. UNECA, Unleashing of the Potential of the Private Sector in Driving Green Growth and Job Creation in Selected African Countries, 2022 [Draft Report - Under Review] 35. The EPR policy is contained within the Section 18 Regulations of the South African National Environmental Management: Waste Act of 2020 and came into effect in May 2021. 36. Plastics SA, Extended Producer Responsibility – creating a true circular economy for plastics packaging, 2022

implementing the EPR, PROs were not working as a collective, and government had to align and monitor multiple action plans and mandates. Another challenge that delays the implementation of initiatives is government reshuffles that happen, sometimes abruptly with no coordination<sup>37</sup> or clear path for the uninterrupted implementation of current initiatives.

### **INSUFFICIENT AND MISALIGNED FINANCING MECHANISMS AND FUNDING OPTIONS**

**There is a lack of hybrid financing mechanisms that combine grant funding with more mainstream commercial financing products to develop and scale circular economy business models.** Funding to grow and scale circular business models is predominantly provided by governments, NGOs, and a few global development finance institutions (DFIs). Economic incentives such as tax breaks and subsidies to encourage the private sector to invest in a circular economy are underdeveloped relative to those for linear business models. As a result, funding – particularly for MSMEs – tends to come from the government as part of government efforts to advance a circular domestic economy. Furthermore, existing circular business models do not exhibit attractive profitability levels and lack proper risk assessments, thus limiting their access to traditional financing from commercial banks. Additionally, circular business models are relatively unknown and therefore deemed as riskier and more complex than their linear economy counterparts, which inhibits their ability to access seed and growth capital. A challenge that is more prevalent amongst MSMEs are the collateral and due diligence requirements connected with commercial funding. This makes MSMEs hesitant to seek debt financing as they typically lack the resources to meet these requirements.<sup>38</sup> Instead, they tend to seek subsidies or grants, which are difficult to mobilise. Finally, financial institutions lack financing products designed to fund circular business models. For example, blended finance models are scarce, and very limited R&D capital is available. This type of funding is required to develop and incorporate new technologies in consumption and production processes. Consequently, this lack of financial innovation limits the amount of private sector capital being channelled towards circular business models.

37. Addis Standard, News: PM Abiy forms new gov't; adds 20 institutions including NISS, investment & financial security accountable to his office, 2021

38. Stakeholder consultations, 2022



Photo courtesy of UNEP



### III. CRITICAL ENABLERS TO ADVANCE A CIRCULAR ECONOMY IN AFRICA



## CRITICAL ENABLERS TO ADVANCE A CIRCULAR ECONOMY IN AFRICA

To address the barriers to the adoption of circular economy practices on the continent, six critical enablers were identified to facilitate a continent-wide transition towards circularity. These are:

- Policy environment: Establishing conducive circular economy policies to set clear priorities for different stakeholders.
- Regulatory Frameworks and Legal Instruments: Enacting comprehensive laws and regulatory enforcement mechanisms to encourage product substitution, resource efficiency optimisation, as well as sustainable production and consumption.
- Institutional Arrangements: Creating institutional frameworks for collaborative implementation of circular economy initiatives.
- Capacity Development and Awareness Creation: Creating awareness about circular economy processes, benefits, and best practices, as well as capacity building through technical assistance to private and public sector entities to help them integrate circular processes and technologies in the economy.
- Private Sector Engagement: Enhancing private sector engagement for co-creating solutions and market incentives to increase innovation and the adoption of circular economy practices;
- Funding and Financing Options: Mobilising adequate funding for circular economy initiatives. The following subsections articulate the relevance of these six enablers for Africa, how they are currently being deployed on the continent (in some instances, examples from outside Africa are provided), and the impact they have had in advancing a circular economy.

### POLICY ENVIRONMENT

Transitioning to a circular economy requires a phased approach in which a country's context informs policy priorities and various policy instruments to aid the transition are developed with joint input from both public and private stakeholders. Although most of these instruments are often established and implemented at a country-level, regional and continental institutions can play a role in harmonising policy priorities for increased transnational collaboration to create an enabling environment for a circular economy across Africa. Table 1 provides a non-exhaustive list of different types of policies and instruments with varying effectiveness in advancing a circular economy across the continent.

*Table 1: Non-exhaustive list of policy types and instruments to accelerate the transition to a circular economy*

POLICY TYPE	INSTRUMENT	EXAMPLES
Public strategies and policies	Continental/Regional/National/City-level Policies	<ul style="list-style-type: none"> <li>• COMESA Industrialisation Strategy, COMESA</li> <li>• National Climate Change Adaptation Policy Framework, Mauritius</li> <li>• National Environment and Climate Change Policy, Rwanda</li> <li>• National Action Plan on Integrated Waste Management, Burkina Faso</li> </ul>
	Strategies and implementation or action plans	<ul style="list-style-type: none"> <li>• Climate-Resilient Green Economy Strategy, Ethiopia</li> <li>• Green Economy Strategy and Implementation Plan, Kenya</li> </ul>
	Sector policies or guidelines	<ul style="list-style-type: none"> <li>• National Policy on Plastic Waste Management, Nigeria</li> <li>• Green Manufacturing Strategy, Uganda</li> <li>• Tourism Concession Guidelines for Transfrontier Conservation Areas in SADC, SADC</li> </ul>

	EPR policies	<ul style="list-style-type: none"> <li>• National Environmental (Base Metal, Iron and Steel Manufacturing/ Recycling Industries Sector) Regulations, Nigeria</li> <li>• The Environmental Management and Co-ordination (Extended Producer Responsibility) Regulations, 2021, Kenya</li> <li>• Environment Protection (Extended Producer Responsibility for Electrical and Electronic Equipment) Regulations, Mauritius</li> <li>• Extended Producer Responsibility for Plastics Packaging, South Africa</li> <li>• Decree No.2013-327 – Ban on the use of plastic bags and EPR, Côte d'Ivoire</li> </ul>
Procurement and innovation	Circular or green public procurement	<ul style="list-style-type: none"> <li>• EU Green Public Procurement Criteria, EU</li> <li>• Public Procurement and Disposal of Public Assets Act, Uganda</li> <li>• City of Cape Town Green Procurement Action Plan, South Africa</li> </ul>
	Eco-design requirements: durability, repairability, recyclability	<ul style="list-style-type: none"> <li>• Ecodesign Directive, EU</li> </ul>
	Voluntary agreements	<ul style="list-style-type: none"> <li>• Industry voluntary agreement to improve the environmental performance of imaging equipment placed on the European market, EU</li> <li>• The Courtauld Commitment 2030, UK</li> </ul>
Certifications and labelling	Certifications	<ul style="list-style-type: none"> <li>• African Organisation for Standardisation, Africa</li> <li>• BCA Green Mark<sup>40</sup> certification e.g., Nyarutarama Plaza, Rwanda</li> <li>• Mauritian certification for adopting international Green Agricultural Practices<sup>41</sup>, Mauritius</li> <li>• The Courtauld Commitment 2030, UK</li> </ul>
	Eco-labelling	<ul style="list-style-type: none"> <li>• Eco-Mark Africa, Africa</li> <li>• EU Ecolabel, EU</li> <li>• Der Grüne Punkt, Germany</li> </ul>

**Public policies which require manufacturers to assume responsibility for the environmental impacts of their products throughout the entire product lifecycle are amongst the most successful policy measures globally.** By internalising the end-of-life management costs of materials (i.e., those linked to collection and recycling), policies such as EPR schemes are an important tool to boost innovation and enhance resource efficiency.<sup>42</sup> These policies are also gaining traction in Africa, with almost 20 countries having at least one EPR policy in place, primarily for plastics or electronic products.<sup>43</sup> There are significant variations in the products for which countries are enacting EPR policies across the continent, but there is a need to: (1) expand the application of these policies to more countries and products; and (2) harmonise products covered by these policies to allow for widespread economies of scale in managing products at their end-of-life. EPR policies have also been effective in advancing circular economy practices, including in waste management. In Nigeria, E-waste Producer Responsibility Organisation Nigeria (EPRON) was established by the producers of electrical and electronic products and is responsible for proper e-waste management and works both with consumers and producers. Members are compelled to comply with the country's EPR Programme, and EPRON facilitates end-of-life responsibility through a buyback/recovery and recycling programme for e-waste.<sup>44</sup>

40. The Green Mark Certification Scheme is a rating system for green buildings that is designed to assess the environmental impact and performance of a building. 41. Stakeholder consultations, 2022 42. EPR schemes can include a variety of policy instruments, such as product taxes, recycling requirements, deposit-refund schemes, and disposal fees 43. African countries with EPR policies include Mauritius; Madagascar; Zimbabwe; Zambia; Tanzania; Rwanda; Uganda; Ghana; Nigeria; Sao Tome & Principe; Côte D'Ivoire; Gambia; Cabo Verde; Mali; and Egypt 44. EPRON, Extended Producer Responsibility, 2022

In voluntary agreements – which can be between government and private stakeholders, or simply made among private sector actors for mutual benefit – signatories commit to taking certain actions to advance a circular economy. These instruments rely on self-regulation, coordination, information disclosure, and shared goals for them to be effective. For instance, in the industry voluntary agreement to improve the environmental performance of imaging equipment placed on the European market, fifteen companies in the imaging sector committed to complying with requirements on primary design, resource efficiency, and providing consumers with accurate information on the environmental impact of their products to contribute to achieving the goals of the EU Action Plan on Energy Efficiency.<sup>45</sup>

**Procurement and innovation-based policies, such as those on circular or green public procurement, are another key instrument to accelerate the transition to a circular economy.** These procurement policies set resource efficiency standards for suppliers and products purchased by the public sector, thus stimulating innovation, shaping consumption and production, and ultimately creating markets for greener products.<sup>46</sup> They can be used to design criteria relevant to a circular economy, such as product lifespan requirements and quality standards for second-hand or repaired products. More sustainable and nature-positive public procurement processes can have a high impact. For instance, in 2016, government procurement in member countries of the Organisation for Economic Cooperation and Development (OECD) accounted for one-third of public expenditure and 12% of GDP.<sup>47</sup> In sectors such as construction, health services, and public transport where the public sector is the major consumer, circular public procurement has high potential. In 2020, the African Development Bank (AfDB), supported by UNEP, established a Sustainable Public Procurement Policy that requires borrowers to include sustainability provisions to allow the bank to determine the potential impact of excluding certain products or suppliers or limiting eligibility to a selected group of qualified green products or categories of bidders on the market.<sup>48</sup>

**While the prevalence of these types of policies is increasing across the continent, there are barriers to implementation that hinder their effectiveness.** For example, in most countries, there are no product verification systems to assist in screening circular products and ultimately simplify product evaluation processes. Due to limited government resources, the cost of product verification would likely be borne by producers. Premium costing is also anticipated due to the small number of suppliers able to provide circular products, and this higher cost relative to linear products may slow down the adoption of circular procurement processes.<sup>49</sup> Thus, when creating an enabling environment to accelerate the transition to a circular economy, policymakers must engage various public and private stakeholders to enhance acceptance and adoption. Furthermore, countries can employ a phased approach whereby they pilot sustainable procurement with already certified circular products, and then expand the initiative based on learnings and availability of more circular solutions. European countries in the North Sea region have been piloting various projects through ProCirc (see Box 5 for how this can be replicated across RECs and the continent in Africa) to determine the opportunities for circular procurement.

45. Industry Voluntary Agreement to Improve the Environmental Performance of Imaging Equipment Placed on the European Market, VA v.5.2, 2015

46. For best practices on GPP, see this paper here: OECD, Going Green: Best Practices for Sustainable Procurement, 2015

47. OECD, Towards a more resource-efficient and circular economy - the role of the G20, 2021

48. AfDB, Sustainable Public Procurement Guidance Note, 2020

49. Naicker, CT., Opportunities and barriers for greening procurement in South African Provincial Public Entities- perspectives from KwaZulu-Natal, 2018

**Box 5: ProCirc: Piloting circular procurement in the North Sea Region**

ProCirc is a project implemented from January 1, 2018, to December 31, 2022, covering multiple countries in the North Sea region, namely: Belgium, England, Denmark, the Netherlands, Scotland, and Sweden. The aim of the project is to advance the transition to a circular economy using procurement processes to create market demand for circular products. ProCirc involves 30 pilot initiatives to determine the benefits of a circular economy and procurement processes in the region. As part of the program, in 2019, Het Facilitair Bedrijf – the Facilities Services Agency of the Flemish government in Belgium – signed two framework contracts with a local company for the supply of refurbished office furniture. Under the first contract, government entities could have their existing furniture inventoried, collected, refurbished, and returned in a renewed state by the local company. The second contract allows government entities to trade their surplus furniture for credits with the partner company. These credits may be used to acquire other circular items – as needed – from the company at discount prices. In 2021, over 1,000 refurbished furniture items were reused, and over 1,100 more pieces were reused following light refreshment services by the local company. **In terms of climate change mitigation, procuring refurbished furniture prevented over 308,000 tons of CO2 emissions in 2021.**

Sources: North Sea Region, ProCirc; Circular Flanders, *Refurbished furniture for employees of the City of Leuven and AG Stadsontwikkeling Leuven*; Circular Flanders, *The Flemish government's Facility Services Agency opts for circular office furnishings*. All accessed 2022.

**However, SPP should not solely focus on acquisition of public assets, but also on their disposal.**

In 2014, the government of Uganda enacted the Public Procurement and Disposal of Public Assets (Disposal of Public Assets) Regulations which stipulate that public institutions, through their designated accounting officer, must have a concise disposal plan for assets under their care. Figure 5 is an excerpt from the Regulations that lists the requirements public entities must meet to comply with the stipulated disposal process. This disposal planning innovation brings transparency and efficiency in public procurement processes and has been a key driver of SPP in Uganda.<sup>50</sup>

**“[In African countries] government is the biggest buyer and as such has the potential to transform the market. Hence, the government can play a pivotal role by procuring sustainable products and setting the standards to promote the procurement of circular products,”** *Dalberg stakeholder consultations, 2022*

**Additionally, information-based policy instruments such as certifications and eco-labelling could be effective in encouraging multi-stakeholder participation in advancing a circular economy.** Such instruments seek to increase information transparency on the circularity of business processes and products, thus allowing consumers to make informed choices. They generally have lower compliance and enforcement costs than traditional command and control policies such as public and procurement and innovation policies.<sup>51</sup> Certifications and eco-labelling requirements help to build the business case for circularity by using industry requirements, competition among businesses, and meeting consumer preferences as enforcement and compliance mechanisms. Eco-labelling also helps with determining footprints and energy consumption.

50. Dalberg stakeholder consultations, 2022. 51. Bengtsson, M., Hotta, Y., Hayashi, S., and Akenji, L., *The four main types of policy instruments Policy Tools for Sustainable Materials Management: Applications in Asia*, 2010



**Box 6: Enhancing standardisation for African products to promote trade**

The African Organisation for Standardisation (ARSO) was established in 1977 by the Organisation of African Unity (now the AU) and United Nations Economic Commission for Africa (UNECA). ARSO's mandate is to create appropriate tools to facilitate the development of harmonised standards and deploy these methods to improve intra-Africa trading capacity and the competitiveness of Africa products in global markets, all while enhancing African consumer welfare.

Among its various goals, ARSO strives to:

- Harmonise national and regional standards to develop coherent African Standards through liaising with the relevant standards bodies in the continent.
- Encourage and enable the adoption of international standards by member bodies across the continent through sharing information and expertise, as well as providing training on standardisation activities.
- Collate and communicate the views of member organisations to international entities concerned with standardisation activities e.g., the International Organisation for Standardization (ISO) and the International Electrotechnical Commission (IEC).

ARSO developed the Eco-Mark Africa certification scheme, a system to recognise sustainability standards and provide quality assurance for African products. Eco-Mark Africa seeks to promote products that are produced sustainably in the continent, provide certification, and assist African producers to access different international and domestic markets. Having a common eco-label for African products, with certification provided using clearly defined and communicated criteria that is aligned with international sustainability standards, will ameliorate the credibility and brand recognition of African products.

Source: ARSO, *Eco Mark Africa*, United Nations Forum on Sustainability Standards. All accessed 2022.

**REGULATORY FRAMEWORKS AND LEGAL INSTRUMENTS**

The legal and regulatory frameworks define mechanisms through which the policies can be enforced, thus ensuring compliance, and providing motivation for all stakeholders to advance a circular economy. However, it is challenging to establish and align legal instruments across countries, as well as ensure appropriate implementation and enforcement mechanisms for them. Table 2 provides examples of regulatory mechanisms that have effectively promoted a circular economy.

*Table 2: Non-exhaustive list of regulatory frameworks to accelerate the transition to a circular economy*

REGULATORY FRAMEWORKS	LEGAL INSTRUMENTS	EXAMPLES
Legal and compliance mechanisms	Legislative acts	<ul style="list-style-type: none"> <li>• Environmental Management and Co-ordination Act, Kenya</li> <li>• Hazardous and Electronic Waste Control Management Act, Ghana</li> <li>• National Environment Act, Uganda</li> </ul>
	Prohibitions (e.g., batteries containing mercury, single use product bans)	<ul style="list-style-type: none"> <li>• Consumer Protection (Control of Imports) Regulations 2017, Mauritius</li> <li>• Prohibition of Manufacturing, Importation, Use, and Sale of Polythene Bags, Rwanda</li> <li>• Environmental Management (Prohibition of Plastic Carrier Bags) Regulations, 2019 Tanzania, The importation of used vehicles is completely banned in Egypt, Morocco, South Africa, and Sudan<sup>52</sup></li> <li>• ECOWAS has a 5-year age limit for import light duty vehicles and a 10-year age limit for heavy duty vehicles<sup>53</sup></li> </ul>
Economic and financial mechanisms	Eco-contributions (e.g., virgin material taxes)	<ul style="list-style-type: none"> <li>• Eco-levy on imported electric and electrical goods and tires (Hazardous and Electronic Waste Control and Management Act 917), Ghana</li> <li>• Plastic bag levy (Section D to Part 3 of Schedule No. 1 of Act No. 20 of 1998), Namibia</li> <li>• Plastic bag levy (Memorandum of Agreement of September 2002) South Africa</li> </ul>
	Incentive frameworks (e.g., grants, subsidies, differentiated interest rates, exemptions)	<ul style="list-style-type: none"> <li>• 5-year tax exemption for businesses that use cocoa by-products derived from substandard cocoa beans, cocoa husks, and other cocoa waste as main production input, Ghana</li> <li>• Development Bank of Rwanda provides low interest rate loans to the agriculture sector. The rates are lowered even further if the project performs well<sup>54</sup></li> </ul>

52. UNEP and UNECE, *Used Vehicles: A Global Overview*, 2017 53. UNECE, *Safer and cleaner used vehicles for Africa*, 2021, 54. Stakeholder consultations, 2022

**Legal and compliance mechanisms allow regulatory authorities to enforce various policy instruments that are within the statutes of their mandates.** Policymakers use legislative acts to codify the decisions they make into binding laws that provide direction on acceptable actions under the specific policy. For example, in Kenya, the Environmental Management and Co-ordination Act is the guiding law for environmental management and related matters in the country.<sup>55</sup> Governments and policymakers can also use prohibitions to remove undesirable products from domestic markets. Prohibitions are widely used across Africa, particularly those banning the use, manufacture, sale, and importation of single-use plastic products. Some countries, such as Rwanda, have banned the importation of used clothing to promote the local garment and textile industry.<sup>56</sup> As a circular economy seeks to maximise resource value, prohibitions can be applied to enhance product quality. For example, countries could prohibit the importation of poor quality used clothing to mitigate the fast-fashion trend and bring more circularity in the fashion and textiles industry.

**Other frameworks, such as sustainability reporting frameworks, can also work to green portfolios of financial institutions.** Financial institutions globally are already using frameworks such as the Taskforce on Climate-related Financial Disclosures (TCFD) to report risks related to climate change and supporting the development of frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD) to report risks related to natural capital. These disclosures are voluntary in most countries, with a few exceptions that have decided to mandate climate-related financial reporting using the TCFD.<sup>57</sup> There is an opportunity to consider the circular economy in impact and risk reporting by financial institutions in Africa. The EU's sustainability reporting standards have been revised to include resource use and circular economy.<sup>58</sup>

**Economic and financial mechanisms – such as eco-contributions, subsidies, and differentiated interest rate schemes – can also be used to enhance resource efficiency and incentivise the transition to a circular economy.** Virgin material taxes seek to foster efficient resource use by increasing the cost of extracting and using natural resources and raw materials, while landfill taxes can play a key role in diverting waste flows from landfills. In most cases, however, resource tax rates tend to be too low to effectively enhance resource productivity. Moreover, environmental taxes such as landfill taxes potentially carry unintended consequences, such as incentivising illegal dumping of waste. In addition to incentivising materials reuse and recycling, environmentally positive subsidies and eco-contributions can also encourage increased materials productivity. Waste management can also benefit from pay-as-you-throw (PAYT) schemes, as well as cap-and-trade schemes, such as the tradable landfill permits scheme implemented in the UK.<sup>59</sup> Although the application of these instruments to advance a circular economy is currently limited in Africa, they have huge potential (see Box 7 on the application of ecotaxes and subsidies in Europe).

55. The Republic of Kenya, Environmental Management and Co-ordination Act, Revised edition 2016 [2014] 56. BBC, How the United States and Rwanda have fallen out over second-hand clothes, 2018 57. Reuters, G7 backs making climate risk disclosure mandatory, 2021 58. European Commission, Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting, 2021

**Box 7: Eco-contributions and subsidies**

Eco-contributions provide economic incentives to promote environmentally friendly practices by putting a levy on products, practices, or activities which are deemed harmful to the environment.

- Mauritius has various eco-contribution mechanisms including environment protection fees on electronics, car batteries, tyres, and stone crushing companies, as well as a tax on PET bottles. The revenue is directed to a consolidated fund that seeks to enhance environmental benefit in the country. Mauritius has also initiated some fiscal measures such as establishing a tipping fee of USD 6 per ton of waste taken from transfer stations to be recycled, providing USD 45 per ton of used tyres recycled or exported for recycling, and increasing the incentive to recycle PET bottles from USD 112 to USD 337 per ton of PET bottles.

- Nigeria enacted the Carbon Tax Act whereby the carbon tax applies to direct emissions from fuel combustion, fugitive emissions from fuels, and emissions from industrial processes.
- Zimbabwe has a Petroleum Importers Levy on petrol and diesel products. This tax is collected alongside the other import duties levied on these taxable fuels.
- Italy has ecotax on highly polluting cars and an eco-bonus to purchasers of environmentally friendly modes of transport such as mopeds, scooters, motorbikes, and electric vehicles. Both the ecotax and the eco-bonus are applied to the price of the vehicle at the time of purchase. The tax ranges between EUR 1,100 and EUR 2,500 depending on an individual vehicle's carbon dioxide emission levels. A tax rebate of up to EUR 3,500 is available to owners who replace their vehicles that are at least 10 years old with new ones. Furthermore, Italy signed a decree to allocate EUR 650 million annually for incentives to buy electrified or low-polluting cars during the 2022–2024 period. The country plans to subsidise up to EUR 6,000 of the purchase price of new electric vehicles to support the local car industry.

*Source: Reuters, Italy to give new electric car buyers subsidy of up to 6,000 euros, 2022; ANSA, Car 'ecobonus-ecotax' system kicks in, 2019; Automotive News Europe, Italy to introduce scrapping program to boost sales after coronavirus hit, 2020; Bulgarian National Television, In Bulgaria, eco tax on cars older than 5 years goes up, 2022; Nairametrics, Carbon Tax: A market-based alternative to carbon emissions in Nigeria, 2021; Dalberg stakeholder consultations, 2022*

**INSTITUTIONAL ARRANGEMENTS**

**The transition to a circular economy requires well-established structures that facilitate coordination in the implementation of initiatives and mitigate the duplication of efforts by different stakeholders.** These governance structures seek to align different national, regional, and continental policies to enable a coordinated transition to a circular economy in Africa and widespread compliance to ease the enforcement burden. Coordination among policymakers also allows them to establish uniform standards and accreditation statutes for circular products and processes that enable businesses to scale their operations across Africa. Additionally, countries need to have monitoring and evaluation mechanisms to support effective implementation and progress, and ensure that initiatives are not contradictory. **Overall, having clearly defined institutional frameworks facilitates the efficient allocation of resources to support the transition to a circular economy.** Box 8 explores the institutional framework used by the EU to implement its Circular Economy Action Plan.



Photo courtesy of UNEP

#### Box 8: Institutional framework for the EU Circular Economy Action Plan

**The EU has made great strides in promoting the circular economy among its member states.** Earlier legislation and initiatives, both mandatory and voluntary, targeted specific sectors or economic activities without promoting circularity across the entire economic process. For example, the Eco-design Directive of 2009 provided a framework to enhance energy efficiency through regulating the design on energy-related products. While this was a progressive move towards a circular economy within the EU, it could not result in the required system transformation. In 2015, the EU unveiled its first Circular Economy Action Plan (CEAP) outlining 54 action plans covering a broad range of circular economy principles including product design, consumption, waste management, and creating a market for secondary raw materials. The plan employed a mix of voluntary initiatives and regulatory requirements and sought to establish cross-sectoral partnerships along the entire value chain.

The Directorate-General for Environment and Directorate-General for Internal Market, Industry, Entrepreneurship, and SMEs co-lead the implementation of the CEAP, whilst the Secretariat General of the European Commission coordinates the implementation efforts of the different directorates.

Following the successful implementation of the CEAP, the EU then launched the European Green Deal in 2019 to further accelerate the region's transition to a circular and competitive market. This is an ambitious plan focusing on nature and societally positive economic development that will make Europe the world's premier climate-neutral continent. In 2020, the EU unveiled its second Circular Economy Action Plan.

Having defined institutional arrangements to coordinate the efforts of the EU member countries and their cooperation towards achieving the shared goal of sustainable and climate-smart growth has been instrumental in promoting an exemplary regional approach to transitioning to a circular economy.

*Sources: European Commission, First circular economy action plan, 2022; European Union, Circular Economy Action Plan: For a cleaner and more competitive Europe, 2020; Ellen MacArthur Foundation, The EU's Circular Economy Action Plan: Setting the world's largest single market on a transition towards a circular economy, 2020*

## CAPACITY DEVELOPMENT AND AWARENESS CREATION

**Circular business models and practices are different from their linear counterparts, and capacity development is instrumental in ensuring that all stakeholders have the relevant skills to adopt these practices.** Furthermore, capacity development enables relevant stakeholders, particularly MSMEs, to access the required technologies and financing to unlock innovation and the growth of circular business models. In addition to capacity development, awareness creation is essential for establishing common understanding of a circular economy, available business opportunities, and its potential socio-economic benefits by the government, private sector, development partners, and consumers. Awareness creation messages must be tailored to different audiences using different media and the predominant and local languages of the target audience. When jointly pursued, capacity development and awareness creation eventually allow for parallel adoption of circular practices at the production and the consumption levels (see Box 9). One example of an effective mechanism of awareness creation is the engagement between the Department of Forestry, Fisheries and the Environment (DFFE) and the Banking Association South Africa (BASA), which involves quarterly meetings in informal settings to discuss current issues, including those related to the green economy agenda. This engagement helps sensitize banks to environmental issues, including those related to the circular economy. Another effective mechanism for capacity development and awareness creation is integrating circular economy principles in academic curricula. This model was pioneered by Finland (see Box 12 for a snapshot of how the Finnish Innovation Fund Sitra is embedding circular economy principles in academic curricula).

**Box 9: Capacity Development by the Institute for Circular Economy and Sustainable Development Goals**

The Global Institute for Circular Economy and Sustainable Development Goals (ICE&SDGs) is an international think tank headquartered in India seeking to advance innovations in science and technology using current research and development. ICE&SDGs was founded in 2018 and provides capacity development, awareness creation, and advisory services to help individuals and organisations transition to a circular economy by adopting zero-waste, zero-carbon, and carbon-neutral practices.

To date, ICE&SDGs has provided capacity building training to over 400 organisations across 78 countries in Africa, Asia, Europe, and the Americas on adopting circular economy practices in their operations. The institute has also offered sector-specific training to MSMEs in India on transitioning to a circular economy. Additionally, ICE&SDGs partnered with Climate-KIC, a European climate knowledge and innovation initiative to mentor more than 35 circular economy and sustainability start-ups from various countries including India, Canada, and Bangladesh.

To further accelerate the transition towards a circular economy, ICE&SDGs established the International Alliance on Circular Economy and Sustainable Development Goals (IAoCE&SDGs) in 2021. The Alliance has over 110 representatives from governments, funders, private sector, and experts from the South Asian Association for Regional Cooperation and across the globe. The members exchange knowledge to build the required capacity and collaboratively advance a circular economy. IAoCE&SDGs has since developed the Circular Economy Standard and Certification System, which can be used to determine the circularity of products, business and production processes, and buildings. This certification framework seeks to align with international standards for a circular economy and mainstream circular economy principles.

**Circle Economy** is an organisation seeking to empower decision-makers from the public and private sectors to develop and implement circular economy strategies and business models. Since its founding in 2011, Circle Economy has worked with over 20 national governments, more than 40 city governments, and over 100 businesses to create evidence-based circular economy roadmaps to be used in decision-making and to prompt action. Other service offerings include the Circle Workshop Suite, which is a set of on- and offline training courses to build knowledge on the circular economy. Along with an introduction on circular economy, other topics covered include financing circular business models; circular design practices; and innovating for a circular economy.

Source: ICE&SDGs; Climate-KIC; Circular Economy. All accessed 2022.

Table 3 provides additional examples of mechanisms countries can use to increase awareness of circular economy and relevant initiatives. It also provides examples on tools that can be used for capacity building to support organisations and individuals as they adopt circularity.

*Table 3: Non-exhaustive list of awareness creation and capacity development instruments to advance a circular economy*

TYPE	INSTRUMENTS	EXAMPLES
Awareness creation	Advocacy and lobbying	<ul style="list-style-type: none"> <li>African Circular Economy Alliance, Africa</li> <li>Circular Economy – Ecopreneur.eu, EU</li> </ul>
	Conferences and webinars	<ul style="list-style-type: none"> <li>World Circular Economy Forum, Global</li> <li>European Circular Economy Stakeholder Platform, EU</li> </ul>
	Consumer awareness (e.g., behaviour change campaigns) and mass media sensitisation (tv, radio, social media, etc.)	<ul style="list-style-type: none"> <li>E-waste management awareness campaign, Uganda</li> <li>PROSOL Project, Tunisia</li> </ul>
Capacity development	Research	<ul style="list-style-type: none"> <li>Circular Economy Research Centre, France</li> <li>Council for Scientific and Industrial Research – The Science and Technology Policy Research Institute, Ghana</li> </ul>
	Knowledge repositories	<ul style="list-style-type: none"> <li>Footprints Africa – Knowledge Hub, Africa</li> <li>Ellen MacArthur Foundation, Global</li> </ul>
	Technical assistance	<ul style="list-style-type: none"> <li>SWITCH Africa Green Programme: Burkina Faso; Ethiopia; Ghana; Kenya; Mauritius; South Africa; and Uganda</li> <li>Confédération Générale des Entreprises de Côte d'Ivoire – Patronat Ivoirien, Côte d'Ivoire</li> <li>Uganda Green Enterprise Finance Accelerator, Uganda</li> </ul>
	Peer learning platforms and networks	<ul style="list-style-type: none"> <li>Africa Circular Economy Network, Africa</li> <li>Nigeria Circular Economy Working Group, Nigeria</li> <li>Platform for Accelerating the Circular Economy, Global</li> </ul>

## PRIVATE SECTOR ENGAGEMENT

**Advancing a circular economy requires a systemic change in economic activity, including strengthened public-private partnerships to facilitate a multi-stakeholder approach.** In particular the role of the private sector is key in leading innovation and technological development which will accelerate the transition towards a circular economy. Furthermore, the private sector can mobilise the resources required to make this transition sustainable. Box 10 spotlights some examples of how private sector engagement can advance a circular economy.

### Box 10: Private sector engagement

#### Holland Circular Hotspot

The Ministry of Infrastructure and Water Management in collaboration with the Netherlands Enterprise Agency created the Holland Circular Hotspot, a private-public platform to help companies, knowledge institutions, and local authorities promote the Dutch circular economy. The platform focuses on eight themes: biomass and food; circular cities, construction, consumer goods, manufacturing, plastics, textiles, and water. Case studies, publications, events, and news related to each of these themes can be found on the platform.

The Holland Circular Hotspot presents an opportunity to support interested Dutch organisations with circular innovations or initiatives that they wish to export to other places with capacity development and a medium to facilitate the trade. The platform also organises frequent meetings on current global developments in circular business models. Additionally, it organises numerous events and provides businesses with peer learning opportunities by highlighting success stories from various countries to showcase their progress in advancing a circular economy.

#### SWITCH Africa Green

The SWITCH Africa Green programme has been working with countries (Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius, South Africa, and Uganda) to promote green business development in Africa. The programme provides opportunities for the private sector to move to more resource-efficient, environmentally sound business practices that also increase profitability, create green jobs, and reduce poverty. Results from a survey of the programme show that the adoption of SCP patterns and practices by MSMEs results in monetary gains, creates employment, and supports environmental development goals. The results of SWITCH Africa Green projects implemented with the private sector indicate the following:

- a. Interventions in the agriculture sector show increased uptake of sustainable agriculture practices, including organic farming, improved soil management, control of pests and weeds, agritourism, eco-labelling and certification, water-use efficiency, improved pre- and post-harvest management, increased commercialization, job creation, and resource efficiency.
- b. Interventions in the waste sector demonstrate that integrated waste management offers various business opportunities in areas such as recycling, waste to energy, waste to compost, and industrial symbiosis. Most of the surveyed enterprises (73%) recorded improved sales turnover and job creation.
- c. The SWITCH Africa Green interventions in the manufacturing sector focused mainly on promoting energy-use and water-use efficiency. The results reveal the great potential for improving such efficiency in manufacturing MSMEs in terms of increased monetary savings, competitiveness, and associated environmental benefits.
- d. Adopting SCP practices in tourism, such as improved waste management, efficient energy use, and water use, and certification, generates monetary savings. The results also reveal that community-based tourism can contribute to local development through community-based economic activities, including cultural tourism and agritourism, while conserving the environment.

*SWITCH Africa Green, Enhancing the resource productivity and environmental performance of MSMEs in 6 African countries through the concept of industrial symbiosis, 2019; Holland Circular Hotspot; UNEP Open Data, SWITCH Africa Green Phase II, 2022; SWITCH Africa Green, Sustainable Agriculture in Africa: Focus on Organic Agriculture, 2020; SWITCH Africa Green, Integrated Waste Management in Africa: Focus on Circularity, 2020; SWITCH Africa Green, Green Manufacturing in Africa: Focus on Micro, Small and Medium Enterprises (MSMEs), 2020; SWITCH Africa Green, Sustainable Tourism in Africa: Focus on Ecotourism, 2020; Dalberg stakeholder consultations, 2022*

## FUNDING AND FINANCING OPTIONS

**Circular business models and initiatives require different production and implementation approaches than their linear counterparts.** Hence, financial innovation is required to catalyse adequate capital to finance the acquisition of required technology, R&D, product prototyping, and market development for circular business models and initiatives.

*Table 4: Non-exhaustive list of funding and financing instruments to advance a circular economy*

TYPE	INSTRUMENTS	
Public sector-based	Seed capital	<ul style="list-style-type: none"> <li>• SEED Enterprise Support Programme, Global</li> </ul>
	Innovation grants	<ul style="list-style-type: none"> <li>• SME Mauritius Technology and Innovation Scheme, Mauritius</li> <li>• FONERWA's Innovation Grant, Rwanda</li> </ul>
	Credit facilities (with differentiated rates for circular businesses)	<ul style="list-style-type: none"> <li>• Green Guarantee (African Guarantee Fund), Africa</li> <li>• Africa Agriculture and Trade Investment Fund, Africa</li> <li>• African Circular Economy Facility, Africa</li> <li>• FONERWA's credit line<sup>60</sup>, Rwanda</li> </ul>
	Challenge or innovation funds	<ul style="list-style-type: none"> <li>• Innovation Fund, EU</li> <li>• African Innovation Foundation, Africa</li> </ul>
Private sector-based	Working capital loans	<ul style="list-style-type: none"> <li>• Uganda Green Finance Enterprise Accelerator, Uganda</li> </ul>
	Asset financing	<ul style="list-style-type: none"> <li>• M-KOPA: Ghana; Kenya; Nigeria; and Uganda</li> </ul>

**In addition to the instruments listed in Table 4, green bonds<sup>61</sup> are increasingly being issued to increase funding for nature-related and sustainable projects.** The very first Certified Climate Bond in Africa was issued by the Moroccan Agency for Sustainable Energy in 2016 and raised USD 104 million.<sup>62</sup> In 2019, Access Bank issued a USD 41 million five-year bond targeting renewable energy and flood defence projects in Nigeria.<sup>63</sup> This was the first bond to benefit from the Nigerian Green Bond Market Development Program, as well as the first Certified Climate Bond<sup>64</sup> issued by a corporation in Africa. In 2021, Benin issued a fourteen-year EUR 500 million SDG Bond.<sup>65</sup> Sovereign de-risking instruments have also been effective in encouraging innovation and increasing demand for circular products. Box 11 explores a mechanism used by the UK government.

### Box 11: UK Contracts for Difference Scheme for the generation of renewable energy

**The Contracts for Difference (CfD) Scheme is the main mechanism used by the UK government to increase national low-carbon energy generation capacity.** The volatility of the country's energy market is a deterrent to investors. Thus, to channel more funds towards renewable energy generation, the government created the CfD scheme to directly hedge wholesale prices for developers of projects with high initial capital requirements and long lifespans. This de-risking mechanism allows the scheme to indirectly protect consumers from paying increased support costs resulting from high electricity prices.

In 2021, the UK government launched a renewable energy auction scheme to support phasing out the use of fossil fuels. The scheme received GBP 285 million in funding: GBP 200 million for harnessing offshore wind power; GBP 75 million for emerging technologies; and the rest going towards established renewable energy technologies such as solar power. **The CfD scheme has effectively increased the use of renewable energy and reduced energy costs.** The latest allocation round of the scheme aims to create a more resilient energy system to achieve net zero.

*Source: Gov.UK, Biggest ever renewable energy support scheme opens, 2021; Power Compare, Contracts for Difference: How Does It Work & Why Do We Need It?, accessed 2022.*

60. FONERWA's credit line is 11.45% compared to market rates of 16-18% 61. FSD Africa and Climate Bonds Initiative, Africa Green Bond Toolkit: A practical guide to issuing green bonds for Africa, 2020 62. African Business, Africa poised for green bond growth, 2022 63. Harrison, C., Green Bond Pricing in the Primary Market H2 2021, Climate Bonds Initiative, 2022 64. Climate Bonds Initiative, Certification, accessed 2022 65. Green Finance Platform, Republic of Benin issued a sovereign green bond, 2021





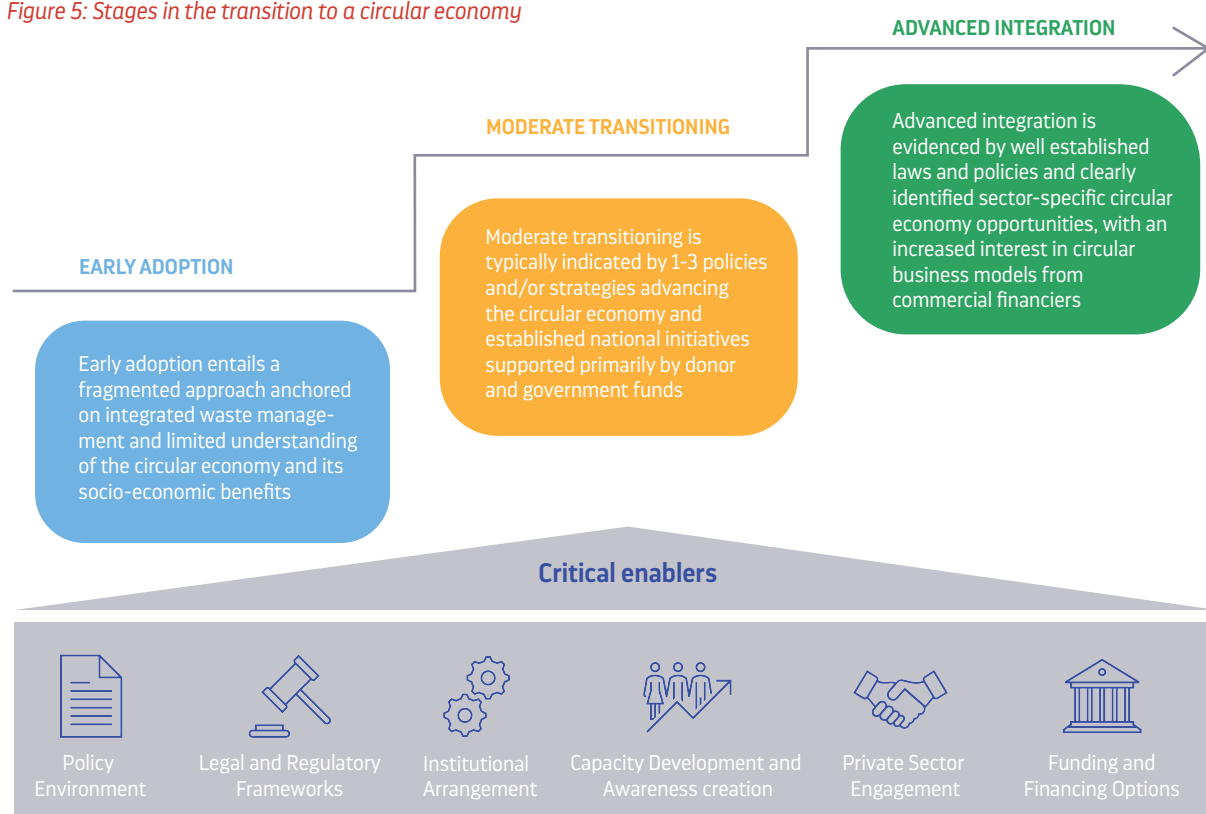
# IV. ADOPTION OF A CIRCULAR ECONOMY IN AFRICA



## ADOPTION OF A CIRCULAR ECONOMY IN AFRICA

Across the continent, countries are advancing towards adopting a circular economy at differing paces. The transition to a circular economy can best be defined as traversing a continuum. As such, the transition is a phased approach along a hierarchy of different objectives that aim to improve public health, mitigate environmental impacts from disposal practices, and facilitate environmental improvements through material efficiency and recovery.<sup>66</sup> The process of developing these guidelines uncovered three phases along this continuum (see Figure 5), marked by a set of enablers to promote further progression and adoption of circularity. The following subsections discuss the characteristics of each phase and the critical enablers required for further adoption of a circular economy.

Figure 5: Stages in the transition to a circular economy














### EARLY ADOPTION

During the early adoption stage, countries understand what a circular economy is but not necessarily how it aligns with their national objectives or the macro-economy, thus a fragmented approach to advancing a circular economy is common. Different economic actors (both public and private) are working in siloes and only adopt circular economy practices based on their individual interests. Within government, there is limited awareness of what different government institutions are doing to advance a circular economy, which may lead to the inefficient allocation of already limited government resources and duplication of effort. Furthermore, even though there is understanding of the economic benefits of a circular economy, business models and initiatives are anchored on integrated waste management as this is the typical entry point for countries as they transition. Food, plastic, and electronic waste present immediate opportunities for circularity with the major focus currently on recycling, which exerts a lot of pressure on an economy’s recycling capacity.<sup>67</sup>

66. OECD, Towards a more resource-efficient and circular economy - the role of the G20, 2021 67. Stakeholder consultations, 2022

**Despite the focus in recycling, countries at the early adoption phase also understand that circular business opportunities beyond recycling exist.** To discover and unlock opportunities in reusing, repairing, remanufacturing, and redesigning products, countries begin to develop a comprehensive roadmap which provides a clear pathway to a circular economy. This roadmap tends to outline implementable steps and actions that key stakeholders, from both the public and private sectors, must adopt to facilitate the transition.<sup>68</sup> Figure 6 shows the key characteristics and critical enablers to advance a circular economy during the early adoption phase.

Figure 6: Stages in the transition to a circular economy

	CHARACTERISTICS	CRITICAL ENABLERS
PHASE 1: EARLY ADOPTION V2	 Weak political commitment at the highest levels of government and enforcement mechanisms to advance a circular economy	 Establish national/city-level circular economy policies and action plans to provide a clear pathway for adopting a circular economy
	 No clear laws and guidelines for industries to promote new circular economy approaches and sector opportunities, although some policies and laws may exist with embedded provisions that can advance a circular economy	 Advocate across the highest levels of government to create buy-in for passing circular economy policies and laws  Create a clear institutional framework and targets for a circular economy to aid enforcement, monitoring, and evaluation
	 Focus of circular economy activities is on integrated waste management, with insufficient data on pollution levels to guide this process and limited understanding of how other sectors can replicate these initiatives	 Conduct national scoping studies to identify sector specific circular economy opportunities and key interventions for them
	 Not all economic sectors are active in advancing a circular economy, and most initiatives are government-led	 Engage the private sector to discuss unlocking barriers to incorporating circular business practices and promote technological and business model innovation
	 Funding to drive the transition to a circular economy is typically from within existing national budgets	 Mobilise financial resources e.g., grants to support key national initiatives, R&D, and early-stage circular business models

















*During early adoption, countries require technical assistance to establish policies that have a clear vision aligned with national priorities, laws and regulatory frameworks to advance a circular economy, as well as advocacy to achieve sponsorship to enable implementation from the highest authoritative level of the state*  
Source: Dalberg analysis, 2022

## MODERATE TRANSITIONING

**The next distinct phase in the circular economy continuum is the moderate transitioning phase which is characterised by a shift towards employing an integrated approach to advancing a circular economy across specific product and/or sector value chains.** At this stage, countries typically have a few comprehensive policies that explicitly support the transition to a circular economy. These policies tend to be accompanied by some ongoing national initiatives which are primarily financed through donor or government funds under the leadership of a handful of government ministries. Nevertheless, even at moderate transitioning, monitoring and evaluation mechanisms still need to be strengthened through capacity building and resource mobilisation. Along with this, businesses face challenges in converting the identified sector-wide circular economy opportunities into attractive investment opportunities, which slows down private sector participation in advancing circularity. Figure 7 details the critical enablers required to overcome these challenges and continue to advance a circular economy in the moderate transitioning phase.

68. Ibid 1

Figure 7: Key characteristics and enablers for the moderate transitioning phase

	CHARACTERISTICS	CRITICAL ENABLERS
PHASE 2: MODERATE TRANSITIONING V2	 National policies and regulations that can advance a circular economy (such as climate resilience and adaptation, green growth and sustainable development, and EPR policies) exist	 Align national initiatives, especially production processes and quality standards, with global ones to ensure competitiveness of domestic circular economy products
	 Monitoring and evaluation mechanisms are still weak and under-resourced	 Make regional and local studies on circular economy publicly available to improve data availability for monitoring and evaluation, even those conducted by private entities
	 1-3 ministries, typically the ministries of agriculture, environment, and finance, lead and fund circular economy initiatives from their specific budget allocations or donor funding targeting specific projects	 Engage government institutions to facilitate intra- and intergovernmental coordination, monitoring, evaluation, and raising awareness about circular economy
	 Clear sector-wide opportunities identified, but with challenges converting them into viable commercial businesses or encouraging wide-spread uptake	 Provide fiscal and technical incentives to encourage the private sector to invest in circular business models and innovation, including developing new technologies
	 Financial institutions are starting to gain interest in circular businesses, but do not have sufficient data or technical understanding to confidently invest in these businesses	 Engage the private sector to mobilise resources and increase innovation in circular economy business models and technologies
	 Clear sector-wide opportunities identified, but with challenges converting them into viable commercial businesses or encouraging wide-spread uptake	 Provide business development support to draft appropriate business plans, collect and keep relevant required data to access financing, and skills development to apply for available funding
	 Financial institutions are starting to gain interest in circular businesses, but do not have sufficient data or technical understanding to confidently invest in these businesses	 Nominate appropriate regulatory bodies to provide appropriate business certifications and labelling standards to improve the credibility of circular businesses, products, and services
	 Financial institutions are starting to gain interest in circular businesses, but do not have sufficient data or technical understanding to confidently invest in these businesses	 Engage financing institutions to catalyse private capital and provide financing products tailored to a circular economy











*The moderate transitioning phase requires institutional arrangements, including regulatory bodies, that can enforce laws to advance a circular economy and monitor progress on national plans, as well as increased private sector engagement for the adoption of circular business practices*

*Source: Dalberg analysis, 2022*

## ADVANCED INTEGRATION

The third distinct phase of adoption of a circular economy – advanced integration – is characterised by a well-established policy environment with multiple stakeholders working together to advance a circular economy. At this stage, countries completely understand that a systems transformation across the entire national economy is required to derive the full benefits of a circular economy. Therefore, there is a big focus on further enhancing policy coordination and public-private partnerships to enable this change without adversely impacting socio-economic activity. The partnerships are essential for developing transnational business models, green financing mechanisms, innovation, technology, human capital, and expertise, and creating access to diverse markets. Additionally, they allow circular business models to achieve economies of scale and expand so that they can effectively compete with, and replace, linear business models. Another critical enabler in the advanced integration phase is the establishment of robust integrated value chain databases. Countries at the advanced integration stage tend to collaborate with each other to develop sector and product specific databases to enhance efficiencies in business operations, production process, and consumption habits. These data can also be utilised by financial service providers to conduct due diligence on potential circular economy investments or loan applications to ensure business case viability. Figure 9 details the key characteristics and critical enablers required to continue to advance a circular economy in the advanced integration phase.

Figure 8: Key characteristics and enablers for the advanced integration phase

	CHARACTERISTICS	CRITICAL ENABLERS
PHASE 3: ADVANCED INTEGRATORS V2	 Well-established national policy and regulatory environment with defined and effective institutional frameworks to advance a circular economy	 Coordinate policies with regional trading partners with clear institutional arrangements to facilitate regional integration driven by a circular economy
	 Strong collaboration amongst multiple stakeholders (private, public, CSOs, research institutions) to develop and implement initiatives advancing a circular economy	 Establish a Transnational Steering Council with representation from all economic actors (public and private sectors, academia, NGOs, civil society, etc.) to coordinate regional integration efforts
	 Lack of data to support increased investment and the scale-up of circular economy business models	 Develop linkages between the Ministry of ICT and technical experts to share knowledge and expertise for the development and maintenance of secure value chain databases
	 Limited awareness amongst end-consumers of circular economy products, which limits market demand for them and the relevant technologies and skillsets to make these products	 Integrate circular economy principles in school curricula to help mainstream circularity and develop the right capacity for innovation and implementation of these business models
	 Existing price discrepancies between products produced through linear and circular business models	 Develop innovative financing products tailored to circular economy business models e.g., blended financing, private equity, venture capital, and tradeable stocks

*The advanced integration stage requires strengthened public-private partnerships to unlock more potential (transnational business models, financing, innovation, human capital, expertise, access to diverse markets, etc.) to accelerate the transition to a fully circular economy*  
 Source: Dalberg analysis, 2022

### The advanced integration phase does not mark the end of the transition to a circular economy.

Adopting a circular economy requires constant adaptation and innovation to promote resource efficiency and sustainable socio-economic development. Therefore, all stakeholders must diligently monitor their actions to ensure that they fully embody circular economy principles and have a good idea of the extent of resource efficiency achieved. This also entails integrating circularity across entire business value chains, which includes all domestic and international trading partners.



Photo courtesy of UNEP



V. CONTINENTAL GUIDELINES  
AND BEST PRACTICES TO  
ACCELERATE THE  
TRANSITION TOWARDS  
A CIRCULAR ECONOMY



## CONTINENTAL GUIDELINES AND BEST PRACTICES TO ACCELERATE THE TRANSITION TOWARDS A CIRCULAR ECONOMY

### INTENDED OUTCOMES OF ADOPTING THE GUIDELINES FOR ADVANCING A CIRCULAR ECONOMY IN AFRICA

In Africa, key institutions such as the AUC, AfDB, Regional Economic Communities (RECs), UNEP, United Nations Environment Programme Finance Initiative (UNEP FI), United Nations Development Programme (UNDP), UNECA, United Nations Forum on Sustainability Standards (UNFSS), and United Nations Industrial Development Organization (UNIDO) can play a pivotal role in advancing the transition towards a circular economy. For instance, these institutions can help countries to establish harmonised circular economy policies and legislation and facilitate knowledge exchange and peer learning to build viable transnational business models. Table 5 explores the progress made by RECs to advance a circular economy across their member states.

Table 5: Current initiatives developed by Regional Economic Communities to advance the circular economy

REC	CIRCULAR ECONOMY INITIATIVES
Common Market for Eastern and Southern Africa (COMESA)	<ul style="list-style-type: none"> <li>Plans to develop a framework for a private sector-led circular economy to help achieve the region's Industrialisation Strategy and Action Plan goals<sup>69</sup></li> </ul>
East African Community (EAC)	<ul style="list-style-type: none"> <li>Launched the Eastern African Regional Bioeconomy Strategy 2021/22-2031/32 whose organising framework is a bio-based circular economy. The strategy prioritises innovation in bio-based products and processes<sup>70</sup></li> </ul>
Southern African Development Community (SADC)	<ul style="list-style-type: none"> <li>Launched its Green Economy Strategy and Action Plan for Sustainable Development aiming to enable even, resource-efficient, and sustainable socio-economic development across Member States</li> <li>Currently drafting a regional circular economy roadmap to guide Member States on key targets and opportunities for a circular economy on which they can collaborate<sup>71</sup></li> </ul>

The present guidelines seek to complement ongoing initiatives at the national, regional, and continental levels to accelerate the transition towards a circular economy.

Firstly, these guidelines seek to help countries establish a common and suitable enabling environment to advance a circular economy through policy harmonisation between countries. For Africa's transition to a circular economy to be successful and sustainable, such an enabling environment must exist across all countries to ensure that initiatives to advance a circular economy at the national, regional, and continental levels are complementary.

Secondly, they promote coherence and collaboration amongst African countries, which is essential for resource mobilisation and implementation. This includes the financing, knowledge, technical expertise, technology, and innovation required to make circular business models more mainstream and unlock economies of scale.

Thirdly, the guidelines seek to help countries make the business case for the transition through developing markets for new circular products and scaling existing circular business models. This will ensure that a circular economy is not simply viewed as an environmental solution under government mandate, but as a solution for business sustainability led by the private sector.

69. COMESA, Medium Term Strategic Plan 2021 – 2025, 2022 70. East African Science and Technology Commission, The Eastern African Regional Bioeconomy Strategy: A Summary, 2020 71. Stakeholder consultations, 2022



Ultimately, these guidelines aim to support a coordinated approach to advance a circular economy in Africa by identifying key actions that need to occur at the national level that countries can adopt and adapt to their specific context, and those that must be driven at the regional and continental levels to accelerate the continent-wide transition for maximum impact.

**Five key guidelines have been identified to advance the transition to a circular economy in Africa:**

1. Make the case for a circular economy by increasing awareness of its significance for sustainable inclusive development in Africa
2. Establish a roadmap for the development and adoption of circular economy policies and action plans, as well as the required governance structures to ensure that national, regional, and continental policies on circular economy are complementary
3. Strengthen market demand for circular economy products by providing effective incentives for firms to consider the impact on natural capital in their decision-making
4. Increase access to financing for circular business models, including risk capital, by supporting financial innovation and entrepreneurial skills development
5. Establish sector-specific priorities and policies, and ensure their coherence across countries and RECs

These guidelines are designed to be non-sequential and mutually reinforcing. They provide a streamlined process African countries can follow to accelerate their transition towards a circular economy. Hence, individual countries are the primary implementors as they must adopt and adapt these guidelines to their specific context and needs. The guidelines and their respective best practices are discussed in the following subsections. Additionally, some potential partners that can help countries in implementing the guidelines, and more specifically the best practices, are also identified. The list of potential implementation partners for each best practice is by no means exhaustive.









**Table 7** Key activities in creating the capabilities of various operational units in a business

Business Unit	Activities	Business Processes
<p><b>Production Manager</b></p> <p>Identify, select and coordinate the activities of the production unit in order to ensure the production of goods and services</p> <p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Production</li> </ul>	<p>Production, distribution, inventory, quality control, and customer service</p> <p>Production, distribution, inventory, quality control, and customer service</p>	<p>Production</p>
<p><b>Production Manager</b></p> <p>Identify, select and coordinate the activities of the production unit in order to ensure the production of goods and services</p> <p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Production</li> </ul>	<p>Production, distribution, inventory, quality control, and customer service</p> <p>Production, distribution, inventory, quality control, and customer service</p>	<p>Production</p>
<p><b>Production Manager</b></p> <p>Identify, select and coordinate the activities of the production unit in order to ensure the production of goods and services</p> <p><b>Activities:</b></p> <ul style="list-style-type: none"> <li>Production</li> </ul>	<p>Production, distribution, inventory, quality control, and customer service</p> <p>Production, distribution, inventory, quality control, and customer service</p>	<p>Production</p>

Table 6: Best practices for raising awareness of the importance of the circular economy for sustainable inclusive development

BEST PRACTICES	EXAMPLES	POTENTIAL IMPLEMENTATION PARTNERS
<p><b>Ensure buy-in from the highest level of government to incorporate circular economy principles in existing and new policies</b></p> <ul style="list-style-type: none"> <li>- Establish strong economic cases for a circular economy across African countries aligned with national priorities, as well as continental and global commitments</li> <li>- Explicitly identify advancing a circular economy and promoting resource efficiency as part of Nationally Determined Contributions</li> </ul>	<ul style="list-style-type: none"> <li>• ACEA provides policy development support, leadership, and advocacy at the national, regional, and pan-African levels to help governments accelerate the transition to a circular economy<sup>72</sup></li> <li>• The Nordic Waste Prevention Group, an arm of the Nordic Council of Ministers, launched the Moving towards a circular economy – successful Nordic business models project to mainstream circular economy concepts and accelerate the transition to a circular economy in the Nordic countries<sup>73</sup></li> <li>• The Irish Environmental Protection Agency launched a Circular Economy Programme in 2021 which will provide leadership to align national and sub-national circular economy activities to support the implementation of the country's circular economy strategy<sup>74</sup></li> <li>• ACEN, through its network of over 100 country representatives in 30 countries across Africa, works with key stakeholders in the countries of presence to share best practices through developing circular business cases and projects promoting a circular economy<sup>75</sup></li> <li>• Footprints Africa and ACEN, through the support of GRID-Arendal and Shifting Paradigms, collects case studies on various circular economy initiatives implemented by MSMEs across Africa. To date, over 500 cases have been included in the Knowledge Hub housed by Circular Economy<sup>76</sup></li> <li>• During COP26, UNEP, UNDP, and the United Nations Framework Convention on Climate Change jointly hosted a discussion on “Strengthening NDC ambition through circular economy: the path for 1.5 degrees” which sought to emphasise the importance of incorporating circular economy and SCP approaches in NDCs and long-term development strategies</li> <li>• Commissioned by the German Ministry for Economic Cooperation and Development, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH published a practical guide to help policymakers integrate circular economy principles in their NDCs and long-term development strategies. In addition to highlighting the challenges presented by climate change, the guide showcases the importance of transitioning to a circular economy as a natural solution to the climate crisis<sup>77</sup></li> </ul>	<p>AUC, RECs, ACEA, UNECA, ACEN, Africa NDC Hub, African Climate Policy Centre, AUDA-NEPAD, African Climate Resilient Investment Facility, GIZ, RECs, UNEP, UNDP</p>
<p><b>Conduct awareness-raising campaigns and capacity development programmes across the country to communicate the importance of adopting a circular economy and promote innovation.</b></p> <p>Specifically:</p> <ul style="list-style-type: none"> <li>• Collect and share stories on various initiatives and business models that are successfully advancing the transition towards a circular economy, highlighting how they relate to cultural practices to accelerate their adoption</li> <li>• Develop a communication strategy to sensitise consumers about circular economy products and their importance to promote sustainable consumption-related behavioural practices</li> <li>• Integrate circular economy principles in academic curricula to develop the right capacity for technology development, innovation, and implementation</li> </ul>	<ul style="list-style-type: none"> <li>• The ARSO Consumer Committee promotes consumer participation in African standardisation processes through a standardisation and conformity assessment to gain consumer perspectives<sup>78</sup></li> <li>• In 2020, the government of Rwanda launched #GreenRwanda, a two-year national campaign to raise awareness of sustainable e-waste management and encourage the public to dispose of their e-waste at designated collection sites for them to be recycled by EnviroServe Rwanda</li> <li>• The African Circular Economy Network (ACEN) Foundation organises various conferences, workshops, and activities to raise awareness of the significance of a circular economy. These initiatives target stakeholders at the country and continental levels</li> <li>• The Education for Sustainable Development (ESD) in the Southern African Development Community Regional Strategic Framework was developed to help SADC Member States integrate ESD into their education systems. ESD builds the capacity of individuals, communities, and society to make informed choices in favour of sustainable development</li> <li>• In 2020, the Kenya School of Government and the Ministry of Environment and Forestry signed a Memorandum of Understanding (MoU) to co-develop a collaboration framework to design and implement capacity building programs, including curricula and training material on green growth and circular economy. In 2021, technical officers from government and the private sector from Kenya, South Africa, Argentina, and Indonesia were trained on “Green and Circular Economy – Dynamics and Governance” through this collaboration. This program has been instrumental in fostering capacity development for public officers</li> <li>• In Burkina Faso, the national academic curricula from pre-school to the tertiary level have an environmental education component which also includes circular economy principles</li> </ul>	<p>ARSO COCO, ACEN, ACEA, RECs, UNDP, UNEP, United Nations Institute for Training and Research (UNITAR)</p>

79. Rwanda Ministry of ICT and Innovation, Rwanda launches campaign to boost e-waste recycling and collection, accessed 2022 80. ACEN Foundation, Awareness raising, accessed 2022 81. Kenya School of Government, Kenya widens focus on green growth and circular economy, 2020

82. Kenya School of Government, Fortifying expertise for a green economy, 2021 83. Dalberg stakeholder consultations, 2022 84. United Nations Economic Commission for Africa, Inclusive green economy policies and structural transformation in Burkina Faso, 2016

<p>Set regular multi-stakeholder discussion sessions and establish information exchange platforms to strengthen public-private partnerships and foster a private sector-led transition</p>	<ul style="list-style-type: none"> <li>• The Ellen MacArthur Foundation and UNEP are leading the Global Commitment, a platform where governments and the private sector commit to changing the way they produce and use plastic<sup>85</sup></li> <li>• The Polish Circular Hotspot is a platform that brings together various public and private stakeholders so that they can collectively advance the transition to a circular economy in alignment with their individual interests<sup>86</sup></li> </ul>	<p>AUDA-NEPAD, UNEP</p>
<p>Coordinate continental in-person and virtual peer learning platforms across RECs to foster collaboration in circular business model development</p>	<ul style="list-style-type: none"> <li>• ACEN has chapters in different countries, and chapter members have access to training, workshops, events, and other knowledge sharing activities on circular economy</li> <li>• ICLEI World Congress has a major summit every three years to showcase how cities, towns, and regions across ICLEI's network are advancing sustainable design ideas in urban areas.</li> </ul>	<p>ACEA, ACEN, ICELI, UNECA</p>

85. Ellen MacArthur Foundation, The Global Commitment, accessed 2022 86. The Polish Circular Hotspot is one of several platforms promoting the circular economy in Europe. It seeks to develop innovative, practical, and scalable solutions for public and private stakeholders to adopt circular economy practices, reduce the reliance on natural resources, reverse environmental degradation.



## **GUIDELINE 2: ESTABLISH A ROADMAP FOR THE DEVELOPMENT AND ADOPTION OF CIRCULAR ECONOMY POLICIES AND ACTION PLANS, AS WELL AS THE REQUIRED GOVERNANCE STRUCTURES TO ENSURE THAT NATIONAL, REGIONAL, AND CONTINENTAL POLICIES ON CIRCULAR ECONOMY ARE COMPLEMENTARY**

**Countries have been implementing various initiatives advancing a circular economy, but these efforts have primarily been government-led and executed in siloes.** There is limited coordination between ministries and other government institutions to effectively implement circular economy initiatives for widespread adoption and impact. In many countries, circular economy policies are mainly owned by and seen as the responsibility of the ministries of environment, yet the successful adoption of a circular economy will bring a system change that goes beyond environmental conservation and enhancement. Consequently, circular economy policies need to be addressed at the national level, and governments should ensure that other existing policies are aligned with these policies to avoid countering efforts to advance and promote a circular economy.

**Additionally, national, regional, and continental policies need to be complementary to help in the realisation of economies of scale.** Aligning circular economy policies at all levels will help circular businesses from different countries operate under similar policy environments. This should enable the development of transnational and cross-sectoral business models. Furthermore, it will facilitate the replication of successful circular business models in different countries, which will ultimately help circular businesses become more mainstream.

The guidelines outlined in this report will inform the AU Circular Economy Action Plan, which intends to address the continent's disconnect in implementing circular economy initiatives. Many ongoing initiatives on the continent, including these guidelines, will enable the action plan to capitalize on existing progress. The decision to develop the action plan stemmed from the 3rd Specialized Technical Committee on Agriculture, Rural Development and Water and the 17th Session of the African Ministerial Conference on the Environment (AMCEN) embracing the circular economy approach. The AUC Expert Working Group (EWG) is responsible for developing the action plan and setting the key priorities for a circular economy approach to development. The EU has already developed a circular economy action plan to provide regional direction which member countries can reference and align with when developing their respective national action plans for implementation (see Box 13). Table 7 provides a list of best practices that can be adopted to establish and/or strengthen governance structures that will help harmonise national, regional, and continental policies to accelerate the transition to a circular economy. Each best practice has examples of where these have been implemented that regional and continental entities can leverage.

### **Box 13: EU Circular Economy Action Plan**

A circular economy is one of the main building blocks of the European Green Deal. As such, the EU launched its second Circular Economy Action Plan (CEAP) which articulates the economic bloc's ambition to promote a just transition to a climate-neutral, resource-efficient, and circular economy globally. This latest action plan also emphasises the need to dematerialise the economy, reduce the current reliance on primary materials in economic activity, and secure access to resources to foster resilient supply chains.

Furthermore, the CEAP identifies key product value chains in electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water, and nutrients. It also identifies required actions such as the development of sustainable product policy legislation and minimum mandatory green public procurement processes.

As with the first CEAP, the current plan also targets product design, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented by keeping resources used in production and consumption in the EU economy for as long as possible

The coherence in priorities and policies across the EU – which contributed to the successful implementation of the first CEAP – can serve as a guide for African countries on how to better reflect circularity in their policies and initiatives whilst also working collaboratively with other member states within their RECs to accelerate the transition to a circular economy.

*Source: European Commission, Circular Economy Action Plan – For a cleaner and more competitive Europe, 2020*

Table 7: Best practices for ensuring the complementarity of national, regional and continental circular economy policies

BEST PRACTICES	EXAMPLES	POTENTIAL IMPLEMENTATION PARTNERS
<p><b>Identify/ensure linkages with existing frameworks and develop/strengthen legal and regulatory frameworks and standards to support a circular economy</b></p>	<ul style="list-style-type: none"> <li>In Zimbabwe, the National coordination on the Implementation of SDGs (NACOS) Initiative was established with the aim to ensure that there is a coherent, coordinated, and all-inclusive participatory approach to the effective localisation, implementation, and coordination of the 2030 Agenda in Zimbabwe<sup>87</sup></li> </ul>	AUC, RECs
<p><b>Establish institutional frameworks which explicitly identify key stakeholders and state their roles in designing, implementing, monitoring, and reporting on initiatives to advance a circular economy, including coordination structures</b></p>	<ul style="list-style-type: none"> <li>The First Ten Year Implementation Plan (FTYIP) of the AUC's Agenda 2063, which covers the period 2013-2023, articulates the implementation, monitoring, and evaluation responsibilities of key stakeholders at the national, regional, and continental levels. The FTYIP also provides information to these stakeholders on the envisioned outcomes of the successful implementation of the plan</li> </ul>	AUC, ACEA, RECs
<p><b>Foster collaboration amongst certification bodies across Africa to create coherent standards that are aligned with international standards such as ISO and IEC</b></p> <p>-Certification and labelling should also include reviewing product design to ensure circular economy principles are embedded from the beginning of the production cycle to post consumption</p>	<ul style="list-style-type: none"> <li>In 2021, the Specialised Technical Committee for Trade, Industry, and Minerals of the AUC adopted the Africa Quality Policy which seeks to develop a continental quality infrastructure<sup>88</sup> that operates efficiently and is aligned with quality policies at the regional and national levels</li> <li>The East African Organic Products Standard was adopted in 2007 by the East African Community (EAC) as the official standard for organic agriculture production in the region. The Standard is the first regional organic standard on the continent and the second worldwide. It established organic agriculture as a trade and environment priority in the EAC</li> <li>The EAC, through the East African Standards Committee, developed East African Standards to harmonise quality requirements for products and services in the region. These standards are aligned with international best practices and technological advances, which means they are subject to regular reviews. They cover water quality, sanitation, the clothing industry, production processes, products in the timber industry, and renewable energy engineering such as solar and wind systems, to name a few areas. This regional standardisation system can be extended to advancing a circular economy and then replicated and adapted in other RECs as well for continent-wide adoption</li> <li>The African Organisation for Standardisation (ARSO) was established in 1977 to harmonise African standards, conformity assessments, and procedures to reduce technical barriers to trade and therefore promote intra-African and global trade, as well as enhance industrialisation in Africa. RECs and ARSO signed an MoU that recognises ARSO as the lead institution to coordinate the harmonisation of standards developed at the national and regional levels to establish common African standards.<sup>89</sup> ARSO has established 80+ technical committees which handle the standard harmonisation work in specific sectors of priority to Africa in alignment with the international best practice. In line with the circular economy, the following sectors have been considered: (1) Agriculture and food products, (2) Environmental management, (3) Ecolabelling, sustainability, and resilient system, (4) Healthcare technology, and (5) Traditional medicines</li> </ul>	ARSO, AUDA-NEPAD, RECs

87. United Nations, National Coordination on the Implementation of SDGs (NACOS Initiative), accessed 2022 88. Quality infrastructure "is a system comprising the organisations (public and private) together with the policies, relevant legal and regulatory framework, and practices needed to support and enhance the quality, safety, and environmental soundness of goods, services, and processes," Africa Quality Policy, Box 2. 89. African Organisation for Standardisation, ARSO – RECs Relations, 2014

<p><b>Create a National Cleaner Production Centre to coordinate all sustainable production and consumption programming between government and businesses. Where one exists, strengthen its capacity</b></p>	<ul style="list-style-type: none"> <li>• Since the mid-1990s, UNIDO and UNEP have collaborated to foster global uptake of RECP, a concept that addresses production efficiency, environmental protection, and social enhancement. In 2009, they launched RECPnet as a global network to enable the effective and efficient development, application, adaptation, and replication of RECP methodologies and technologies. The network has about 70 members and has worked with over 50 National Cleaner Production Centres<sup>90</sup></li> <li>• German Resource Efficiency Programme is a commitment by the German government to report on the progress of national resource efficiency every four years and amend activities with the goal of making natural resource use and extraction more sustainable<sup>91</sup></li> <li>• One of the five priorities identified by the government of Rwanda in the Second Economic Development and Poverty Reduction Strategy (EDPRS II) for 2013-2018 is advancing a green economy</li> </ul>	<p>AUC, UNEP, UNIDO</p>
<p><b>Ensure adequate resources (e.g., technical expertise, personnel, etc.) for implementing, monitoring, and evaluating circular economy strategies</b></p>	<ul style="list-style-type: none"> <li>• ACEA is a government-led coalition and platform that supports the transition to a circular economy at the national, regional, and continental levels. Resources on Increasing Circularity in Africa's Plastics Sector, Increasing Circularity in Africa's Mining Sector, and the Five Big Bets for Circular Economy in Africa offer vast knowledge that can be leveraged and discussed further through the platform. The Alliance is organising the World Circular Economy Forum planned for December 2022 which will bring together various circular economy professionals</li> </ul>	<p>AUC, AfDB</p>

90. UNIDO, Resource Efficient and Cleaner Production (RECP), accessed 2022 91. Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection, German Resource Efficiency Programme (ProgResS)- an overview, 2020

### **GUIDELINE 3: STRENGTHEN MARKET DEMAND FOR CIRCULAR ECONOMY PRODUCTS BY PROVIDING EFFECTIVE INCENTIVES FOR FIRMS TO CONSIDER THE IMPACT ON NATURAL CAPITAL IN THEIR DECISION-MAKING**

**African countries are adopting circular economy principles at slow rates due to limited market demand for circular products which does not encourage the development and scaling of circular business models and initiatives.** The low demand for circular products coupled with high costs of non-virgin materials relative to virgin ones, underdeveloped subsidies and market incentives promoting the use of secondary materials or by-products in production processes, high upfront investment costs for identifying and developing circular business processes, insubstantial market volumes or economies of scale for new and innovative circular products, and inadequate data on the breadth of circular business opportunities all lead to a slower transition to a circular economy for businesses. Creating viable incentives to encourage businesses to adopt circularity will boost innovation and the competitiveness of circular products, which will ultimately increase demand. A potential entry point can be ensuring transnational companies are at the forefront of incorporating circularity across African markets.

**Multilateral collaboration will offer an opportunity to extend incentives that increase interest across circular businesses in different countries.** Actions such as reducing or removing import duties on inputs that are used in the production processes of circular businesses will encourage firms to adopt circular practices. Shared objectives and incentives across the continent (see Box 14 on how one region in the Netherlands is creating demand for circular products) will allow for cross-country business models, and eventually help achieve economies of scale; thus, helping to make products more affordable. Table 8 provides a list of best practices countries can adopt to establish and strengthen market demand for circular economy products and services. Alongside each best practice are examples, of where these have been implemented, that regional and continental entities can leverage.

**The African Continental Free Trade Area (AfCFTA) provides various potential channels to strengthen regional and continental value chains for circular economy products.** Many African countries lack state-of-the-art recycling facilities, while smaller countries with the recycling facilities may not always have the volume of material inputs required for recycling processes. Regional collaboration can enhance economies of scale as countries work together to aggregate their waste for processing in central recycling facilities with adequate capacity and recycling facilities in countries with lower supplies do not have to rely on sourcing only within the country. The AfCFTA can ease the cross-border movement of waste, e.g., plastic waste, to these central facilities through mechanisms such as simplified customs procedures, waiving fees for movement of the plastic waste and harmonised standards for plastics such as food-grade packaging.<sup>92</sup> Naturally, moving waste across borders necessitates the presence of guidelines on how the waste is transported and handled. Moreover, country-level markets can be integrated into regional or continental markets to create a bigger market for circular economy products. Regional trade integration would enable import substitution at the regional or continental level and allow the use of locally produced products from within a country or neighbouring countries. This would be enabled by mechanisms such as harmonisation of standards as well as reduced tariff and non-tariff costs, facilitated by the AfCFTA. For the standards, there have to be considerations for conformity assessments, and accompanying certification that allow movement of goods between member states.

92. World Economic Forum, *Five Big Bets for the Circular Economy in Africa*, 2021

#### Box 14: Chemelot, the first circular economy hub in Europe

In 2020, the Chemelot Region in Limburg, Netherlands, became the first European Circular Economy Hub. Home to the Chemelot Industrial Park and Brightlands Chemelot Campus, the Chemelot Circular Hub provides a space where local residents, MSMEs, and large industries consciously consider how they handle raw materials, energy sources, and the environment in which they do business, work, live, and relax. Various companies, knowledge institutes, and government agencies came together to develop an investment agenda for the 2020-2030 period. Among the objectives set out in the agenda are promoting industrial symbiosis and creating new circular jobs that will attract people and investments into Limburg.

Some of the ongoing circular activities in the region include processing PET plastic and converting it into raw materials for other products, as well as converting carpet waste into materials to make mattresses. The region also has a plastic recycling plant and a solar company supplying part of the electricity consumed. It plans to continue creating, experimenting, implementing, and scaling promising circular innovations. Chemelot offers a conducive environment to advance circularity as this is where innovations in chemistry, sustainable materials, and biomedical solutions occur and are prioritised.

Source: Brightsite, Chemelot Region first European Circular Hub, 2020. Brightlands Chemelot Campus.

Table 8: Best practices for strengthening demand for circular products

BEST PRACTICES	EXAMPLES	POTENTIAL IMPLEMENTATION PARTNERS
<p><b>Establish national regulatory frameworks that are aligned across RECs to reduce barriers to entry, exit, and growth for transnational circular firms and business models</b></p>	<ul style="list-style-type: none"> <li>To facilitate the realisation of Agenda 2063, the AUC developed several continental frameworks that focus on the development of key economic sectors including agriculture, energy, mining, trade, and transport. These frameworks include the: Comprehensive African Agricultural Development Programme; Programme for Infrastructural Development in Africa; African Mining Vision; Science Technology Innovation Strategy for Africa; Boosting Intra African Trade; and Accelerated Industrial Development for Africa.<sup>93</sup> These frameworks should be leveraged to accelerate the transition towards a circular Africa economy to achieve the sustainable development goals embedded in Agenda 2063</li> <li>The Southern African Development Community (SADC) launched a Green Economy Strategy and Action Plan for Sustainable Development to enable even, resource-efficient, and sustainable socio-economic development across member states</li> </ul>	AUC, RECs
<p><b>Establish enabling environments and phase out contradictory subsidies that support linear business models</b></p> <ul style="list-style-type: none"> <li>Increase public investment in circular economy infrastructure and services (e.g., waste management) to facilitate private sector participation</li> <li>Reduce the costs of intellectual property rights for MSMEs and start-ups developing new circular economy business models</li> </ul>	<ul style="list-style-type: none"> <li>Fossil subsidies are known to be popular in many countries. Recently, however, countries such as the G7 member states have committed to stop funding overseas fossil fuel developments.<sup>94</sup> Additionally, phasing out inefficient fossil fuel subsidies is a key component of delivering on Article 2.1.c of the Paris Agreement<sup>95</sup></li> <li>Denmark has set out to ban new exploration and end oil and gas production in the North Sea by 2050 to achieve the goal of becoming a climate neutral country. To this effect, the country no longer issues licenses to search for and produce oil and gas<sup>96</sup></li> <li>The UK allocated GBP 265 million in subsidies to fund and develop projects to install new wind farms, solar panels, and other alternative energy sources throughout the country. Of this amount, GBP 55 million will be allocated to emerging technologies seeking to increase the use of renewable energies<sup>97</sup></li> <li>The European Council approved a plastic tax in 2021 to incentivise the recycling of plastic waste. However, members of the European Plastics Converters association argued that taxing the landfill disposal of plastic packaging waste instead would be more efficient<sup>98</sup></li> </ul>	AUC, RECs, WIPO, UNECA

93. AUC, Continental Frameworks, accessed 2022 94. The Guardian, G7 countries to stop funding fossil fuel development overseas, 2022

95. G7 Germany, G7 Climate, Energy and Environment Ministers' Communique, 2022 96. BBC, Denmark set to end all new oil and gas exploration, 2020

97. Electropages, UK Government offering £265m in renewable energy subsidies, 2021 98. Plastics Today, EU Plastic Tax Approved by the European Council, 2020

<p>- Reduce or remove import duties on primary goods used for managing pollution and resources (such as equipment used in recycling plants) or on secondary raw materials</p>	<ul style="list-style-type: none"> <li>• In 2010, The Ministry of Finance, General Administration of Customs of the People's Republic of China and the State Administration of Taxation implemented the decision to remove import duties and value-added taxes on key technological equipment (which included equipment used to generate hydro and wind electricity).<sup>99</sup> Countries, through their RECs, can agree on relaxing some import duties and taxes on resources that advance circularity to lower operational costs for circular businesses</li> <li>• In healthcare, when pharmaceutical companies make a new drug, they hold a patent on the manufacturing of that drug. The patent protection is lifted after a certain period of time which allows other companies to manufacture the same drug, thus making it more affordable due to increased competition. This concept can be applied to circular innovations by granting innovators intellectual property rights on their innovations for a specified time so that they benefit from their creations and recover their costs. The technology and innovation can then be availed to others at a favourable cost</li> </ul>	
<p><b>Develop or leverage existing free trade zones to enable backward and forward linkages</b></p>	<ul style="list-style-type: none"> <li>• Countries that participated in the SWITCH Africa Green programme received support to implement industrial symbiosis projects in the integrated waste management sector. These projects ranged from using waste from one business as production inputs for another traditionally unrelated business to converting waste into energy, such as biogas<sup>100</sup></li> </ul>	RECs, UNEP
<p><b>Establish and harmonise EPR policies, starting with products such as plastics and electronics</b></p>	<ul style="list-style-type: none"> <li>• For regional and continental harmonisation of EPR policies, regulatory bodies in all 55 countries should come together to establish modulated Extended Producer Responsibility fees according to sustainability criteria which penalise producers whose products are waste intensive</li> </ul>	AUDA-NEPAD, RECs, UNEP, UNECA
<p><b>Enact circular procurement policies for government entities such as refurbishing furniture and internally circulating excess supplies to create demand for circular products</b></p>	<ul style="list-style-type: none"> <li>• In Uganda, public procurements accounts for 60-70% of government expenditure.<sup>101</sup> The Public Procurement and Disposal of Public Assets Act guides all public procurement and disposal activities related to the country. Initially launched in 2003, the Act was amended in 2021 to incorporate SPP elements to promote sustainability in government procurement and asset disposal processes.<sup>102</sup> As such, the government has started adopting circular economy principles on certain products including refilling rather than replacing printer cartridges and requiring procuring or disposing entities to have a clear disposal plan for electronic products.<sup>103</sup> This disposal innovation, in particular, can be replicated in other countries to promote and/or enhance SPP</li> <li>• The EU developed a website with resources on adopting Green Public Procurement (GPP) for its member countries. Among the resources provided are a criteria development work plan, GPP good practice, legal and policy frameworks, and GPP projects</li> </ul>	UNEP, EU

99. Energy Central, China Removes Import Duties on Wind and Hydro Equipment, 2018 100. SWITCH Africa Green, 34 Projects at a glance: Project sheet for SWITCH Africa Green Programme, accessed 2022 101. Dalberg stakeholder consultations, 2022 102. UNEP, Sustainable Public Procurement in Uganda, 2019 103. Dalberg stakeholder consultations, 2022

#### GUIDELINE 4: INCREASE ACCESS TO FINANCING FOR CIRCULAR BUSINESS MODELS, INCLUDING RISK CAPITAL, BY SUPPORTING FINANCIAL INNOVATION AND ENTREPRENEURIAL SKILLS DEVELOPMENT

**Circular business models are newer and require seed funding to convert them into successful and sustainable businesses.** Financing such as seed and growth capital to grow and scale new and existing circular economy business models is limited and is predominantly provided by governments, NGOs, and a few global DFIs. This is because these business models are relatively unknown and are therefore deemed as riskier and more complex than linear economy business models. Developing widely acceptable metrics that both private and public financial institutions can use to assess the circularity of businesses, providing innovative tailored financing mechanisms for circular businesses (see Box 15 for an example on integrating circular economy criteria in a financial institution's portfolio), and capacity building to MSMEs to ensure that they have the skillset to develop bankable projects are some key best practices that will help circular businesses scale their operations beyond their domestic markets. Table 9 explores these best practices and provides some examples of practical applications.

##### Box 15: Integrating circular economy concepts in investment decisions and financing products

A circular economy is a mechanism that offers vast potential for businesses to mitigate the various risks they face in a linear economy, such as the depletion and scarcity of raw materials and a changing regulatory environment and consumer preferences. These risks mean that for businesses to survive, be sustainable, and be resilient, they need to shift from business-as-usual and adopt circular economy principles. As this awareness and the adoption of the different business opportunities in this economy grows, financial institutions are also increasingly developing both debt and equity financing products tailored to these business models.

Intesa Sanpaolo, one of the largest European international banking groups, is an example of a financier that has been proactively seizing the opportunities presented by a circular economy. The Group launched the Circular Economy Plafond of EUR 6 billion (which was increased from the initial EUR 5 billion credit line) for their 2018-2021 business plan. This facility is part of the Group's efforts to provide tangible support to businesses that are integrating circular economy concepts through increasing access to commercial finance.

In 2020, the facility was extended to the Group's International Subsidiary Banks Division which has strategic commercial banking presence in Central Eastern Europe, the Middle East, and North Africa. In 2021, this division utilised approximately EUR 22 million from the facility to finance initiatives in the circular and green economies. Over 86% of this financing went to SMEs. Overall, EUR 7.7 billion worth of financing has been provided through the Plafond, and EUR 5.5 billion of this amount was disbursed in 2021 alone.

A portion of the credit facility supports investments in producing renewable energy, energy efficiency, sustainable farming, and biodiversity conservation. Another portion is allocated towards green mortgages to finance the purchase of new high-ranking energy-efficient homes or home renovations to meet the targeted energy efficiency rankings.

The **Intesa Sanpaolo Innovation Center** provides technical assessments on received applications against specific circular economy criteria jointly developed by Intesa Sanpaolo and the Ellen MacArthur Foundation. By the end of 2021, about 300 projects with circular criteria received over EUR 3.9 billion total financing (of the 800 total applications received from corporate clients, only 100 projects with green criteria valued at over EUR 2.6 billion were financed). The financed company projects include replacing essential fossil fuel-based materials with recycled or organic materials, converting organic urban waste into energy (biomethane) and compost, industrial symbiosis, and enhancing renewable energy plants to extend their lifetimes and production capacity.

*Sources: Bocconi University, Ellen MacArthur Foundation, Intesa Sanpaola (2021), The circular economy as a de-risking strategy and driver of superior risk-adjusted returns; Intesa Sanpaolo, Support to the Circular Economy, accessed 2022*

Table 9: Best practices for increasing access to financing for circular business models

BEST PRACTICES	EXAMPLES	POTENTIAL IMPLEMENTATION PARTNERS
<p><b>Engage multilateral DFIs to establish innovative financing products and adopt proactive circular economy credit policies and lending strategies</b></p> <p>- Issue green bonds and/or loans to fund circular business models</p>	<ul style="list-style-type: none"> <li>• The Development Bank of Southern Africa (DBSA) has a ZAR 500 million Green Fund which targets small-scale initiatives that support the transition to a green economy. Through this fund, DBSA provides investment funding and technical assistance. The funding is in the form of recoverable grants and debt. The latter includes mezzanine debt<sup>104</sup></li> <li>• In 2020, Africa Finance Corporation (AFC) issued their first green bond valued at GBP 126 million to finance – or in some cases refinance – green projects across the continent.<sup>105</sup> Prior to issuing the bond, AFC was already funding green projects in Africa, including the development of a wind farm in Djibouti<sup>106</sup> and the Singrobo hydro-dam in Côte d'Ivoire<sup>107</sup></li> <li>• In 2019, Acorn Holdings issued a USD 40 million five-year Climate Bonds Certified green bond. This was the first green bond to be issued in Kenya, which was also the first non-governmental in Africa to be rated by Moody's<sup>108</sup></li> </ul>	<p>Association of African Development Finance Institutions (AADFI), AfDB, AFC, Development banks (national and regional)</p>
<p><b>Integrate circular economy into regional, national, and sectoral budgeting and fund allocation processes to ensure that a portion of national budgets is allocated for specific and prioritised circular economy initiatives to channel funds towards solutions</b></p> <p>- Provide grants for early-stage innovations and project preparation, then subsequently allow for debt financing as the business advances through different growth stage</p>	<ul style="list-style-type: none"> <li>• The Ministry of Finance in Uganda has allocated a portion of the 2022-2023 national budget to finance climate-related national projects<sup>109</sup></li> <li>• COMESA secured funding from the World Bank for the Regional Infrastructure Finance Facility Project. One of the three components of this project will focus on facilitating debt financing for SMEs, particularly those in the renewable energy sector<sup>110</sup></li> <li>• DBSA has a Climate Finance Facility worth USD 170.6 million which was approved by the Green Climate Fund (GCF) in 2018 that de-risks and increases the bankability of green projects to catalyse investments from private financiers. The facility has a 20-year projected lifespan and will cover four countries (eSwatini, Lesotho, Namibia, and South Africa). Prioritised projects include those in the following sectors: health, food, and water security; infrastructure and the built environment; energy generation and access: and transport<sup>111</sup></li> </ul>	<p>AADFI, AUDA-NEPAD, AfDB, GCF, Global Environment Facility, UNECA</p>
<p><b>Provide capacity development for private commercial banks to integrate circular economy principles in their revenue/capital mobilisation and lending policies and procedures and to manage and disburse funding for circular economy solutions</b></p> <p>- Assist financial institutions with getting certified to access climate funds</p> <p>- Develop circular criteria relevant to the national context that banks should use in assessing funding applications</p>	<ul style="list-style-type: none"> <li>• The Uganda Green Enterprise Finance Accelerator (UGEFA) provides capacity development and support to commercial banks to help them understand green finance, green and circular business models, and the specific needs of MSMEs operating in this space. This technical assistance also seeks to help private financiers develop funding facilitation mechanisms and instruments to increase access to green financing for MSMEs<sup>112</sup></li> <li>• In Ghana, the central bank and commercial banks have developed sustainability principles for the banking sector. This practice has been helpful in developing the capacity of banks operating in the country to enable them to provide funding to sustainable business models<sup>113</sup></li> </ul>	<p>Association of African Development Finance Institutions (AADFI), AfDB, AFC, Development banks (national and regional)</p>

104. Stakeholder consultations, 2022. 105. The African Law & Business, AFC issues green bond, 2020. 106. Climate Fund Managers, First Renewable Energy Project in Djibouti Launched by Investors AFC, CFM, FMO, and GHIH, 2020. 107. Africa Business Communities, AFC to Co-develop the US\$ 120 Million Singrobo Hydro Power Plant in Côte d'Ivoire, 2015. 108. Harrison, C., Green Bond Pricing in the Primary Market H2 2021, Climate Bonds Initiative, 2022. 109. Dalberg stakeholder consultations, 2022. 110. World Youth Magazine, 9 COMESA Projects Impacting Africa Youth, 2021. 111. Green Climate Fund, DBSA Climate Finance Facility, accessed 2022. 112. Dalberg stakeholder consultations, 2022. 113. Ibid



<p><b>Provide capacity development for private commercial banks to integrate circular economy principles in their revenue/capital mobilisation and lending policies and procedures and to manage and disburse funding for circular economy solutions</b></p> <ul style="list-style-type: none"> <li>- Assist financial institutions with getting certified to access climate funds</li> <li>- Develop circular criteria relevant to the national context that banks should use in assessing funding applications</li> </ul>	<ul style="list-style-type: none"> <li>• The Uganda Green Enterprise Finance Accelerator (UGEFA) provides capacity development and support to commercial banks to help them understand green finance, green and circular business models, and the specific needs of MSMEs operating in this space. This technical assistance also seeks to help private financiers develop funding facilitation mechanisms and instruments to increase access to green financing for MSMEs</li> <li>• In Ghana, the central bank and commercial banks have developed sustainability principles for the banking sector. This practice has been helpful in developing the capacity of banks operating in the country to enable them to provide funding to sustainable business models</li> </ul>	<p>AfDB, AUC, RECs, UNEP, UNDP</p>
<p><b>Provide technical assistance to equip MSMEs with the skills and documentation required to access funds designated for a circular economy, as well as skills to iterate and improve their innovations to make their business models more bankable</b></p> <ul style="list-style-type: none"> <li>- Help MSMEs form Savings and Credit Cooperative Organisations to access funds at better rates from their pooled savings</li> </ul>	<ul style="list-style-type: none"> <li>• SWITCH Africa Green has a green business development component that provides grants to MSMEs to help them green their businesses</li> <li>• The ACEF is a EUR 4 million multi-donor trust fund that will support programming that advances a circular economy at both the continental and national levels. One of the three intervention areas of the ACEF will be providing technical assistance to the private sector, particularly start-ups and MSMEs, that will develop and demonstrate innovative new circular economy business models, as well as develop strategic and innovative partnerships and knowledge exchange platforms to create "fertile ground for the diffusion of circular practices in member countries"<sup>114</sup></li> <li>• Through funding from the EU, UGEFA provides business development support to green MSMEs in Uganda. UGEFA facilitates group and one-on-one activities that seek to help participating MSMEs build their financial capacity and strengthen their business models. The organisation also works with financial institutions to create tailored products to increase access to loans to green business models and technologies</li> </ul>	<p>AfDB, AUC, RECs, UNEP, UNDP</p>
<p><b>Develop due diligence frameworks and metrics that allow businesses and financiers to assess the circularity potential and impact of their business practices and/or production processes</b></p> <ul style="list-style-type: none"> <li>- Conduct studies on the return on investment of transitioning to a circular economy to showcase its viability as an approach to sustainable business and investment</li> </ul>	<ul style="list-style-type: none"> <li>• In February 2022, the European Commission adopted a proposal for a directive on corporate sustainability due diligence. If adopted by the European Parliament and Council, EU member countries will convert the directive into enforceable national law in their respective countries. The proposed due diligence requirements seek to ensure that corporate action across their global value chains respects human rights and the environment<sup>115</sup></li> <li>• ESG metrics were established to allow businesses to measure their environmental, social, and governance performance and to enhance transparency with consumers and stakeholders. Given that ESG metrics have some aspects that can reflect circularity – such as water consumption, energy efficiency, and waste generation – they can provide good guidance and reference when building circular economy-specific metrics</li> </ul>	<p>UNECA, AUC, Ellen Macarthur Foundation, WEF</p>

114. African Development Bank Group, Africa Circular Economy Facility (ACEF), 2022

115. European Commission, Corporate sustainability due diligence, 2022

## **GUIDELINE 5: ESTABLISH SECTOR-SPECIFIC PRIORITIES AND POLICIES, AND ENSURE THEIR COHERENCE ACROSS COUNTRIES AND RECS**

**There is a need to articulate sector-specific transnational business cases for a circular economy in order to facilitate a continent-wide transition.** To do this, countries need to collaborate and align their national priorities and policies with regional and continental priorities to ensure complementarity. This will also allow for knowledge sharing, better coordination, and easier monitoring and evaluation. Table 10 explores the best practices and provides some examples of how to establish and harmonise circular economy priorities and policies across countries and RECs. The last part of guideline 5 provides specific opportunities to advance a circular economy, challenges, best practices, and some examples of initiatives that are taking advantage of opportunities in select sectors. This sector-specific approach (see Box 16 on the approach taken by the World Economic Forum) can be replicated and adapted for other priority sectors to accelerate the transition to a circular economy

### **Box 16: Sector-Specific Circular Economy Action Plan**

**To support the transition towards a circular economy, the World Economic Forum (WEF) launched the Platform for Accelerating the Circular Economy (PACE) in 2017.** Through a process involving over 200 stakeholders with representation from the public and private sectors, PACE developed the Circular Economy Action Agenda (the “Agenda”), a call to collaborative action between governments, the private sector, experts, consumers, and civil society to accelerate the transition to a circular economy globally.

The Agenda is comprised of five publications focusing on sectors identified to have the greatest potential for circularity. These key sectors are capital equipment, electronics, food, plastics, and textiles, and each publication includes: (1) the objectives of advancing a circular economy in the sector; (2) potential social and environmental impacts of achieving the set objectives; (3) challenges in implementing or scaling circular economy initiatives; and (4) ten calls-to-action to optimise impact, mitigate the barriers, and unlock new opportunities. The calls-to-action also include practical examples and case studies of effective implementation to provide a starting point for countries to explore relevant opportunities in the identified sectors and to then adapt the actions as required for implementation in their specific country contexts.

*Source: Circular Economy Action Agenda – Capital equipment, Electronics, Food, Plastics, Textiles, accessed 2022*

Table 10: Best practices for establishing and harmonising sector-specific priorities and policies

BEST PRACTICES	EXAMPLES	POTENTIAL IMPLEMENTATION PARTNERS
<p><b>Conduct scoping studies to identify key sectors with high potential to advance a circular economy and the relevant business opportunities</b></p>	<ul style="list-style-type: none"> <li>• In 2022, Science and Technology Policy Research Institute (CSIR) released the first set of technical reports on how the agriculture, manufacturing, and mining sectors in South Africa would benefit from circular economy interventions. These sectors are three of the seven resource-intensive sectors that were identified for further study to allow key stakeholder groups – businesses, government, and civil society – to harness circular economy opportunities</li> <li>• In Five Big Bets for the Circular Economy in Africa, ACEA identified three key sectors that span five thematic focus areas with immediate and existing opportunities to advance a circular economy in Africa. These sectors (and thematic focus areas) are agriculture (food systems), construction (built environment), and manufacturing (electronics, fashion and textiles, and packaging)<sup>116</sup></li> <li>• The SWITCH Africa Green programme produced reports for four priority sectors – Integrated Waste Management, Green Manufacturing, Sustainable Agriculture, and Sustainable Tourism – with opportunities for advancing green business and SCP practices in the participating countries. The reports highlighted the implementation of programme interventions in Burkina Faso, Ghana, Kenya, Mauritius, South Africa and Uganda, and the results, cross-cutting issues, challenges, lessons learned, as well as recommendations for unlocking even more significant economic, social and environmental benefits from the application of SCP in these sectors.</li> </ul>	<p>AUDA-NEPAD, RECs, ACEA, ICLEI Africa</p>
<p><b>Design sector-specific circular economy action plans and integrate such priorities into the relevant national and sectoral policies, strategies, and programmes</b></p>	<ul style="list-style-type: none"> <li>• The Ellen MacArthur Foundation, in collaboration with ICLEI Africa, Chatham House, and the University of Lagos, curated a series of articles identifying opportunities for a circular economy in automotives, the built environment, electronics and e-waste, fashion and textiles, finance, food and agriculture, and plastics. These reports feature examples from different countries across the continent that have adopted circularity along these thematic focus areas that other countries can replicate and adapt to their specific contexts<sup>117</sup></li> <li>• In Mauritius, linkages between the agriculture and tourism sector are being explored so that the transition towards a circular economy embodies a holistic and integrated approach. For example, promoting local cuisines and using produce that is in season can help create linkages between agricultural supply and demand for these products from the tourism sector. Furthermore, food and other organic waste from the tourism industry can be used as compost or to make organic fertiliser to grow organic and local food<sup>118</sup></li> </ul>	<p>AUDA-NEPAD, RECs, Ellen MacArthur Foundation</p>
<p><b>Establish policy instruments (e.g., EPR, eco-contributions, tax exemptions, etc.) and standards (e.g., labelling) that are aligned across sectors</b></p>	<ul style="list-style-type: none"> <li>• ReMade in Italy® is a non-profit NGO founded in 2009 that promotes the use of recycled products. In 2013, it was named as the first certification scheme in Italy and Europe to validate the amount of recycled material in a product by Accredia, the only accreditation body in Italy. Products that can be certified include those used in construction, furniture, school material, and textiles, among others. Companies are issued a label for each audited product to show its recycled material content and its product category. Additionally, the label provides information on the environmental benefits (e.g., reduced GHG emissions) of the recycling process of the specific product to enhance consumer education</li> <li>• The French government has made eco-contributions mandatory for the packaging industry to incorporate circular economy practices in the packaging value chain from the beginning. The Modulated Eco-Contribution Scale was developed with input from various stakeholders from across the packaging industry. It is an educational and financial incentive tool to promote innovation in packaging eco-design<sup>119</sup></li> <li>• Côte d'Ivoire is in the process of developing a circular economy strategy for the city of Abidjan and a National Circular Economy Strategy. These instruments will enable the country to better implement initiatives geared towards advancing a circular economy<sup>120</sup></li> </ul>	<p>ARSO, UNFSS AUDA-NEPAD, RECs, UNECA</p>
<p><b>Liaise with multilateral trade partners to collaboratively enact coherent sector-specific policies and incentive frameworks to advance a circular economy</b></p>	<p>The ANZPAC Plastics Pact is a collaborative initiative that brings together key stakeholders in the plastics value chain in Australia, New Zealand, and the Pacific Islands region. It is part of the global Plastics Pact Network (Kenya and South Africa also have plastics pacts that are part of this network) created by the Ellen MacArthur Foundation. ANZPAC members work together to develop innovative solutions to bring circularity in the plastics value chain, invest to build and scale the solutions and business models, and exchange knowledge on key issues. This collaboration is essential for ensuring coherence in the research and solutions developed for the plastics sector in the region. This model can be replicated for other sectors across Africa</p>	<p>UNECA, UNEP, UNIDO, RECs, Ellen MacArthur Foundation</p>

116. Published in 2021, the report was developed by Dalberg, the World Economic Forum, and AfDB with support from the Ministry of Foreign Affairs in Denmark (DANIDA) on behalf of and in close collaboration with ACEA 117. Ellen MacArthur Foundation, Circular economy in Africa: Examples and opportunities, accessed 2022 118. Dalberg stakeholder consultations, 2022 119. European Circular Economy Stakeholder Platform, Innovative bonus-malus system for increased rates of recyclability in the packaging industry, France, accessed 2022 120. Dalberg stakeholder consultations, 2022

## OPPORTUNITIES, CHALLENGES, AND BEST PRACTICES TO ADVANCE A CIRCULAR ECONOMY IN SELECT SECTORS

**There are various opportunities to advance a circular economy in Africa.** Although countries may have different priorities, the three broad economic sectors (primary – including agriculture; secondary – including manufacturing; and tertiary – including tourism and waste management) share some similarities across the continent. The opportunities, challenges, and best practices to advance a circular economy in agriculture, manufacturing, tourism, and integrated waste managements are highlighted in Table 11, Table 12, Table 13, and Table 14, respectively.

*Table 11: Opportunities, challenges, and best practices for advancing the circular economy in agriculture*

	PRODUCTION	DISTRIBUTION	CONSUMPTION
Opportunities to advance a circular economy	<ul style="list-style-type: none"> <li>• Increase water resource efficiency through more efficient irrigation practices</li> <li>• Leverage African cultural practices</li> <li>• Adopt regenerative farming methods (e.g., crop rotation, composting, use of organic fertilisers, etc.) to improve soil health</li> <li>• Reduce resource needs by adopting climate-smart practices such as operating vertical farms</li> <li>• Reduce post-harvest losses through improved mobile storage and transportation services</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce distribution losses by simplifying supply chains using technology to directly link farmers to markets</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce resource demand by consuming locally produced foods</li> </ul>
Common issues hindering progress	<ul style="list-style-type: none"> <li>• Lack of technical skills to adopt innovative practices such as soil-less farming systems</li> <li>• Limited financial resources to replace traditional methods, where needed, with efficient circular farming methods</li> </ul>	<ul style="list-style-type: none"> <li>• Limited access to the neighbouring markets</li> <li>• Poor transportation services and limited storage available to keep produce fresh</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in unhealthy eating habits that increase waste</li> </ul>
Best practices to enable uptake	<ul style="list-style-type: none"> <li>• Provide technical assistance to help farmers understand and adopt circular practices such as resource efficiency and organic production</li> <li>• Increase financing to farmers to enable them to purchase the necessary equipment for water recovery and circular irrigation, for example. A regional and/or continental fund can be established to support smallholder farmers and agriculture MSMEs seeking to adopt circular economy principles</li> <li>• Develop the local agro-processing industry to process agricultural products such as dried fruits and juices. Each REC could pool resources to build a cutting-edge agro-processing hub and increase the competitiveness of African products</li> <li>• Establish enforceable regional and continent-wide standards for organic farming and products</li> </ul>	<ul style="list-style-type: none"> <li>• Develop digital platforms that connect farmers with markets</li> <li>• Encourage transnational trade to expand access to markets for available produce</li> <li>• Invest in appropriate infrastructure such as reliable transport and cold chain services which is accessible to MSMEs and smallholder farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Increase consumer awareness of the benefits of consuming locally produced agricultural goods while also mainstreaming cuisines that reduce food waste and use ingredients that are in-season</li> </ul>
Examples	<ul style="list-style-type: none"> <li>• The Africa Agriculture and Trade Investment Fund aims to improve food security and generate additional employment and income to farmers, entrepreneurs, and labourers by providing patient capital to efficient local value chains. The Fund provides loans of more than USD 3 million to businesses that are already operational</li> <li>• The EU's common agricultural policy (CAP) strategic plans seek to support farmers and improve food security in the region. The new CAP covering the 2023-2027 period targets greener and fairer agriculture in alignment with the European Green Deal<sup>121</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>• Great Lakes Facilitation Project is a World Bank funded project, in cooperation with COMESA, that aimed at facilitating cross-border trade. In phase one, the project supported cross-border trade between several countries<sup>122</sup></li> <li>• COMESA, through its preferential tariffs trading environment, introduced the Simplified Trade Regime (STR) to streamline the required documentation and procedures to clear small-scale cross-border trade consignments. Burundi, Democratic Republic of Congo, Ethiopia, Kenya, Malawi, Rwanda, Uganda, Zambia, and Zimbabwe are already implementing the STR<sup>123</sup></li> </ul>	<ul style="list-style-type: none"> <li>• The Ministry of Agriculture, Forestry, and Fisheries in Japan organised the Awards for Excellence in Local Production for Local Consumption acknowledging those who contributed to promoting the use of local produce and increasing understanding and awareness of local products among consumers<sup>124</sup></li> </ul>

121. European Commission, The new common agricultural policy 2023-2027 122. The World Bank, Great Lakes project to help African traders get their goods and services to the market, 2015 123. COMESA, Countries implementing the Simplified trade Regime set to rise, 2021 124. MAFF, Promotion of 'local production for local consumption', accessed in 2022

## PROMOTING CIRCULARITY IN MANUFACTURING

Table 12: Opportunities, challenges, and best practices for advancing the circular economy in manufacturing

	PRODUCTION	DISTRIBUTION	CONSUMPTION
Opportunities to advance a circular economy	<ul style="list-style-type: none"> <li>• Recycle and refurbish automotive parts</li> <li>• Redesign manufacturing by using non-virgin materials or alternative materials that are circular, such as producing bioplastics using plant-based material</li> </ul>	<ul style="list-style-type: none"> <li>• Redesign procurement to promote circularity</li> <li>• Create hubs to circulate and upcycle excess products and used clothing</li> </ul>	<ul style="list-style-type: none"> <li>• Purchase circular products</li> <li>• Repair broken or malfunctioning products rather than disposing of them</li> </ul>
Common issues hindering progress	<ul style="list-style-type: none"> <li>• Lack of the required technological capacity to adopt sophisticated circular processes</li> <li>• Higher costs of production when using non-virgin or alternative materials compared with regular virgin materials</li> <li>• Limited R&amp;D on developing and adopting cost-effective alternative manufacturing materials and efficient technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of a regulatory framework that promotes the procurement of circular products</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of a regulatory framework that promotes the procurement of circular products</li> </ul>
Best practices to enable uptake	<ul style="list-style-type: none"> <li>• Lack of the required technological capacity to adopt sophisticated circular processes</li> <li>• Higher costs of production when using non-virgin or alternative materials compared with regular virgin materials</li> <li>• Limited R&amp;D on developing and adopting cost-effective alternative manufacturing materials and efficient technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Prioritise circular manufacturing and procurement in national development plans</li> </ul>	<ul style="list-style-type: none"> <li>• Limited demand for circular products</li> </ul>
Examples	<ul style="list-style-type: none"> <li>• Der Grüne Punkt is revolutionising the plastics industry by using recycled plastic material to produce Systalen. The high-quality Systalen regranulates are used as inputs for products used in construction, civil engineering, logistics, and packaging technology, to name a few uses<sup>125</sup></li> <li>• Tech Access Partnership was created in 2020 to help address critical shortages in essential health technologies and equipment. The initiative connects experienced and emerging manufacturers to share information, technical expertise, and resources necessary to scale up production of the health tools.<sup>126</sup> This partnership can be replicated to advance circularity in manufacturing other products</li> </ul>	<ul style="list-style-type: none"> <li>• Thailand approved its first procurement plan focused on improving environmental quality in 2008. To align with the procurement requirements, the Packaging Division of Siam Cement Group, Thailand's largest cement company, decided to green the procurement of flexographic ink, which is the most important material used by the Division<sup>127</sup></li> </ul>	<ul style="list-style-type: none"> <li>• The Zambian Ministry of Commerce, Trade, and Industry initiated a Proudly Zambian Campaign to promote the production and consumption of high-quality Zambian products.<sup>128</sup> The Ministry signed a Memorandum of Understanding with Zambia Association of Manufacturers, for the latter to manage the campaign. Such campaigns can be replicated to promote circularity</li> </ul>

125. Der Grüne Punkt, Systalen – The Regranulate from Der Grüne Punkt, accessed 2022 126. United Nations, UN agencies launch Tech Access Partnership in joint effort to scale up local production of life-saving health technologies for COVID-19, 2020 127. Green Purchasing Network Malaysia, A Sampling of Success in Green Public Procurement, 2017 128. Zambia Association of Manufacturers, Proudly Zambian Campaign – Beyond the Logo, 2020

## PROMOTING CIRCULARITY IN TOURISM

Table 13: Opportunities, challenges, and best practices for advancing the circular economy in tourism

	PRODUCTION	DISTRIBUTION	CONSUMPTION
Opportunities to advance a circular economy	<ul style="list-style-type: none"> <li>• Redesign infrastructure by renovating existing buildings and making new buildings with circularity in mind (e.g., using mass timber and local labour)</li> <li>• Redesign products such as packaging materials, produce biodegradable products, and eliminate single-use plastic and nonbiodegradable products</li> <li>• Develop innovative and circular tourist activities</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce resource needs by promoting sharing services and places such as shared accommodation (e.g., Airbnb and Vrbo), transport (e.g., Uber and Bolt), and parks</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce transportation emissions by buying carbon offsets for miles flown and using electric vehicles for high-end safaris</li> <li>• Consume intentionally by choosing certified and eco-labelled products and services</li> </ul>
Common issues hindering progress	<ul style="list-style-type: none"> <li>• High costs of materials and inputs to produce circular products and buildings</li> <li>• Limited innovation to integrate circular economy principles in the sector</li> </ul>	<ul style="list-style-type: none"> <li>• Limited market demand for shared services and facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Limited consumer awareness of green tourism</li> </ul>
Best practices to enable uptake	<ul style="list-style-type: none"> <li>• Develop a unified certification scheme across countries to identify circular tourist facilities</li> <li>• Create incentives to use mass timber and other alternative materials for the construction of new tourist facilities</li> <li>• Establish uniform policies to promote sustainable forestry practices to produce timber used by the tourism industry</li> <li>• Invest in R&amp;D to discover innovative products, services, and activities that integrate circularity in tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Create incentives, for both the users and the providers, that promote shared services</li> <li>• Foster collaboration between RECs to identify resource-sharing opportunities, such as through increasing programming to promote and maintain shared spaces such as parks and other recreation facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Promoting local and regional tourism to reduce emissions from flights. RECs can collaborate on developing packages and programs that attract the consumers</li> <li>• Creating awareness on how to offset individual carbon footprints</li> </ul>
Examples	<ul style="list-style-type: none"> <li>• Circular Tourism Vietnam is a strategy to help the tourism sector recover from the effects of the COVID-19 pandemic. The project offers a platform to collect insights and define strategies that incorporate circular economy principles in the tourism sector. The project also aims to launch a Circularity Lab that will facilitate new circular idea generation and prototyping activities, among other services<sup>129</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Central Asia Regional Economic Cooperation (CAREC) developed a CAREC 2030 strategy in which tourism is one of the priority sectors. The Asian Development Bank then funded a scoping study to determine how to promote regional cooperation in tourism. Some of the recommendations of the study include unifying travel requirements to allow tourists to visit different countries within CAREC with ease and sharing product offerings to attract a wider market<sup>130</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Ecotourism Kenya is an initiative with a voluntary certification scheme that rates facilities based on their socio-economic, cultural, environmental, and legal impact. Such an initiative can be replicated in other countries to allow a common identification system for circular places and facilities</li> </ul>

129. CSPC, Circular Tourism Vietnam, 2020 130. Asian Development Bank, Promoting Regional Tourism Cooperation Under CAREC 2030- A Scoping Study, 2019

## PROMOTING CIRCULARITY IN INTEGRATED WASTE MANAGEMENT

Table 14: Opportunities, challenges, and best practices for advancing the circular economy in integrated waste management

	AGRICULTURE	MANUFACTURING	TOURISM
Opportunities to advance a circular economy	<ul style="list-style-type: none"> <li>• Recycle and refurbish automotive parts</li> <li>• Convert food and organic (e.g., livestock manure) waste into organic fertiliser to increase circularity in food systems and soil health</li> <li>• Convert agricultural residue into energy for more circular agricultural processing and distribution</li> <li>• Recover wastewater for irrigation as a circular and climate-conscious practice</li> <li>• Use food waste to produce nature-friendly animal feed</li> </ul>	<ul style="list-style-type: none"> <li>• Use recycled waste materials to reduce the use of virgin inputs in cloth-making</li> <li>• Use plastic waste to create affordable building material</li> </ul>	<ul style="list-style-type: none"> <li>• Work with local farmers to take food waste and convert it into organic fertiliser</li> <li>• Eliminate single-use plastic packaging, especially for hotel-supplied toiletries</li> <li>• Reuse linens and towels for extended stays to reduce energy and water usage</li> <li>• Replace toxic chemicals with more natural cleaning and laundry products</li> </ul>
Common issues hindering progress	<ul style="list-style-type: none"> <li>• Lack of technical skills to convert food waste for other uses such as organic fertilisers, energy, animal feed, etc</li> <li>• Lack of funding required to adopt technologies necessary for increased resource efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• High costs of alternative circular materials compared to linear materials</li> <li>• Limited investment in R&amp;D to create reliable circular materials that can be used in manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of awareness and/or limited willingness to adopt circular practices</li> <li>• Limited affordable circular alternatives to linear products (e.g., construction, cleaning, and packaging products)</li> </ul>
Best practices to enable uptake	<ul style="list-style-type: none"> <li>• Align on food waste conversion processes and methods across RECs (e.g., waste-to-fertiliser and waste-to-energy)</li> <li>• Provide training to farmers on regionally and continentally acceptable farming methods to produce quality organic products</li> <li>• Create incentives to explore the uses of food waste, such as developing markets for organic fertilisers</li> <li>• Provide support to those adopting circular practices to access the necessary equipment and technologies at an affordable cost</li> </ul>	<ul style="list-style-type: none"> <li>• Increase investment in R&amp;D to develop reliable material from waste for use in manufacturing</li> <li>• Create transnational partnerships to promote the reuse of waste to increase circularity in the manufacturing industry</li> </ul>	<ul style="list-style-type: none"> <li>• Develop multilateral agreements on banning single-use plastics</li> <li>• Partner with the private sector, mainly businesses that make compostable and reusable items</li> <li>• Create a circularity certification program for hotels and other tourist facilities</li> <li>• Increase public awareness of circular economy benefits for local communities</li> </ul>
Examples	<ul style="list-style-type: none"> <li>• Opportunity International facilitates training on good agricultural practices to teach farmers effective soil health management and crop cultivation to increase harvests.<sup>131</sup> The organisation also offers other services including financial support, market access, and digital services to farmers under their Agriculture Finance programme</li> <li>• AgriProtein uses insects to turn food waste into animal feed</li> </ul>	<ul style="list-style-type: none"> <li>• HP partnered with Sinctronics to create a circular reverse logistics ecosystem in the Brazilian electronics sector. To understand and redesign the product cycle, HP created a Recycling and Innovation Centre next to the local manufacturing site. R&amp;D led to the creation of a recycled white plastic to be used in producing electronic products<sup>132</sup></li> </ul>	<ul style="list-style-type: none"> <li>• BioPak offers a packaging solution by producing compostable food packaging made from plants and specifically designed for a circular economy. The company's product range includes hot and cold cups, containers, plates, and cutlery</li> </ul>

131. Opportunity International, Training for Farmers, accessed 2022

132. Ellen Macarthur Foundation, Creating a reverse logistics ecosystem: HP Brazil & Sinctronics, accessed 2022



## VI. RECOMMENDATIONS





# RECOMMENDATIONS

## SYNTHESIS OF GUIDELINES AND RELATED BEST PRACTICES

**These guidelines provide a framework to promote a coordinated approach to the transition towards a circular economy throughout Africa.** They are neither prescriptive nor exhaustive. Instead, they encourage countries to be cognisant of their specific needs and resources, and tailor how they adopt these guidelines to their specific contexts. The transition to a circular economy is not linear and requires concerted collaboration among various stakeholders across all aspects of the economy (public, private, academia, CSOs, research institutes, development partners, etc.) to enable a successful systems transformation. The recommended best practices to help countries begin to adopt these key guidelines are summarised below:

### GUIDELINE 1: MAKE THE CASE FOR THE CIRCULAR ECONOMY BY INCREASING AWARENESS ON ITS SIGNIFICANCE FOR SUSTAINABLE INCLUSIVE DEVELOPMENT IN AFRICA

- Ensure buy-in from the highest level of government to incorporate circular economy principles in existing and new policies
  - Establish strong economic cases for a circular economy across African countries aligned with national priorities, as well as continental and global commitments
  - Explicitly identify advancing a circular economy and promoting resource efficiency as part of Nationally Determined Contributions
- Conduct awareness-raising campaigns and capacity development programmes across countries to communicate the importance of adopting a circular economy and promote innovation. Specifically:
  - Collect and share stories on various initiatives and business models that are successfully advancing the transition towards a circular economy, highlighting how they relate to cultural practices to accelerate their adoption
  - Integrate circular economy principles in academic curricula to develop the right capacity for technology development, innovation, and implementation
- Set regular multi-stakeholder discussion sessions and establish information exchange platforms to strengthen public-private partnerships and foster a private sector-led transition
- Coordinate continental in-person and virtual peer learning platforms across RECs to foster collaboration in circular business model development

### GUIDELINE 2: ESTABLISH A ROADMAP FOR THE DEVELOPMENT AND ADOPTION OF CIRCULAR ECONOMY POLICIES AND ACTION PLANS, AS WELL AS THE REQUIRED GOVERNANCE STRUCTURES TO ENSURE THAT NATIONAL, REGIONAL, AND CONTINENTAL POLICIES ON CIRCULAR ECONOMY ARE COMPLEMENTARY

- Design, adopt and finance a multi-stakeholder roadmap outlining a clear vision and pathway for the development and implementation of a circular African economy, that RECs and countries can then adopt and adapt for their specific contexts
- Identify/ensure linkages with existing frameworks and develop/strengthen legal and regulatory frameworks and standards to support a circular economy
- Establish institutional frameworks which explicitly identify key stakeholders and state their roles in designing, implementing, monitoring, and reporting on initiatives to advance a circular economy, including coordination structures
- Enhance quality policy and infrastructure to enable existing product quality standards enacted at the continental and regional levels to be adapted and replicated across countries

- Foster collaboration amongst certification bodies across Africa to create coherent standards that are aligned with international standards such as ISO and IEC
  - o Certification and labelling standards should also include reviewing product design to ensure that circular economy principles are embedded from the beginning of the production cycling to post consumption
- Create a National Cleaner Production Centre to coordinate all sustainable production and consumption programming between government and businesses. Where one exists, strengthen its capacity
- Ensure adequate resources (e.g., technical expertise, personnel, etc.) for implementing, monitoring, and evaluating circular economy strategies

### **GUIDELINE 3: STRENGTHEN MARKET DEMAND FOR CIRCULAR ECONOMY PRODUCTS BY PROVIDING EFFECTIVE INCENTIVES FOR FIRMS TO CONSIDER THE IMPACT ON NATURAL CAPITAL IN THEIR DECISION-MAKING**

- Establish national regulatory frameworks that are aligned across RECs to reduce barriers to entry, exit, and growth for transnational circular firms and business models
- Engage the private sector to understand their needs to unlock resources and increase circular economy technology and innovation. Specifically, support upstream innovation that is tackling issues from their roots to design context-specific circular economy solutions
- Establish enabling environments and phase out contradictory subsidies that support linear business models
  - o Increase public investment in circular economy infrastructure and services (e.g., waste management) to facilitate private sector participation
  - o Reduce the costs of intellectual property rights for MSMEs and start-ups developing new circular economy business models
  - o Reduce or remove import duties on primary goods used for managing pollution and resources (such as equipment used in recycling plants) or on secondary raw materials
- Develop or leverage existing free trade zones to enable backward and forward linkages
- Establish and harmonise EPR policies, starting with products such as plastics and electronics
- Enact circular procurement policies for government entities such as refurbishing furniture and internally circulating excess supplies to create demand for circular products

### **GUIDELINE 4: INCREASE ACCESS TO FINANCING FOR CIRCULAR BUSINESS MODELS, INCLUDING RISK CAPITAL, BY SUPPORTING FINANCIAL INNOVATION AND ENTREPRENEURIAL SKILLS DEVELOPMENT**

- Engage multilateral DFIs to establish innovative financial products and adopt proactive circular economy credit policies and lending strategies
- Integrate circular economy into regional, national, and sectoral budgeting and fund allocation process to ensure that a portion of national budgets is allocated for specific and prioritised circular economy initiatives to channel funds towards circular economy solutions
  - o Provide grants for early-stage innovations and project preparation, to subsequently allow for debt financing as the business advances through different growth stages
- Provide capacity development for private commercial banks to integrate circular economy principles in their revenue/capital mobilisation and lending policies and procedures and to manage and disburse funding for circular economy solutions
  - o Assist financial institutions with getting certified to access climate funds
  - o Develop circular criteria relevant to the national context that banks should use in assessing funding applications



Photo courtesy of UNEP

- Provide technical assistance to equip MSMEs with the skills and documentation required to access funds designated for a circular economy, as well as skills to iterate and improve their innovations to make their business models more bankable
  - Help MSMEs form Savings and Credit Cooperative Organisations to access funds at better rates from their pooled savings
- Develop due diligence frameworks and metrics that allow businesses and financiers to assess the circularity potential and impact of their business practices and/or production processes
  - Conduct studies on the return on investment of transitioning to a circular economy to showcase its viability as an approach to sustainable business and investment

#### **GUIDELINE 5: ESTABLISH SECTOR-SPECIFIC PRIORITIES AND POLICIES, AND ENSURE THEIR COHERENCE ACROSS COUNTRIES AND RECS**

- Conduct scoping studies to identify key sectors with high potential to advance a circular economy and the relevant business opportunities
- Design sectoral circular economy action plans and integrate such priorities into the relevant national and sectoral policies, plans, and programmes
- Establish policy instruments (e.g., EPR, eco-contributions, tax exemptions, etc.) and standards (e.g., certifications and labelling) that are aligned across sectors
- Liaise with multilateral trade partners to collaboratively enact coherent sector-specific policies and incentive frameworks to advance a circular economy

*Table 15 proposes a distinction on the application of these recommendations at national, regional, and continental levels.*

## SEGMENTATION OF ROLES AT THE NATIONAL, REGIONAL AND CONTINENTAL LEVELS

Table 15: Role Segmentation for Replication of the Best Practices across African Countries

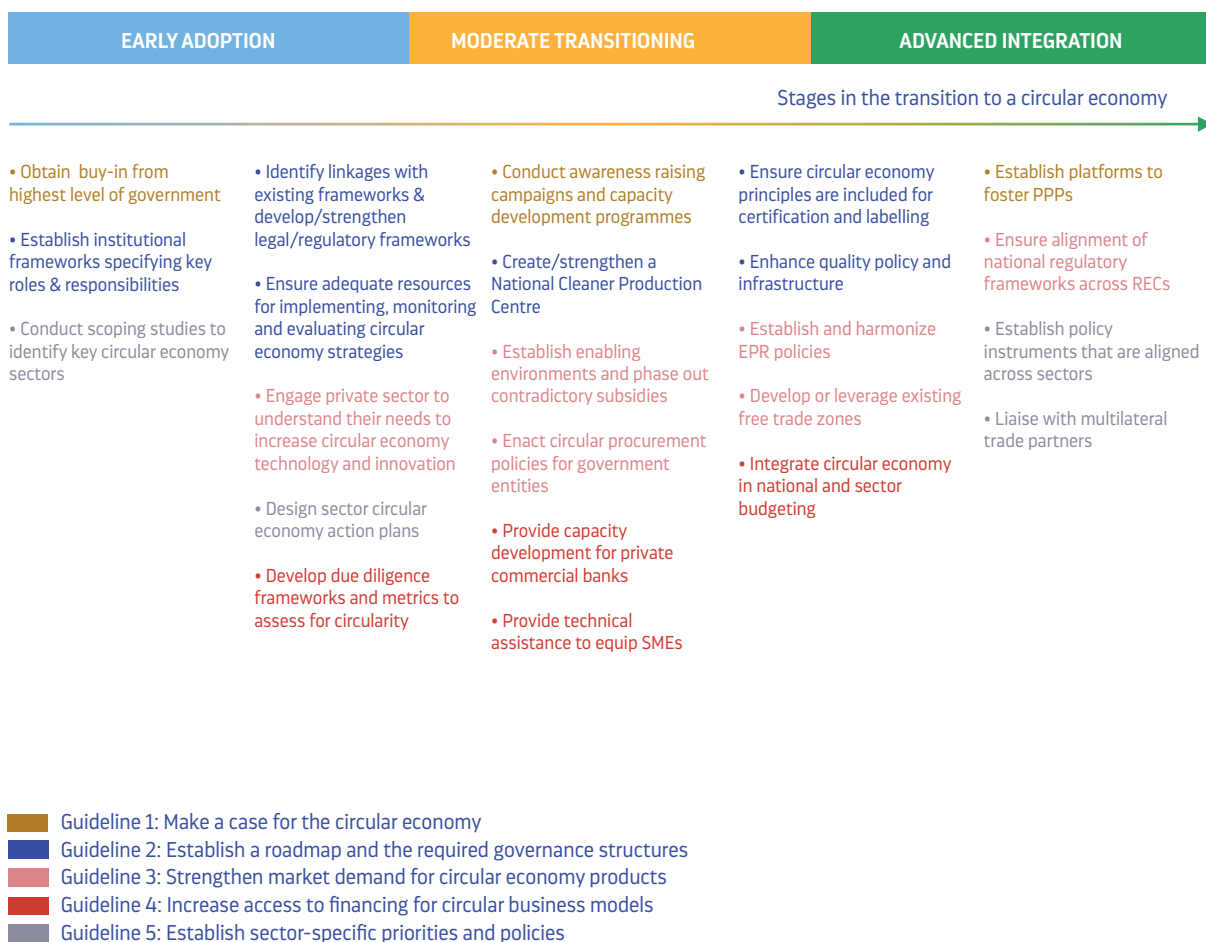
	National level	Regional or REC level	Continental level
<b>Guideline 1: Make the case for the circular economy by increasing awareness on its significance for sustainable inclusive development in Africa</b>			
Get buy-in from the highest level of government to incorporate circular economy principles in existing and new national policies: <ul style="list-style-type: none"> <li>- Establish strong economic cases for a circular economy across African countries aligned with national priorities, as well as continental and global commitments</li> <li>- Explicitly identify advancing a circular economy and promoting resource efficiency as part of Nationally Determined Contributions</li> </ul>	✓	✓	✓
Conduct awareness-raising campaigns and capacity development programmes across countries to communicate the importance of adopting a circular economy and promote innovation. Specifically: <ul style="list-style-type: none"> <li>- Collect and share stories on various initiatives and business models that are successfully advancing the transition towards a circular economy, highlighting how they relate to cultural practices to accelerate their adoption</li> <li>- Integrate circular economy principles in academic curricula to develop the right capacity for technology development, innovation, and implementation</li> </ul>	✓		
Set regular multi-stakeholder discussion sessions and establish information exchange platforms to strengthen public-private partnerships and foster a private sector-led transition	✓	✓	✓
Coordinate continental in-person and virtual peer learning platforms across RECs to foster collaboration in circular business model development		✓	✓
<b>Guideline 2: Establish a roadmap for the development and adoption of circular economy policies and action plans, as well as the required governance structures to ensure that national, regional, and continental policies on circular economy are complementary</b>			
Design, adopt and finance a multi-stakeholder roadmap outlining a clear vision and pathway for the development and implementation of a circular African economy, that RECs and countries can then adopt and adapt for their specific contexts		✓	✓
Identify/ensure linkages with existing frameworks and develop/strengthen legal and regulatory frameworks and standards to support a circular economy	✓	✓	✓
Establish institutional frameworks which explicitly identify and state key stakeholders and their roles in designing, implementing, monitoring, and reporting on initiatives to advance a circular economy, including coordination structures.	✓	✓	✓
Foster collaboration amongst certification bodies across Africa to create coherent standards that are aligned with international standards such as ISO and IEC <ul style="list-style-type: none"> <li>- Certification and labelling should also include reviewing product design to ensure circular economy principles are embedded from the beginning of the production cycle to post consumption</li> </ul>		✓	✓
Enhance quality policy and infrastructure to enable existing product quality standards enacted at the continental and regional levels to be adapted and replicated across countries	✓		
Create a National Cleaner Production Centre to coordinate all sustainable production and consumption programming between government and businesses. Where one exists, strengthen its capacity	✓		
Ensure adequate resources (e.g., technical expertise, personnel, etc.) for implementing, monitoring, and evaluating circular economy strategies	✓	✓	✓

<b>Guideline 3: Strengthen market demand for circular economy products by providing effective incentives for firms to consider the impact on natural capital in their decision-making</b>			
Establish national regulatory frameworks that are aligned across RECs to reduce barriers to entry, exit, and growth for transnational circular firms and business models	✓	✓	
Engage the private sector to understand their needs to unlock resources and increase circular economy technology and innovation. Specifically, support upstream innovation that is tackling issues from their roots to design context-specific circular economy solutions	✓		
Establish enabling environments and phase out contradictory subsidies that support linear business models <ul style="list-style-type: none"> <li>- Increase public investment in circular economy infrastructure and services (e.g., waste management) to facilitate private sector participation</li> <li>- Reduce the costs of intellectual property rights for MSMEs and start-ups developing new circular economy business models</li> <li>- Reduce or remove import duties on primary goods used for managing pollution and resources (such as equipment used in recycling plants) or on secondary raw materials</li> </ul>	✓	✓	
Develop or leverage existing free trade zones to enable backward and forward linkages	✓	✓	✓
Establish and harmonise EPR policies, starting with products such as plastics and electronics	✓		
Enact circular procurement policies for government entities such as refurbishing furniture and internally circulating excess supplies to create demand for circular products	✓		
<b>Guideline 4: Increase access to financing for circular business models, including risk capital, by supporting financial innovation and entrepreneurial skills development</b>			
Engage multilateral DFIs to establish innovative financing products and adopt proactive circular economy credit policies and lending strategies		✓	✓
Integrate circular economy into national and sectoral budgeting and fund allocation process to ensure that a portion of national budgets is allocated for specific and prioritised circular economy initiatives, to channel funds towards circular economy solutions <ul style="list-style-type: none"> <li>- Provide grants for early-stage innovations and project preparation, to subsequently allow for debt financing as the business advances through different growth stages</li> </ul>	✓	✓	
Provide capacity development for private commercial banks to integrate CE in their revenue/capital mobilisation and lending policies and procedures and to manage and disburse funding for circular economy solutions <ul style="list-style-type: none"> <li>- Assist financial institutions with getting certified to access climate funds</li> <li>- Develop circular criteria relevant to the national context that banks should use in assessing funding applications</li> </ul>	✓	✓	
Provide technical assistance to equip MSMEs with the skills and documentation required to access funds designated for a circular economy, as well as skills to iterate and improve their innovations to make their business models more bankable <ul style="list-style-type: none"> <li>- Help MSMEs form Savings and Credit Cooperative Organisations to access funds at better rates from their pooled savings</li> </ul>	✓		
Develop due diligence frameworks and metrics that allow businesses and financiers to assess the circularity potential and impact of their business practices and/or production processes <ul style="list-style-type: none"> <li>- Conduct studies on the return on investment of transitioning to a circular economy to showcase its viability as an approach to sustainable business and investment</li> </ul>	✓	✓	✓
<b>Guideline 5: Establish sector-specific priorities and policies, and ensure their coherence across countries and RECs</b>			
Conduct scoping studies to identify key sectors with high potential to advance a circular economy and the relevant business opportunities	✓	✓	
Design sector circular economy action plans and integrate such priorities into the relevant national and sectoral policies, plans, and programmes	✓		
Establish policy instruments (e.g., EPR, eco-contributions, tax exemptions, etc.) and standards (e.g., certifications and labelling) that are aligned across sectors	✓	✓	✓
Liaise with multilateral trade partners to collaboratively enact coherent sector-specific policies and incentive frameworks to advance a circular economy	✓	✓	✓

## POTENTIAL SEQUENCING OF THE GUIDELINES AT THE COUNTRY LEVEL

Countries are encouraged to assess, using the identified six critical enablers, and determine their standing when it comes to adopting and advancing a circular economy. Once each country determines its current positioning, it should apply the recommended guidelines, starting with best practices that are most relevant to its stage. The figure below provides guidance on what best practices each country can consider focusing on, depending on its identified level of adoption.

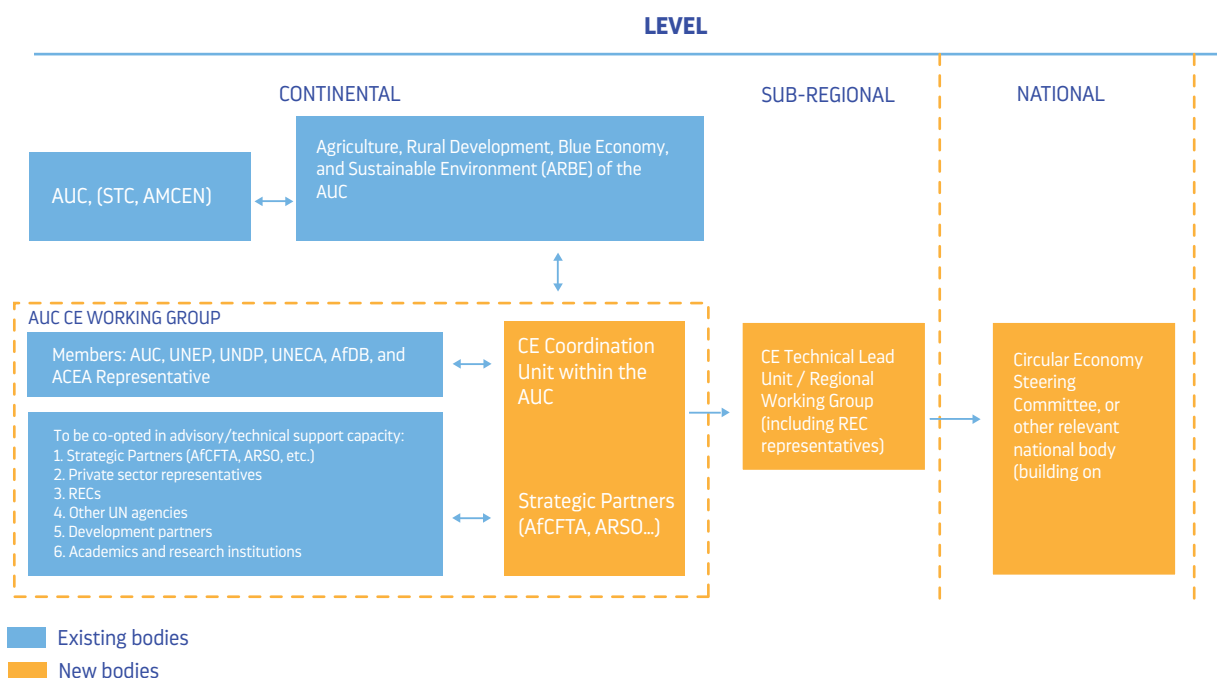
Figure 9: Indicative mapping of circular economy best practices by adoption phase (at the country level)



## NEXT STEPS FOR GUIDELINES ADOPTION

These guidelines are neither exhaustive nor a conclusive work to accelerate the transition towards a circular economy in Africa. For their part, they provide a common basis for the development of explicit circular economy action plans that will accelerate the transition towards a circular economy across the African continent. They highlight the need for a designated mechanism to coordinate the activities of all African countries whilst ensuring uniform enforcement, compliance, monitoring, and evaluation of implementation progress. A clear coordination structure must be defined to facilitate the adoption and execution of these guidelines, relying on existing bodies to the extent possible. Figure 10 provides a potential option for the coordination structure.

Figure 10: Organisation structure for the implementation of the guidelines to advance a circular economy in Africa





At a high level, the roles and responsibilities at the continental and regional levels are as follows:

### 1. Continental level

#### a. Agriculture, Rural Development, Blue Economy, and Sustainable Environment (ARBE) of

**AUC:** Seeks endorsement for circular economy programmes and champions these programmes with the African Union

#### b. African Union Specialized Technical Committee (STC) and African Ministerial Conference on the Environment (AMCEN):

Provide advisory services to ARBE and champions circular economy programmes in collaboration with ARBE

**c. Circular Economy (CE) Working Group:** The AUC CE Expert Working Group (EWG) will take the lead in ratifying the guidelines and developing a continent-wide circular economy action plan with the support of UNEP, UNDP, UNECA and AfDB. A representative from ACEA will take an advisory role within the EWG, leveraging its partnerships and experience from identifying opportunities and creating linkages to facilitate the continent's transition to a circular economy. Strategic partners such as the African Continental Free Trade Area (AfCFTA) through its Council of Ministers, African Organisation for Standardisation (ARSO), RECs, other UN agencies, development partners, academics and research institutions may be co-opted into the working group to provide additional guidance and technical support to the implementation of the

**d. CE Coordination Unit:** A body within ARBE in charge of **coordinating the implementation of the guidelines** and ensuring uniform enforcement, compliance, monitoring, and evaluation of implementation – specifically:

- i. Responsible for ensuring coherence and collaboration amongst all African countries, working closely with RECs
- ii. Responsible for establishing integration linkages amongst economic sectors to bring circularity at the systems level
- iii. Responsible for developing indicators to assess progress made in accelerating the transition towards a circular economy in Africa

This body can also play a key role in enabling information exchange, peer learning, and skills and technology transfer – for example, by organising bi-annual or annual convenings to review progress, share good practices, and identify concrete actions or other measures to advance a circular economy in the continent.

### 2. Sub-regional level

**a. CE Technical Lead Unit/ Regional Working Group:** With participation from RECs, the unit will develop cross-border initiatives and associated indicators to promote circular economy practices, business models, and products, as well as those to assess progress made in accelerating the transition towards a circular economy in Africa through trade facilitation, financial innovation, capacity development, etc. These should be complementary to the work of the ACEA Working Groups, currently covering ACEA's five focus areas at the continental level.

### 3. National level

a. The continental and sub-regional bodies should interact closely with the relevant bodies at the National level. For example, a Circular Economy Steering Committee supports the government in establishing relevant policy instruments and economic mechanisms to advance a circular economy as well as resource mobilisation. This entity can leverage National Cleaner Production Centres, where one exists, or a dedicated unit or department within the ministry leading national circular economy initiatives.



# VII. ANNEX I: INSTITUTIONAL ARRANGEMENTS



# ANNEX I: INSTITUTIONAL ARRANGEMENTS

**The African Continental Free Trade Area (AfCFTA) Agreement was established with the ambitious goal to foster trade facilitation and integration across the continent.** This goal can and should align with an accelerated transition towards a circular economy in Africa. Hence, the existing institutional arrangements established to implement this Agreement could be leveraged to accelerate the development of a circular economy in Africa. The implementation and coordination framework developed for the execution of the AfCFTA Agreement is summarised in Table 16.<sup>133</sup>

*Table 16: Institutional Arrangements for the Implementation of the AfCFTA Agreement*

INSTITUTION	COMPOSITION	FUNCTIONS
Assembly	Heads of State and Government of the AUC	<ul style="list-style-type: none"> <li>• Highest decision-making organ of the AUC where decisions are taken by consensus</li> <li>• Provides oversight and strategic guidance on the implementation of the AfCFTA.</li> <li>• Has sole authority to adopt interpretations of the Agreement recommended by the Council of Ministers</li> </ul>
Council of Ministers	Ministers responsible for Trade or similar ministers, authorities, or officials duly assigned by the State Parties	<ul style="list-style-type: none"> <li>• Reports to the Assembly through the Executive Council</li> <li>• Makes decisions commensurate with the AfCFTA Agreement</li> <li>• Ensures effective implementation and enforcement</li> <li>• Has authority to take required measures to promote objectives and other instruments relevant to the Agreement</li> <li>• Works collaboratively with relevant AUC organs and institutions</li> <li>• Promotes the harmonisation of relevant policies, strategies, and measures for effective implementation</li> <li>• Creates and delegates responsibilities to ad hoc or standing committees and working or expert groups</li> <li>• Prepares its rules of procedure and those of its subsidiary bodies created for the implementation of the AfCFTA. These are submitted to the Executive Council for approval</li> <li>• Oversees the work of all committees and working groups established under AfCFTA</li> <li>• Considers the reports and activities of the Secretariat and takes appropriate actions</li> <li>• Creates regulations, issues directives, and makes recommendations per the provisions of the Agreement</li> <li>• Considers and proposes the staff, organisational structure, and financial regulations of the Secretariat. These recommendations are submitted for adoption by the Assembly through the Executive Council</li> <li>• Approves the work programs of the AfCFTA and its institutions</li> <li>• Considers the budgets of the AfCFTA and its institutions and submits them to the Assembly through the Executive Council</li> <li>• Makes recommendations to the Assembly for the adoption of authoritative interpretations of the Agreement</li> <li>• Performs any other function consistent with the Agreement or per requests of the Assembly</li> </ul>

133. African Union Commission, Agreement Establishing the African Continental Free Trade Area, 2018

Committee of Senior Trade Officials	Permanent or Principal Secretaries, or other officials appointed by each State Party	<ul style="list-style-type: none"> <li>• Implements the decisions of the Council of Ministers</li> <li>• Develops programmes and action plans for the implementation of AfCFTA</li> <li>• Monitors, evaluates, and ensures proper functioning and development of the AfCFTA per the provisions of the Agreement</li> <li>• Creates committees or other working groups as needed</li> <li>• Oversees the implementation of the provisions of the Agreement. As such, a Technical Committee may be requested to investigate any particular matter</li> <li>• Directs the Secretariat to undertake specific assignments</li> <li>• Performs any other function relevant to the Agreement or as may be requested by the Council of Ministers</li> </ul>
Secretariat	Created by the Assembly, which also determines the mandate, nature, location, structure, and budget of the Secretariat	<ul style="list-style-type: none"> <li>• Autonomous and legally independent institution within the AU</li> <li>• Funded through the AU's annual budgets</li> <li>• Its roles and responsibilities are determined by the Council of Ministers</li> </ul>



# VIII. ANNEX II: STAKEHOLDER CONSULTATIONS



## AUC EXPERT WORKING GROUP VALIDATION WORKSHOP

AUC EXPERT WORKING GROUP VALIDATION WORKSHOP			
20-21 OCTOBER 2022			
KASANE, BOTSWANA			
Country	Name of Organisation	Name of Participant	Title of Participant
Côte d'Ivoire	Dalberg	Bertrand Assamoi	Associate Partner
Ghana	Ministry of Environment, Science, Technology & Innovation	Raymond Ohene Ofori	
Mauritius	Consultant	Prof. Toolseeram Ramjeawon	Consultant
Nigeria	Nigeria Circular Economy Working Group	Prof. Francis Ebuta Bisong	
Regional	African Organisation for Standardisation (ARSO)	Liliane Kamanzi	Project Coordinator
Regional	African Union Commission	Caroline Tagwireyi	Consultant
Regional	African Union Commission	Feben Tegegne	Office Assistant
Regional	African Union Commission	Harsen Nyambe	Director
Regional	African Union Commission	Kidanemariam Tiruneh	Water and Climate Finance Adviser
Regional	African Union Commission	Leah Naess Wanambwa	Senior Policy Officer
Regional	International Union for the Conservation of Nature - IUCN	Tanya Merceron	BIOPAMA Regional Coordinator – West and Central Africa
Regional	UNDP Regional Services Centre for Africa	Daisy Mukarakate	Regional Climate Policy Advisor
Regional	UNECA	Charles Akol	Environmental Affairs Officer, Green and Blue Economy section Technology Climate Change and Natural Resources Management division

Regional	UNEP	Alexander Mangwiro	Regional Sub-Programme Coordinator, Chemicals and Waste
Regional	UNEP	Patrick Mwesigye	Regional Sub-Programme Coordinator, RE and SCP
Regional	UNEP	Rhoda Wachira	Programme Management Officer
Regional	UNEP	Sylvia Munuhe	Programme Management Assistant
South Africa	Department of Environment, Forestry, and Fisheries	Dr. Jenitha Badul	Senior Policy Advisor - Sustainability Programmes & Projects
South Africa	University of the Free State	Dr. Tinashe Dirwai	Lecturer
Tanzania	Dalberg	Latifah Kinyanyile	Consultant
Tanzania	Women's Environment and Development Organization (WEDO)	Mwanahamisi Singano	Global Policy Lead
Uganda	Ministry of Finance, Planning and Economic Development	David Kiyingi	Commissoner, Procurement Policy and Management Department

## REGIONAL VALIDATION WORKSHOP

VALIDATION WORKSHOP ACCRA, GHANA AUGUST 24-25, 2022				
No.	Country	Name of Organisation	Name of Participant	Title
1	Burkina Faso	Ministry of Environment, Energy, Water and Sanitation,	Kabore Boukary	
2	Burkina Faso	Ministry of Environment, Energy, Water and Sanitation,	Yacouba Savadogo	
3	Burkina Faso	Private sector – SAG SME	Ezona Bazye	
4	Burkina Faso	Association Jeunesse solidaire pour la Development Veritable (AJSDV)	Yassia Savadogo	Grantee, SAG Phase I
5	Burkina Faso	Minister of Environment, Energy, Water and Sanitation,	Pamoussa Ouedraogo	Focal Point

6	Côte d'Ivoire	Confédération Générale des Entreprises de Côte d'Ivoire (CGECI)	Claude Koutoua	Chairman of the E-QHSE Commission
7	Côte d'Ivoire	Dalberg	Bertrand Yao Assamoi	Associate Partner
8	Côte d'Ivoire	Ministry of Environment and Sustainable Development (MINEDD)	Gustave Aboua	General Director of Sustainable Development
9	Ethiopia	AAiT	Lelissa Daba Butta	Environmental Specialist
10	Ethiopia	EPA Ethiopia	Frenesh Mekuria Gobena	
11	Ethiopia	Ethiopian Environment Protection Authority	Shiferaw Negash Bira	Director General - Environmental and Social Impact Assessment
12	Ethiopia	IPDC - Ethiopia	Mergia Kuma	Head, Environment and Social Safeguard Dept
13	Ethiopia	UNEP/Consultant	Nebiyelul Gessesse	Consultant
14	Ghana	Ecobank Ghana	Kingsley Adofo-Addo	Head SME Banking
15	Ghana	Energy Commission	Ebenezer Ashie	Project Coordinator
16	Ghana	Environmental Protection Agency	Gertrude Annorbah	
17	Ghana	Ghana National Cleaner Production Centre	Phoebe Anchebah	
18	Ghana	Ministry of Environment, Science, Technology, and Innovation (MESTI)	Oliver Boachie	Special Adviser and Ghanaian ACEA Representative
19	Ghana	Ministry of Finance	Robert Mensah	
20	Ghana	Ministry of Trade and Industry	Michael A. Opoku	Team Leader, Policy, Planning, Monitoring and Evaluation
21	Ghana	Science and Technology Policy Research Institute	Dr. (Mrs.) Wilhelmina Quaye	Chief Research Scientist and Director
22	Ghana	City Waste Recycling	Vivian Ahiayibor	Managing Director
23	Ghana	Environmental Protection Agency	Selina Amoah	Deputy Director
24	Ghana	Ghana National Cleaner Production Centre	Daniel Digber	Principal Programmes Officer
25	Ghana	Ghana National Cleaner Production Centre	Letitia Nyaaba	Deputy Director
26	Ghana	Ministry Environment, Science, Technology & Innovation (MESTI)	Peter Justice Dery	Director, Environment
27	Ghana	Ministry of Trade and Industry	Veronica Akiwele Abagye	NTCC Member
28	Ghana	University of Cape Coast	Daniel Ofori	Lecturer
29	Kenya	Kenya National Cleaner Production Centre	Steve Nyamori	Deputy Director
30	Kenya	KEPSA	Faith Ngige	Senior Public Private Dialogue Office
31	Kenya	Kenya Bureau of Standards	Butichi Samson	



32	Kenya	Ministry of Agriculture, Livestock, Fisheries and Co-operatives	Veronica Ndetu	NTCC Member
33	Kenya	Ministry of Environment and Forestry	Augustine Kenduiwo	Deputy Director Climate Change/ SAG Focal Point
34	Kenya	Ministry of Environment and Forestry	Ayub Macharia	Director, Training. NTCC member
35	Kenya	National Treasury and Planning	Hillary Korir	
36	Mauritius	Consultant	Avinash Venkama	Grantee
37	Mauritius	Consultant	Prof. Toolseeram Ramjeawon	Consultant
38	Mauritius	Ministry of Environment, Solid Waste, and Climate Change	Deochan Ganesh Dookee	Deputy Director, Solid Waste Management Division
39	Mauritius	Lineage Invest	Oumila Sibartie	Co-Founder & Director
40	Mauritius	Ministry of Environment, Solid Waste Management and Climate Change	Moonawwara Begum Outim	Environment Officer
41	Nigeria	Nigeria Circular Economy Working Group	Prof. Francis Ebuta Bisong	
42	Regional	Dalberg	Rym Keramane	Associate Partner
43	Regional	EU	Clemens Beckers	
44	Regional	UNECA	Charles Akol	Environmental Affairs Officer, Green Economy and Blue Economy Section in the Technology, Climate Change & Natural Resource Management Division
45	Regional	UNEP	Angèle Luh	Head, Sub Regional Office for West Africa
46	Regional	UNEP	Sylvia Munuhe	Programme Management Assistant
47	Regional	African Guarantee Fund	Patrick Obadhi Lumumba	Senior Capacity Development Officer
48	Regional	ARSO	Dr. Hermogene Nsengimana	Secretary General
49	Regional	UNEP	Carolyne Cheronno	Programme Management Assistant
50	Regional	UNEP	Lawrence Nzuve	Communication Consultant
51	Regional	UNEP	Patrick Mwesigye	Regional Sub-Programme Coordinator, RE and SCP
52	Regional	UNEP	Rhoda Wachira	Programme Management Officer
53	Regional	UNEP	Wycliffe Ogweno	Senior Finance and Administration Assistant
54	Rwanda	Ministry of Finance and Economic Planning	Thierry Watrin	Green Economy and Climate Finance Advisor to the Minister of State/EP

55	Rwanda	Private Sector Federation	Florent Uwacu	Executive Director
56	Rwanda	Rwanda Cleaner Production and Climate Innovation Centre	Sylvie Mugabekazi	Technical Expert, CPCIC/NIRDA
57	South Africa	Dalberg	Scott Hosking	Senior Project Manager
58	South Africa	National Cleaner Production Centre South Africa	Lee-Hendor Ruiters	Business Strategy and Project Development Manager
59	South Africa	National Cleaner Production Centre South Africa	Tanya van Zyl	Quality Manager
60	South Africa	Department of Environment, Forestry, and Fisheries	Elizabeth Ntoyi	Control Environmental Officer G
61	Tanzania	East African Community	Dismas Mwikila	Environment and Natural Resources Management Specialist
62	Uganda	Consultant	Teddy Twine Nsubuga	Consultant
63	Uganda	Ministry of Agriculture, Animal Industry and Fisheries	Evelyn Lutalo	Agricultural Specialist
64	Uganda	Ministry of Finance, Planning and Economic Development	David Kiyingi	Commissoner, Procurement Policy and Management Department
65	Uganda	Ministry of Trade, Industry and Cooperatives	Kassim Semanda	Senior MSME Officer
66	Uganda	Ministry of Water and Environment	Nathan Mununuzi	Senior Environment Officer
67	Uganda	National Environment Management Authority (NEMA)	Richard Mugambwa	SWITCH Africa Green National Focal Point
68	Uganda	Stanbic Bank Uganda	Stephen Segujja	Head, Economic Enterprise Restart Fund
69	Uganda	Uganda Wildlife Authority	Florence Kyalimpa	Warden - Environmental Impact Assessment
70	United Kingdom	Spaanda	Manjula Basant Rai	Founder & CEO
71	Zambia	COMESA Secretariat	Esther Mwimba	Senior Private Sector Development Officer
72	Zambia	Ecowise Solutions	Danny Mwango	Environmental Expert

## STAKEHOLDERS CONSULTED (VIRTUALLY AND IN-PERSON)

	Organisation	Interviewee
Regional	Africa Circular Economy Network (ACEN)	Peter Desmond

	Africa Circular Economy Network Foundation (ACEN Foundation)	Chris Whyte
	African Circular Economy Alliance (ACEA)	Bonmwa Fwangkwal
	Ellen MacArthur Foundation	Miranda Schnitger Sarah O-Carroll
	Footprints Africa	Joanna Bingham
	International Council for Local Environmental Initiatives (ICLEI) Africa	Paul Currie Jokudu Guya Daniel Adeniyi
	Southern African Development Community (Environment and Climate Change Unit)	Sibongile Mavimbela Shepherd Muchuru
	United Nations Economic Commission for Africa	Charles Akol
	World Bank Group	Ernesto Sanchez-Triana Helena Naber
	African Organisation for Standardisation (ARSO)	Dr. Hermogene Nsengimana Charles Gachahi
Burkina Faso	Ministry of the Environment, Green Economy, and Climate Change	Bamoussa Ouedraogo Yacouba Sawadogo Boukary Kaboré Bonkougou Jacques
	GCF Burkina Faso	Issaka Ouedraogo
	Association Jeunesse soldaire pour la Development Veritable (AJSDV)	Savadogo Yassia
	BIOPROTECT	Savadogo W Claude Arsene
	Chef Coutumier	Rogambatibila Oumar Naaba Sigri de Saponé
	Cooperative YAMA	Gnankine Alima/Kassamba
	General Directorate of Green Economy and Climate Change (DGEVCC)/DPEIV	Dao Salimata
	General Directorate of Green Economy and Climate Change (DGEVCC)	Savadogo B. Guy Bonaventure Bambara Antoine
	Minister of Environment, Energy, Water and Sanitation	Savadogo Yacouba
	Ministry of Economy and Finance (MEFP) / General directorate of economy and planification (DGEP)	Sawabogo Boureima
	National Tourism Office of Burkina Faso (ONTB)	Da Leonie
	New-Karikis International-Sarl	Yaméogo Felicité

	Private sector - SAG SME	Ezona Bazye
	Societe Cooperative Wende de Koudougou	Berehoudougou /Zongo S. Monique
	Ministry of Environment, Energy, Water and Sanitation (MEEEA)	Pamoussa Ouedraogo
	General Directorate of Green Economy and Climate Change (DGEVCC)/ Ministry of Environment, Energy, Water and Sanitation (MEEEA)	Sankara Boukaré
	The General Directorate of Green Economy and Climate Change (DGEVCC)/ Ministry of Environment, Energy, Water and Sanitation (MEEEA)	Sawadogo Rihanata
	The Union of Women's Groups Ce Dwane Nyee (UGF/CDN) - Reo	Bahiomé Bationon
	Wend Waoga	W. Georgette
		D. R. Antoine
		Peodiagué Princesse
		Traoré Ali
Côte d'Ivoire	Ministry of Environment and Sustainable Development	Gustave Aboua
	Confédération Générale des Entreprises de Côte d'Ivoire	Claude Koutoua
	Investisseurs & Partenaires	Sandrine Pfister Samuel Monteiro
	Attijariwafa Bank	Ghita Benhaïoun Fatmi Squalli Youssef Boumaiz
	IFC Côte d'Ivoire	Francis Atin
	Coliba Africa	Yaya Bruno Kone
Ethiopia	Ethiopian Environmental Protection Authority	Getahun Garedew Shiferaw
	Industrial Parks Development Corporation	Solomon Shiferaw Kuma Mergia
	Ministry of Agriculture	Elias Eyasu
	Ministry of Planning and Development	Nemera Gebeyehu
	Addis Ababa Chamber of Commerce and Sectoral Associations	Bekele Tsegaye Shibeshi Bettemariam

	Global Green Growth Institute	Gemedo Dalle Tussie
Ghana	Ministry of Environment, Science, Technology, and Innovation	Oliver Boachie
	Ministry of Finance and Economic Planning Natural Resources, Environment, and Climate Change Unit	Mohammed Bash Abdul-Razak Adwoa Fraikue Robert Mensah Iddrisu Sharu Deen
	CSIR Science and Technology Policy Research Institute	Wilhelmina Quaye
	Pyramid Upcycling	Ibrahim Yougbore
	Association of Ghana Industries	Seth Akwaboah
Kenya	National Treasury	Hillary Korir
	Kenya National Cleaner Production Centre	Jane Nyakang'o Steve Nyamori
	Ecopost	Lorna Rutto
Mauritius	Ministry of Environment, Solid Waste Management, and Sustainable Development	Muhammad Luqman Magho Jogeeswar Seewoobaduth Doolaree Roodhun Moonawwara Begum Outim Rajshree Mokool Jaynita Oogarah-Hurhangee
	University of Mauritius	Toolseeram Ramjeawon
	SME Mauritius	Eloise Albert Michael Pompeia
	Soge International Company Limited	Sudesh Somna
Nigeria	National Environmental Standards and Regulations Enforcement Agency	Abdulsalam Isa
	Nigeria Circular Economy Working Group (NCEWG)	Innocent Onah
	Jet Motor Company	Chidi Ajaere Joseph Osanipin
Rwanda	Ministry of Finance and Economic Planning	Thierry Watrin
	Rwanda Environment Management Agency	Rachael Tushabe
	Rwanda Cleaner Production and Climate Innovation Centre	Sylvie Mugabekazi
	Private Sector Federation	Eric Murera Theoneste Ntagengerwa Steven Karake
	Enviroserve	Olivier Mbera

South Africa	Department of Forestry, Fisheries, and the Environment	Alinah Mthembu	
	Department of Trade, Industry, and Competition	Ilze Baron	
	National Cleaner Production Centre South Africa	Ndivhuho Raphulu	Lee-Hendor Ruiters
	Development Bank of Southern Africa	Harold K. Mogale	
	Ben Peta Holdings	Ntobeko Boyana	
	GreenCape	Kirsten Barnes	
Uganda	Ministry of Finance	David Kiyingi Simon Nabyama	
	Ministry of Water and Environment	Nathan Mununuzi Julius Mafumbo Dadinoh Ndibarema	
	Uganda Green Enterprise Finance Accelerator	Christine Meyer Camilla Shearman	
	Stanbic Bank	Stephen Segujja Cathy Adengo	



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## ACRONYMS

<b>AADFI</b>	Association of African Development Finance Institutions
<b>ACEA</b>	African Circular Economy Alliance
<b>ACEF</b>	Africa Circular Economy Facility
<b>ACEN</b>	African Circular Economy Network
<b>AFC</b>	Africa Finance Corporation
<b>AfDB</b>	African Development Bank
<b>AMCEN</b>	African Ministerial Conference on the Environment
<b>ARSO</b>	African Organisation for Standardisation
<b>AUC</b>	African Union Commission
<b>AUDA-NEPAD</b>	African Union Development Agency – New Partnership for Africa’s Development
<b>CAP</b>	Common Agricultural Policy
<b>CAREC</b>	Central Asia Regional Economic Cooperation
<b>CEAP</b>	Circular Economy Action Plan
<b>CfD</b>	Contract for Difference
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>CSO</b>	Civil society organisation
<b>DANIDA</b>	Danish International Development Agency
<b>DBSA</b>	Development Bank of Southern Africa
<b>DFI</b>	Development finance institute
<b>DRC</b>	Democratic Republic of Congo
<b>EAC</b>	East African Community
<b>EADB</b>	East African Development Bank
<b>Eco-contribution</b>	Ecological contribution
<b>Ecotax</b>	Ecological taxation
<b>EDPRS</b>	Economic Development and Poverty Reduction Strategy
<b>EPR</b>	Extended Producer Responsibility
<b>ESD</b>	Education for Sustainable Development
<b>ESG</b>	Environmental, Social and Governance
<b>EU</b>	European Union
<b>EUR</b>	Euro
<b>FTYIP</b>	First Ten-Year Implementation Plan
<b>GBP</b>	British Pound Sterling
<b>GCF</b>	Green Climate Fund
<b>GEF</b>	Global Environment Facility
<b>GHG</b>	Greenhouse gas
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
<b>GPP</b>	Green public procurement
<b>IAoCE&amp;SDGs</b>	International Alliance on Circular Economy and Sustainable Development Goals
<b>ICE&amp;SDGs</b>	Global Institute for Circular Economy and Sustainable Development Goals
<b>ICLEI</b>	International Council for Local Environment Initiatives
<b>IEC</b>	International Electrotechnical Commission
<b>ISO</b>	International Organisation for Standardisation
<b>MoU</b>	Memorandum of Understanding
<b>MSME</b>	Micro, small, and medium enterprise
<b>MUR</b>	Mauritian Rupee
<b>NDC</b>	Nationally Determined Contribution
<b>NGO</b>	Non-governmental organisation

**OECD** Organisation for Economic Cooperation and Development  
**PACE** Platform for Accelerating the Circular Economy  
**PAYT** Pay-as-you-throw  
**PRO** Producer Responsibility Organisation  
**R&D** Research and development  
**REC** Regional Economic Community  
**RECP** Resource Efficient and Cleaner Production  
**SADC** Southern African Development Community  
**SCP** Sustainable consumption and production  
**SPP** Sustainable public procurement  
**UGEFA** Uganda Green Enterprise Finance Accelerator  
**UK** United Kingdom  
**UNDP** United Nations Development Programme  
**UNEA** United Nations Environment Assembly  
**UNECA** United Nations Economic Commission for Africa  
**UNECE** United Nations Economic Commission for Europe  
**UNEP** United Nations Environment Programme  
**UNEP FI** United Nations Environment Programme Finance Initiative  
**UNFSS** United Nations Forum on Sustainability Standards  
**UNIDO** United Nations Industrial Development Organization  
**UNITAR** United Nations Institute for Training and Research  
**USD** United States Dollar  
**WEF** World Economic Forum  
**WIPO** World Intellectual Property Organization  
**ZAR** South African Rand





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Funded by the  
European Union