



Country Update

Circular Economy in Rwanda

By Khadija Zaidi

Introduction

The concept of a green, circular economy (CE) is gaining traction across governments and policymakers worldwide. As it becomes apparent that the current linear “take, make, dispose” economic model has a depletive effect on the world’s resources and is en route to reaching its physical limits, countries could turn towards the CE as a viable alternative that aims to use resources to their highest value and reuse waste to a maximum.

Rwanda is one country that is at the forefront in the area of CE in Africa. For the past decade, it has put environment and climate change at heart of its policies and programmes.¹ Most notably, it was one of the first countries to ban single-use plastic bags. As well as having the largest Green Fund in Africa, Rwanda also played a pioneering role in co-founding the African CE Alliance, which aims to support high-impact circular-economy projects across the African continent.²

This country update note serves to outline the existing policy framework put in place by the Rwandan government to promote a more CE; highlight the key challenges and opportunities to adopting more circular processes in the public and private sector; and provide recommendations and ways forward to support more circular and sustainable trade in Rwanda.

¹ Whyte, C. R., Irakoze, G., Katanisa, P., Desmond, P., Hemkhaus, M., Ahlers, J., . . . Artola, I. (2020). CE in Africa-EU Cooperation. Luxembourg: Publications Office of the European Union.

² World Economic Forum. (2020, November 18). Transforming African economies to sustainable circular

Existing Policy Framework Towards a More Circular Economy

The policy framework currently in place to promote a more CE can be divided into two categories: the plastics economy specifically and the rest of the economy. This section will examine the policy framework of these two categories.

Plastics Economy

Ban on Single-Use Plastics

As mentioned, Rwanda was one of the first countries in the world to ban single-use plastic bags. In 2008, the government enacted a law prohibiting the manufacturing, importation, use and sale of polythene bags in Rwanda. Realizing in posterity that other types of non-polythene plastics also pose equally harmful effects to the environment, the government updated the law in 2019. The updated law includes all types of plastic carry bags and single-use plastic items, such as plastics for wrapping of goods, drinking straws (imiheha), disposable plastic plates and cups, disposable cutlery plastic forks and knives.³

In addition to the ban, the government also imposed an environmental tax on importers of goods packaged in plastic materials. The revenues from

models. Retrieved from World Economic Forum Org: <https://www.weforum.org/our-impact/the-african-circular-economy-alliance-impact-story/>

³ (Whyte, et al., 2020)

the imposition are used to fund projects that promote plastic waste management.

Furthermore, having understood that a direct ban on plastic bags, and later all single-use plastics would have an initial shock on businesses and consumers, Rwandan policy-makers implemented a number of policy instruments to facilitate the plastic ban.⁴ For instance, through information and media campaigns, environmentally friendly alternatives were promoted and a recycling mindset was instilled among citizens. Tax incentives were provided to firms willing to invest in plastic recycling equipment or in the production of environmentally friendly alternatives. Punitive measures were also implemented, including threat of imprisonment, mandatory collection of plastic waste and the imposition of fines, if these duties were not carried out.

A key specificity of Rwanda that assisted in the implementation of the ban was Umuganda, Rwanda's monthly community workday. Mandatory for all people aged 18 to 65, Umuganda greatly accelerated the government's dissemination efforts involving plastic bag collections. Additionally, during these monthly community service workdays, educational communication was provided on the harmful impact of plastics on human health and the environment. It also helped instil a recycling mentality among citizens.

In addition to the plastics ban, the government of Rwanda committed to four further key actions to promote a more circular plastics economy.⁵

Encouraging Reuse Models

The government attempted to reduce the need for single-use plastic items by encouraging the reuse of plastic wherever possible. One notable change was in public institutions, whereby small individual water bottles and water dispensers were replaced with glasses and multiple-use water bottles in the institution premises and conference areas. Additionally, the Rwandan government developed the Green Development Guidelines, whose purpose

⁴ Greening EU Cooperation. (2019). Tackling the Plastic Tide: Stories of Transformational Change . Brussels : EU .

was to prioritize issues of sustainability in public procurement practices.

Incentivising Use of Reusable, Recyclable or Compostable Plastic Bags

During the National CE Forum organized by the government of Rwanda in 2019, various methods were discussed by the different stakeholders present as to how to integrate reusable, recyclable or compostable plastic in their business models, where need be. One notable outcome was among private beverage producers who pledged to form a coalition aimed at coordinating initiatives and innovative solutions to address plastic pollution.

Increasing Collection, Sorting, Reuse and Recycling Rates

The government implemented a number of measures and initiatives to stimulate further plastic waste collection, sorting, reuse and recycling. One of these was mandating quarterly inspections to ensure that the ban on plastic bags was being implemented and that the use of allowed plastic was adhering to existing laws. Another initiative was encouraging those businesses who requested authorization of exceptional use of plastic items to sign agreements with plastic recycling companies to facilitate the collection and recycling of materials after being used by the businesses. Finally, awareness regarding plastic use reduction and recycling was raised among the public through quarterly inspections, training of District Environment Officers, District Planners, Environment Committees, and Radio/TV shows and international events.

Stimulating Demand for Recycled Plastics

In order to stimulate the demand for recycled plastics, the government of Rwanda encouraged all persons, not only businesses, requesting

⁵ Ellen MacArthur Foundation . (2019). The New Plastics Economy: Global Commitment 2019 Progress Report . Oslo: Ellen MacArthur Foundation .

authorization for exceptional use of plastic items to sign agreements with plastic recycling companies to purchase recycled materials. One specific sector where this was observed was the agriculture and forestry sector, whereby all projects, public or private, requiring tubings for nurseries and plastic sheeting were encouraged to use recycled materials from plastic recycling companies.

Beyond Plastics

The government of Rwanda has also been promoting CE through a variety of other vaster legislation, policies and programmes.

Organic Law on Environmental Protection, Conservation and Management

The first piece of legislation enacted to regulate the protection of the environment in Rwanda was the Organic Law on Environmental Protection, Conservation and Management. The main aim of this law was to outline the general legal framework for environmental standards, protection and management in Rwanda. Stating the environment as one of the primary concerns of the government, it also urges action on the part of citizens and the State. For example, Chapter IV, Article 65 of the Organic Law calls for the need to conduct a mandatory Environmental Impact Assessment before initiating any state project.⁶

National Environment and Climate Change Policy

In 2019, the Rwandan government adopted the National Environment and Climate Change Policy. Cognizant of the opportunities that could be opened up by a green and CE, the policy aimed to promote (1) a green economy that is resource-efficient, low-carbon and climate-resilient; (2) a CE to advance sustainable consumption and production patterns; (3) green technologies and procurement; (4) green

urbanization and green rural settlements, and (5) green mobility.⁷

Rwanda Green Fund or FONERWA

In 2012, the government of Rwanda established the Rwanda Green Fund or FONERWA, a fund for environmental and climate change action. The main vision of FONERWA is to respond to Rwanda's current and future financing needs to achieve its environmental, climate change, and green growth objectives. Inherently, the initiatives and projects that it has the intention to support financially contribute to the development of the CE in the country. For example, some successful development projects funded by FONERWA include: (1) a public-private partnership on electronic waste management to establish an e-waste recycling facility; (2) zero-carbon affordable housing project to develop flexible single and multi-storied housing solutions.⁸ To date, FONERWA has approved 42 such projects using USD \$6m financed from the government of Rwanda and leveraged USD \$83m in project finance support.⁹

National Green Growth and Climate Resilience Strategy (GGCRS)

Another important nationally driven programme supporting the CE is the National Green Growth and Climate Resilience Strategy (GGCRS). The focus of the GGCRS is on promoting private sector investment which would help businesses and industry to adapt to more green processes. Specifically, the main goal of the program is to “employ efficient and zero waste technologies, practices and design in Special Economic Zones (SEZ) and provincial industrial parks”. The GGCRS has been lauded due to its capacity to build green practices into the economy rather than imposing restrictions that could otherwise harm the industry's growth.¹⁰

⁶ (Whyte, et al., 2020)

⁷ Government of Rwanda. (2019). 2019 Rwanda Voluntary National Review (VNR) Report . Kigali: Government of Rwanda.

⁸ (Government of Rwanda, 2019)

⁹ (Whyte, et al., 2020)

¹⁰ Vetter, D. (2021, May 27). Sustainability In Africa: How Rwanda's Young Innovators Are Building A CE. Forbes .

State of Play in the Private Sector

The government of Rwanda has put in place a number of different legislations, policies and programmes to promote the CE in the country, as was seen in the section before. However, the burden often falls on the private sector to integrate these changes and adopt more circular processes. This section firstly highlights the opportunities in Rwanda allowing the private sector to adopt more circular processes as well as the challenges faced by MSMEs. It then provides an overview of ongoing measures and initiatives taken by two types of private sectors, namely the agriculture and construction sectors, to promote more circular processes.

Challenges and Opportunities of Adopting More Circular Processes

Challenges

The challenges of promoting circularity faced by the Rwandan private sector revolve around three main issues: lack of business and consumer awareness regarding CE-related practices; risk of protectionism and import restrictions implemented by the Rwandan government; as well as lack of strategic alignment across programmes and policies.

Lack of Business and Consumer Awareness on CE-Related Practices

Until now, the majority of Rwandan businesses continue to operate with the conventional “take, make, dispose” model of consumption and production. The problem lies in the fact that they largely lack awareness of CE-related business opportunities.¹¹ Furthermore, as the CE primarily operates in the informal economy, for example, through personal initiatives undertaken by young innovators, the practices do not have the capacity to

be replicated and propagated on a wide scale as would’ve been possible in the formal sector.¹² Therefore, the current task is to spread awareness of CE-related methods and opportunities and incentivize the development of new ones.

Risk of Increased Trade Costs

Due to increased legislation, regulation and environmental standards imposed on all goods, including imported goods, there is a risk that this may increase the “red tape” involved in importing goods into Rwanda. As a result, businesses, particularly MSMEs relying on the importation of certain inputs and materials may face higher production costs. The task, in this case, would be to align and harmonize standards through collaboration with trade partners to facilitate continued barrier-free trade.¹³

Lack of Strategic Alignment Across CE-Related Programmes and Policies

At the present moment, Rwanda’s national policies and programmes are vast and comprehensive. However, a lack of cohesion and alignment between these may lead to a duplication of efforts, confusion and misunderstanding on the part of MSMEs and coordination problems with international cooperation programmes.¹⁴ Therefore, the task would be to ensure a continuous link between these initiatives to improve green efficiency in the private sector and clarity overall.

Opportunities

Rwanda’s private sector, nevertheless, is well-suited to adopting more circular processes. The current economic and institutional climate presents a number of opportunities that could enable MSMEs to integrate more circular processes in their business models rapidly. These opportunities are related to the development of strategies intended to increase capacities in the area of CE on a national

¹¹ (Whyte, et al., 2020)

¹² The New Times: Rwanda’s Leading Daily . (2019, August 9). Rwanda keen on cutting waste to zero. The New Times: Rwanda’s Leading Daily .

¹³ (Whyte, et al., 2020)

¹⁴ (Whyte, et al., 2020)

scale; and increased access to resources, training and technology related to CE as well as its status as a regional hub for testing out new, innovative approaches aimed at promoting a more CE.

National Capacity-Building on CE

In 2010, the Rwandan Ministry of Education developed an Environmental Education for Sustainable Development Strategy for Rwanda. This aimed to increase learning, capacity-building programmes, and skill development in the sustainable use of resources at all levels. Additionally, the Rwandan government also set up the Technical and Vocational Education and Training (TVET) programme, of which one of the aims was to facilitate CE-related TVET approaches. Although these initiatives may still need improvements in effectiveness and relevance, they nevertheless set up an environment for Rwanda's young entrepreneurs that will allow them to have hands-on skills and competencies necessary to integrate and innovate towards CE processes.¹⁵

Establishment of Centre of Excellence for Sustainability Resources

In 2019, the government of Rwanda established the Cleaner Production and Climate Innovation Center (CPCIC). This center aims to serve as a “one-stop-shop” for all resources related to sustainability. It also provides training and reskilling of Rwanda's workforce, advises businesses on how to make their operations more sustainable and helps firms secure access to green funding from various bodies, including FONERWA. CPCIC has so far helped generate USD \$6.5 million in revenue for industry and MSMEs and has also led to thousands of new green jobs.¹⁶

Regional Hub for CE-related Innovation

Having played a pioneering role in co-founding the African Circular Economy Alliance alongside Nigeria and South Africa, and with ten member countries from across the African continent, Rwanda has achieved its status as a regional hub of the innovation in CE practices. It is considered as a test location for trialing new approaches, before launching in other parts of Africa.¹⁷ This has further led to increased advocacy projects, more policy research and support for high-impact CE projects in Rwanda and in the region.¹⁸

Sector Analysis

The tables in this section outline the ongoing measures and initiatives taken by the agriculture and construction sectors to promote more circular processes.

The share of agriculture in Rwanda's economy is significant – twice the size of the sub-Saharan African average. It is therefore one of the top sectors identified by the Rwandan government as having CE potential and presents numerous opportunities for integration of CE processes.¹⁹

Similarly, the construction industry in Rwanda is rapidly developing to accommodate high demand. The government has hence also emphasized the need to integrate CE in this sector as well

¹⁵ (Whyte, et al., 2020)

¹⁶ Vetter, D. (2021, May 27). Sustainability In Africa: How Rwanda's Young Innovators Are Building A CE. Forbes

¹⁷ (Whyte, et al., 2020)

¹⁸ World Economic Forum. (2020, November 18). Transforming African economies to sustainable circular

models. Retrieved from World Economic Forum Org: <https://www.weforum.org/our-impact/the-african-circular-economy-alliance-impact-story/>

¹⁹ (Whyte, et al., 2020)

Table 1: Overview of Existing CE Measures/Initiatives in Agriculture Sector²⁰

Measure/Initiative	Leader of Measure/Initiative	Date of entry into force	Objective(s) of the Measure/Initiative	Link to Measure/Initiative
Governance We Want Programme	Rwanda Governance Board	2019	<ul style="list-style-type: none"> ∫ To aid local farmers in improving food storage and logistics to prevent harvest food loss in the agricultural supply chain ∫ To reduce imports of agricultural products 	https://bit.ly/3kCun0w
Fertilizer Policy	Government of Rwanda, Ministry of Agriculture and Animal Resources (MINAGRI)	2007	<ul style="list-style-type: none"> ∫ To increase use of organic fertilizers in agriculture, replacing use of mineral fertilizers ∫ To reduce Rwanda's importation of synthetic fertilizers and increase output of Rwandan farmers who rely on organic fertilizers ∫ To tackle growing organic waste stream in Rwanda and simultaneously serve growing local demand for fertilizers 	https://bit.ly/3wSq7wb
RUNRES Project	International Institute of Tropical Agriculture (IITA) Rwanda, ETHZ Zurich	2019	<ul style="list-style-type: none"> ∫ To improve the resilience and sustainability of food systems by encouraging nutrient & waste recycling 	https://runres.ethz.ch/

²⁰ (Whyte, et al., 2020)

Table 2: Overview of Existing CE policies in Construction Sector²¹

Measure/Initiative	Leader of Measure/Initiative	Date of entry into force	Objective(s) of the Measure/Initiative	Link to Measure/Initiative
Kigali Cooling Efficiency Programme	ClimateWorks Foundation	2017	<ul style="list-style-type: none"> ∫ To cut the production and consumption of hydrofluorocarbons (HFCs) while ensuring climate-friendly, affordable cooling solutions 	https://www.k-cep.org/
Rwanda Green Building Minimum Compliance System	Rwanda Housing Authority (RHA)	2019	<ul style="list-style-type: none"> ∫ To increase the use of recycled materials in construction, thus replacing virgin materials (glass, cement, sands, ceramics) ∫ To improve energy efficiency of new buildings 	https://bit.ly/2UmBxve
National Informal Urban Settlement Upgrading Strategy	Government of Rwanda, Ministry of Infrastructure (MININFRA)	2017	<ul style="list-style-type: none"> ∫ To tackle densification in Rwanda's urban planning before urban expansion reaches unsustainable levels 	https://bit.ly/3xRRHLt

²¹ (Whyte, et al., 2020)

Recommendations and Ways Forward

As seen throughout this note, Rwanda is clearly invested and committed to holistically transforming its economy into a green circular economy. To help achieve this objective, WTO Member States can play a role, whether this may be in assisting in awareness-raising and capacity development, coordination and alignment of policies and programmes or collective investment in the circular economy. This section provides further detail into these recommendations.

Raising Awareness and Capacity Development

Although Rwanda has various programmes aimed at enhancing its human resources and building the skills and competencies necessary for creating a circular economy, these can be further strengthened, e.g., by creating a pool by WTO Members of learning resources, competency trainings and pedagogical methods specifically targeting CE-related skills, that can be shared between Member States. This will greatly benefit developing countries such as Rwanda to improve the effectiveness of their programmes.

International Cooperation and Alignment of Strategies

Another key recommendation is to strengthen policy dialogues among Member States of Regional Economic Communities (RECs) and the African Union (AU). Coordinating, focusing and formalizing such dialogues with tangible, implementable strategies will allow Rwanda to be on a level playing field with other actors in the region and the international community. It will enable the identification of key objectives and deliverables that the government of Rwanda should follow; and will allow a fair assessment and comparison of the achieved objectives and deliverables with fellow Member States. The content and outcomes of these dialogues can be shared with other WTO Members.

²² (Whyte, et al., 2020)

Trade and Investment

WTO Member States should consider possibilities to encourage investments, and the transfer to developing countries of environmentally friendly technologies. These could include, but are not limited to, big data technology and artificial intelligence to gather and analyse waste data, robotics to dismantle hard-to-recycle materials, and provide technical assistance in creating mobile apps for young entrepreneurs providing CE-related services, etc.²²

Furthermore, regarding trade, more favourable tariff regulations, and the inclusion of sustainability directives in future trade agreements could also accelerate the shift in transition to a CE in Rwanda and its trading partners. As mentioned earlier, alignment of environmental standards and requirements may be necessary to avoid asymmetric costs of trade between trading partners.

Post-COVID

Rwanda ranks among the top nations for its response to the COVID-19 pandemic. Introducing a strict lockdown and effective testing regime allowed the nation to keep the pandemic under control. However, it did not come without a cost. Many businesses in Rwanda had to shut down and travel for public officials was severely restricted.

Continuing with efforts to promote circularity post-COVID may therefore not be without obstacle. However, planning for long-term recovery may allow the integration of more circular processes in this recovery process. Rwanda could aim at building resilient health systems, exercising leadership in protecting the environment and mitigating climate change, and support digitalization and new technologies' transfer with a focus on sustainable growth. This last section will discuss these objectives in more detail.²³

Resilient Health Systems

The purpose of building resilient health systems is to guarantee the population's health and productivity, which is conducive to sustainable economic growth. It can be done by improving universal access to

²³ Rwanda, Fiji, EU and UK. (2021). Recovering better for sustainability, Concept Note.

essential health services, investing in the quality, quantity and resilience of these services, ensuring access to food, water and sanitation systems and the amelioration of air quality. As part of the COVID-19 recovery process, it is also crucial to provide safe, affordable and equitable access to COVID-19 vaccines, treatment and testing. While working towards these, the CE goals must be kept in mind, e.g., through monitoring, control and recycling of waste generated by health facilities, adopting simpler procedures, etc.

Protection of Environment and Climate Change Mitigation

To ensure that the reduction of greenhouse gas emissions resulting from lockdowns does not become temporary as economic activity resumes, it is important to continuously highlight the importance of waste reuse, reduction, and recycling. In Rwanda, the practice of Umuganda is vital as a source and reminder information about recycling techniques. Furthermore, it is important to strive for job-led economic recovery that focuses on increasing jobs and opportunities in the green economy. Trade and Environmental Sustainability Structured Discussion (TESSD), the Plastics Initiative, and discussions in the Committee on Trade and Environment (CTE) are some possible arenas within the WTO where such focussed exchanges can take place on these important issues.

Digitalization

Finally, as sustainable development is driven in part by digitalization and new technologies, it is important to support these during the recovery process. For example, providing affordable connectivity, improving digital literacy, increasing access to digital technology for vulnerable and marginalized groups, and integrating digitally-enabled work processes and service delivery may be critical solutions to transitioning to a more circular economy while also ensuring a sound and stable recovery process. With its impressive track record in both the CE and digitalization related policies and programmes, Rwanda can be a leader in this effort. It can also share its experience with other WTO Members.

Conclusion

Understanding the importance of a green, circular economy for its future economic and social growth, Rwanda has implemented a number of policies, programmes and legislation that would enable it to transition into a sustainable economy. Being a pioneer in its region has also aided it in obtaining the resources necessary and providing support to its fellow nations to promote circularity in the region further.

However, the transition does not come without challenges, which include lack of awareness-raising, coordination of policies and programmes, and capacity-building.

As was explored in this note, WTO Member States and the international community can play a role in further strengthening the laudable efforts of developing countries like Rwanda by facilitating trade, investment and technology transfer in this area and providing capacity-building resources to aid in the transition to a more circular economy.

References

- Ellen MacArthur Foundation . (2019). The New Plastics Economy: Global Commitment 2019 Progress Report . Oslo: Ellen MacArthur Foundation
- Government of Rwanda. (2019). 2019 Rwanda Voluntary National Review (VNR) Report . Kigali: Government of Rwanda.
- Greening EU Cooperation. (2019). Tackling the Plastic Tide: Stories of Transformational Change . Brussels : EU Rwanda, Fiji, EU and UK. (2021). Recovering better for sustainability, Concept Note.
- The New Times: Rwanda's Leading Daily . (2019, August 9). Rwanda keen on cutting waste to zero. The New Times: Rwanda's Leading Daily .
- Whyte, C. R., Irakoze, G., Katanisa, P., Desmond, P., Hemkhaus, M., Ahlers, J., . . . Artola, I. (2020). CE in Africa-EU Cooperation. Luxembourg: Publications Office of the European Union.
- World Economic Forum. (2020, November 18). Transforming African economies to sustainable circular models. Retrieved from World Economic Forum Org: <https://www.weforum.org/our-impact/the-african-circular-economy-alliance-impact-story/>
- Vetter, D. (2021, May 27). Sustainability In Africa: How Rwanda's Young Innovators Are Building A CE. Forbes .



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