# Country brief Rwanda



Based on political and economic priorities of Rwanda as well as relevance for circular economy (CE), the following two areas of interest are addressed in this country brief:

- 1. Construction including urbanisation
- 2. Production including procurement policies
- © Further information about these areas as well as considerations for other sectors and material streams can be found in the full study 'Finance for Circular Economy in Low- and Middle-Income Countries'<sup>[1]</sup>, particularly in Section 3.1.

#### 1 Construction incl. urbanisation

Major challenges for CE: Fast population growth (17 per cent between 2014 to 2019 to 11 million inhabitants), strong economic momentum (six per cent growth per year in the last decade to USD 820 per capita in 2019), and ongoing Urbanisation (forecasted urban share to be doubled between 2020 and 2024 to 35 per cent) put enormous pressure on available urban eco-systems in Kigali and the six secondary city districts. In the City of Kigali alone (0.8 million) more than 0.3 million additional houses need to be constructed/retrofitted until 2032 in order to address governmental plans. While the green building agenda for the Green City Kigali Project (1 per cent area of City of Kigali) already integrates energy efficiency, sustainable waste management, and urban forests, there is a lack of capacities for sustainable building and construction needs (especially in the residential development) in other parts of the country (e.g. secondary cities). Overall, there is a low level of resource and energy efficiency standards in construction of domestic and commercial buildings.

Relevant strategies and frameworks for CE: Various legal documents (e.g. National Strategy for Transformation, National Roadmap for Green Secondary City Development, Green Growth and Climate Resilience Strategy) are promoting a sustainable agenda in the next decades and highlight circular activities. In addition, there is an increased interest by various private and public stakeholders in circular built environment initiatives. Thus, from a legal and institutional perspective, there is strong willingness to foster a green transformation and be recognised in the global community as a role model in (East) Africa. On the CE Value Hill (Table R1), key levers are synthesised based on the national priorities and planned outcomes.

Herausgegeben von:



Table R1 Construction incl. urbanisation in Rwanda –
entry points for circular economy on the Value Hill (excerpt)

Up-hill	Top-hill	Down-hill
Establishment of functioning markets for non-virgin/eco-friendly materia,l, e.g. via green public procurement (and stricter construction regulation.	Capitalise the Green Investment Facility (FONERWA) through one of its four investment windows; support private and public stakeholders.	Address huge import-export deficit for construction material by enabling circular concepts; build on 'Made in Rwanda' initiative promoting use of local construction materials.

### Promising interventions for circular economy in Rwanda - construction including urbanisation

- 1a. Support the Rwanda Environment Management Authority (REMA) to implement the adopted Green Building Minimum Compliance System (GBMC), particularly its circular-aligned sustainability standards through ongoing awareness programmes, outreach, and capacity building: The Rwanda Green Building Minimum Compliance System (GBMC) established in 2019 represents the first mandatory Green Building Code in an African country, that supports the development of partly circular-aligned sustainability standards for commercial and public buildings. While it is not mandatory for residential developments, real estate developers are encouraged to adopt the system on a voluntary basis. In the light of the enormous housing demand, the updated Nationally Determined Contributions (NDCs) indicate that under the Business-as-Usual scenario, emissions from the building sector increase six-folded, but could be reduced by 50 per cent when applying consistent building standards until 2030. Thus, a major lever has been identified in co-supporting (via technical assistance; grant funding) the Rwanda Environment Management Authority (REMA), and the Rwanda Housing Authority (RHA) in implementing the Rwanda Green Building Minimum Compliance System through ongoing awareness programs, outreach, and capacity building. This helps to ensure that environmental, economic and social benefits of green buildings tickle down the construction value-chain.
- 1b. Provide external funding to the national basket fund (FONERWA) to support the use of more regenerative including non-virgin materials in the construction sector: In the light of the large amount of planned infrastructure projects, substituting cement and steel with more regenerative, incl. non-virgin materials (i.e. construction and demolition waste), is essential, but requires additional funding from international partners. The closed-meshed green fund (FONERWA) mobilises international aid and private funding injections to local corporates/SMEs with lines of credit (well below market rate of ten per cent per year), loan guarantees, and public equity capital. For circular activities, the 'innovative grant mechanism' and the 'green incubator program' aim to leverage sustainable and innovative business opportunities. The green investment facility is permanently looking for further capitalisation (already funded by UNEP, GCF, NDF, AfDB, KfW, and other ODA donors) through grant funding and low-cost loans (high concessionality).

Figure R1 describes potential funding mechanisms, entry points, and thematic funding windows for the capitalisation of FONERWA. The capitalisation of FONERWA represents a prime funding opportunity in the African country context as the fund is well established and internationally recognised (e.g. FONERWA won the UN Momentum for Change Award in 2018).

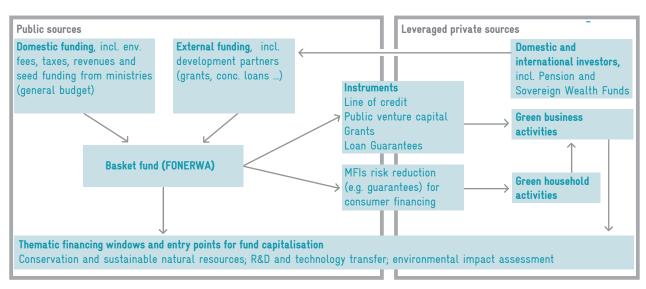


Figure R1 Proposed capitalization of FONERWA (non-exhaustive, only-illustrative)

Source: Adapted from GIZ, Frankfurt School, FS-UNEP Collaborating Centre for Climate & Sustainability Energy Finance (2021). Financing Circular Economy in Low- and Middle-Income Countries.

## 2 Production, incl. procurement policies

Major challenges for CE: Against the background of high population and economic growth, the prevalent 'take, make, dispose' business models in Rwanda add to the degradation of natural ecosystems. Main drivers are survival concerns by (M) SMEs and lack of awareness of circular business opportunities, even in the time of tight regulation such as the single-plastics ban in 2008. While special economic zones (SEZs) provide basic infrastructure for corporates, they often still lack proper waste management, and major challenges regarding environmental degradation are present despite various existing policies. Innovative Business models for e.g. shared equipment (e.g. in SEZs) or more resource efficient practices are still lacking.

Relevant strategies and frameworks for CE: The Government of Rwanda is aware of the range of environmental challenges, e.g. driven by continuous land degradation and fossil fuel dependency as well as lack of material standards and green infrastructure development (see recommendation 1a.).

Table R2 Production including procurement policies in Rwanda – entry points for circular economy on the Value Hill (excerpt)

Up-hill	Top-hill	Down-hill
Improve legal base of eco- industrial parks/special economic zones.	Reshape business models for a more service-based economy to capitalise on longer use.	Develop progressive waste collection schemes to activate the private sector.



#### Promising interventions for circular economy in Rwanda - production including procurement policies

- 2a. Support the development of green/circular procurement practices, particularly in SEZs: Currently, Rwanda envisages the establishment of nine new SEZs. Under the Green Growth and Climate Resilience Strategy (GGCRS), green industry development including efficient and zero waste technologies, practices, and design in SEZs is addressing energy and water efficiency, green site preparation, building and design as well as waste treatment options. Against this background, co-supporting (via technical assistance/grant funding) the Rwanda Public Procurement Authority (RPPA) in the development of the planned Green Procurement Policy represents an impactful lever to strengthen circular approaches in SEZs. Concretely, the intervention can cover considerations such as general circular practices (e.g. full lifecycle costing), and investments in more circular SEZ-facilities (e.g. applying integrated solutions and holistic approaches such as privileged access to intermediate supply of raw materials from local companies). Activities can build on good practice of REMA's initiative to develop eco-industrial parks and their cooperation with Cleaner Production and Climate Innovation Centre (CPCIC) to define a concrete CE-Investment pipeline as well as on Public Procurement Trainings by Global Green Growth Institute (GGGI).
- **2b. Financially support the Cleaner Production and Climate Innovation Centre in strengthening its approach of good CE practices:** With the 'Made in Rwanda' initiative based on the Rwanda Vision 2020, the Government of Rwanda is committed to expand and diversify the economic base to strengthen domestic value creation for export markets. Hence, new and innovative production models are needed and envisaged. In this context, the Cleaner Production and Climate Innovation Centre offering technical audits, advisory services, and capacity building including on resource efficiency and circular concepts for companies in e.g. leather production, garments, and textiles. The centre's momentum might benefit from further financial support to strengthening its circular approaches i.e. in terms of shared capital equipment, product-as-a-service models, and chemical leasing services.

## Key stakeholders for circular economy in Rwanda

- Rwanda Environment Management Authority (REMA) facilitates the implementation of national policies and focuses on sustainable use of natural resources through decentralised structures of governance.
- © Cleaner Production and Climate Innovation Centre (CPCIC) provides access to green technologies and business services and promotes circular practices, climate resilience, environmental compliance, and sustainable development.
- Ministry of Infrastructure (MININFRA) aims to promote and supports policy making for circularity and enable regulatory frameworks.
- © For consultations on circular built environment MININFRA, the Rwanda Housing Authority (RHA) and the City of Kigali (CoK) are relevant public authorities. Relevant private sectors include MASS Design, SKAT Rwanda (Modern Bricks), Earth Enable (affordable, sanitary flooring using circular practices), Seyani Brothers (circular architects/construction), and Landmark Studio (circular architects).
- In addition, the Green Global Growth Institute (GGGI) is a very pro-active development partner supporting the government in developing a CE.
- <sup>(1)</sup> GIZ, Frankfurt School, FS-UNEP Collaborating Centre for Climate & Sustainability Energy Finance (2021). Financing Circular Economy in Low- and Middle-Income Countries. <a href="https://www.giz.de/de/weltweit/15109.html">https://www.giz.de/de/weltweit/15109.html</a>.

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