

GGGI Rwanda: Fact Sheet

Rwanda Green Building Minimum Compliance System

Challenges

Globally, buildings accounted for 30% of global final energy consumption and 28% of global CO₂ emissions in 2017ⁱ. In Africa, energy used in buildings is an estimated 56% of the total national electricity consumption. Over 70% of this energy is consumed in cities. In some cases, more than 50% of the national energy is used in the capital city aloneⁱⁱ. Furthermore, 75% of the building stock in developing countries in Africa will be built between 2010 and 2060ⁱⁱⁱ.

Rwanda's Third National Communication under the United Nations Framework Convention on Climate Change (UNFCCC) estimates that the CO₂ emissions from buildings will increase by 574% by 2050 from 2012 baseline levels in the business as usual scenario. This exponential growth can be attributed to economic development, rapid urbanization and population growth^{iv}.

Approach

Recognizing that cities are both drivers of energy consumption and central to the country's development, the Government of Rwanda (GoR) has developed the Second Economic Development and Poverty Reduction Strategy II 2013-2018 (EDPRS2) on green urbanization.

Rapid economic development and urbanization provides an opportunity to steer growth on a green path by pursuing environmentally compatible development, poverty reduction, job creation and social inclusion. This paradigm shift in the model of development is defined as 'green growth' as reflected in Rwanda's Green Growth and Climate Resilient Strategy, 2011 and the National Roadmap for Green Secondary City Development, 2015.

Building and Construction is considered as one of the key pillars of green urbanization of the National Roadmap. The

National Roadmap suggests the following actions for the building and construction sector:

- Promote the design of green buildings
- Build with local and sustainable construction materials
- Elaborate and implement a local green building certification

Activities

To implement the recommendations, GGGI works closely with the Buildings Regulations Standards Inspection & Audits (BRSIA) Division of the Rwanda Housing Authority (RHA) in collaboration with the Building Construction Authority (BCA) Singapore and the Rwanda Green Building Organization (RwGBO). As an intergovernmental organization, GGGI also has a full-time staff member embedded in RHA to provide technical assistance and to support the integration of green growth principles and initiatives related to the building and construction industry. A few of the activities conducted in partnership with RHA include:

- Knowledge sharing sessions on benefits of green buildings for Ministry of Infrastructure (MININFRA) Urbanization Division, RHA's BRSIA Division, and sector-level technicians of Rwanda's 6 Secondary Cities (Huye, Muhanga, Musanze, Nyagatare, Rubavu, and Rusizi)
- Stakeholder consultations conducted to raise awareness of the benefits of green buildings and to gather inputs to enrich the drafting of the Rwanda Green Building Minimum Compliance System with the Ministry of Environment (MoE), MININFRA, Rwanda Environment Management Authority (REMA), City of Kigali (COK), Rwanda Standards Board (RSB), Rwanda Energy Group (REG), Water and Sanitation Corporation (WASAC), Rwanda

Utilities Regulatory Authority (RURA), Rwanda Institute of Architects (RIA), Institution of Engineers Rwanda (IER), Association of Building and Civil works contractors (AEBTP), among others.

- Drafting of the Rwanda Green Building Minimum Compliance System
- Presentation of the draft Rwanda Green Building Minimum Compliance System at the Continuous Professional Development (CPDs) programs organized by RIA and at various National Building & Construction Exhibitions.
- Supported the revision of Ministerial Orders (MO) related to Urban Planning and Building Construction to facilitate the adoption of green building minimum compliance system
- Supported the revision of Rwanda Building Code (RBC) 2015 to integrate key elements from the green building minimum compliance system
- Development of Rwanda Green Building Minimum Compliance Templates (testing ongoing)

Other partners that contributed to the work are MININFRA, RwGBO and BCA Singapore

Results to Date

- Establishment of RwGBO - a National NGO established by RHA with support from partners RIA and GGGI to raise awareness and build capacities of practitioners, contractors, real estate developers, academia, government personnel on green buildings through training and awareness workshops
- Awareness among the construction industry stakeholders raised on the benefits of green buildings
- Development of the Rwanda Green Building Minimum Compliance System
- Continuous support to RHA to ensure the Green Building Minimum Compliance system is adopted by the government
- The Government of Rwanda in the cabinet meeting held on 3rd April 2019 approved the Ministerial Order determining Urban planning and Building regulations. The Rwanda Green Building Minimum Compliance System is an Annex to the Ministerial Order along with the revised Rwanda Building Code. The Ministerial Order and the supporting green building annex were officially gazetted on 16th April 2019.
- Development of Rwanda Green Building Minimum Compliance Templates (testing ongoing)

Overall Goals

The building sector is a key economic driver. Green buildings offer an opportunity for GHG emissions reduction, job creation, resource (energy, water, materials) efficiency, improved productivity of building occupants, and decreased impact on the environment that will support the achievement of following GGGI's strategic outcomes:

- Strategic Outcome 1: GHG emissions reduction
- Strategic Outcome 2: Creation of green jobs

Implementing Partners

- Rwanda Housing Authority (RHA) with technical support from GGGI Rwanda and RwGBO
- City of Kigali (COK) and District One Stop Centers (OSC)

ⁱ International Energy Agency and the United Nations Environment Programme (2018): 2018 Global Status Report: towards a zero-emission, efficient and resilient buildings and construction sector.

ⁱⁱ UN-Habitat (2018): Presented at the Regional Conference on Energy and Resource Efficiency in Buildings in East Africa: 01 – 03 August 2018

ⁱⁱⁱ UN-Habitat (2014): Sustainable Building Design for Tropical Climates: Principles and Applications for Eastern Africa

^{iv} Republic of Rwanda (2018): Third National Communication: Report to the United Nations Framework Convention on Climate Change.