



Climate Governance

An assessment of the government's ability and readiness to transform Rwanda into a zero emissions society

CAT Climate Governance Series

RWANDA

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CAT Climate Governance Series

Under the Paris Agreement, governments have committed to limiting temperature increase to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C. Achieving this objective will require halving global emissions by 2030, reaching net zero CO₂ emissions by 2050 and all gases around 2070, with net negative emissions thereafter.

Governments in all countries play a critical role in enabling this transformation, which involves action from all aspects of society and the economy.

The Climate Action Tracker (CAT) tracks the progress of countries towards achieving the climate targets they have set for themselves under the Paris Agreement and what the combined effect of these commitments and policies mean for global temperature levels at the end of this century.

In this series, the CAT expands on its country analysis to evaluate the ability and readiness of national governments to enable the required economy-wide transformation towards a zero emissions society.

Our assessment focuses on national governments and analyses four aspects of governance covering key enabling factors for effective climate action:

- the political commitment of the government to decarbonisation,
- the institutional framework it has put in place to achieve its emission reduction targets,
- the processes it has established to develop, implement and review mitigation policies, and
- its ability and willingness to engage with relevant stakeholders on policy development.

The Climate Governance Series seeks to offer a standardised and replicable approach to assessing a government's ability and readiness to achieve the required transformation, highlighting positive developments and areas for improvement.

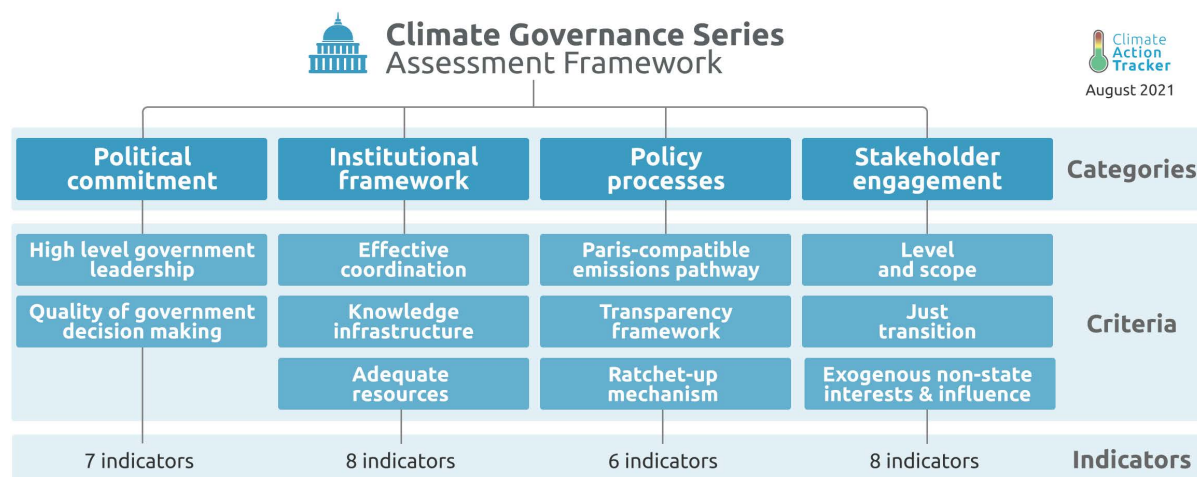
Since 2019, we have been expanding the scope of our coverage. All country profiles are available on our **website**.

<http://climateactiontracker.org/publications/climate-governance>

Legend

Understanding our indicators

This report series seeks to produce a standardised and replicable approach to assessing a country's readiness to transition to a zero emissions society. To achieve this, we have assessed a number of possible indicators under four broad categories and eleven criteria. **Criteria** are marked in bold text throughout this document.



Notwithstanding the desire for standardisation, our framework is a living document and we occasionally revise the number or make-up of our indicators. For complete details, see our [methodology page](#). This assessment of Rwanda is based on our **2021 methodology**.

Understanding our rating system

Our rating system highlights positive developments within countries, identifies areas of improvement, and establishes a basis on which to compare climate governance across countries.

Each individual indicator has been assessed and given a score. The categories and criteria linked to those indicators are then given a rating based on those scores.

Very Poor	<p>≤ 20% of possible score This rating indicates that the government is deficient and improvement is necessary.</p>
Poor	<p>20 – 40% of possible score This rating indicates that the government is showing a limited level of readiness and improvement is still necessary.</p>
Neutral	<p>40 – 60% of possible score This rating indicates that the government is showing some level of readiness, but improvement is still necessary.</p>
Acceptable	<p>60 – 80% of possible score This rating indicates that the government is showing a good level of readiness, although improvement is still possible.</p>
Advanced	<p>≥ 80% of possible score This rating indicates that the government is performing well, although improvement is still possible and beneficial.</p>

Executive summary

Rwandan President Paul Kagame has been committed to low carbon growth for more than a decade: his leadership has, in part, been responsible for Rwanda adopting a low carbon growth strategy in 2011. The President has also stressed the need for a shared responsibility to fight climate, and the need for climate finance on the international stage.

Line ministers often make reference to climate mitigation in their public comments and statements, indicating support and buy-in across government. Mitigation actions are included in the country's key long and short-term plans, indicating that addressing climate change is a priority for the government.

There has been consistent climate policy development over the course of President Kagame's regime. Given this policy consistency and Rwanda's good rankings on various governance and anti-corruption indices, the extent to which the government can be trusted to deliver on climate action and held accountable is likely high. Analysis of opposition party manifestos suggests that there may, at least, be a continuation of current climate policy if there was a change in government. But, as it is possible that the current President may stay in power until 2034, cross-party support is likely not the decisive element for continued climate action.

Coordination amongst all levels of government could be improved. Rwanda does not have a climate-focused inter-ministerial coordination body with a clear mandate to lead and coordinate climate policy and action in the country.

Rwanda has been making efforts to mainstream climate considerations across policies for more than a decade. Rwanda's sectoral policies are generally aligned with its broader long-term vision and planning documents. Mainstreaming will be further improved as Rwanda moves to implement its transparency framework which has a greater focus on GHG emissions tracking and indicators.

Rwanda's knowledge infrastructure is good, but there is room for improvement. The nation does not have an entity with the explicit mandate to provide advice and analysis on transition-related policies to the government, though it does have a history of seeking technical advice during its policy development process and some sector specific entities that can play an advisory role.

Rwanda has a good level of climate finance readiness. It established the award-winning National Fund for Environment in 2012. It also has a long history of incorporating climate change considerations into its domestic budget planning processes. The 2009 report, *Economics of Climate Change in Rwanda*, which examined the economic costs of climate change would have on the country, is often credited as one of the reasons for Rwanda's early action in this area.

Rwanda has committed to net zero CO₂ emissions by 2050, but has not yet defined a Paris Agreement-compatible decarbonisation pathway. That said, consideration of the long-term has long been part of its climate policy process. The country lacks comprehensive climate mitigation legislation and would benefit from updating its existing laws to include its emissions targets and governance provisions.

Rwanda is in the process of establishing a comprehensive transparency framework to report, measure and monitor its climate action. The government provided a detailed overview of the institutional arrangements to track its NDC implementation. This structure builds on, and is imbedded into, the monitoring and evaluation processes that already exists as part of its national planning processes.

Rwanda does not appear to have a dedicated review mechanism focus on climate action, but will incorporate this into existing processes. Nor does it have a formal ratchet up mechanism to ensure regular review and continuous updating of its NDC, though it was one of the first countries to submit its updated NDC in 2020.

Stakeholder consultation occurs regularly as part of the policy development process, though its effectiveness is not always guaranteed. A 2018 citizen report card on renewable energy projects revealed a lack of engagement with local stakeholders on decision-making matters or the monitoring of project implementation, which may inhibit local buy-in. Rwanda does not have a formal body or policy to ensure a Just Transition.

Enhancing climate-related education has long been a policy focus in Rwanda. Consideration of climate change has been incorporated into Rwanda's basic K-12 curriculum and tertiary level programmes are being developed.

Rwandan civil society is active in the climate space. The knowledge basis to support advocacy for the transition is, however, limited. It is difficult to gauge the level of support amongst the general public for climate action, as polling data is limited.

Category	Criteria	Recommendations
Political commitment	High-level government leadership	<ul style="list-style-type: none"> Maintain political commitment to climate action in order to ensure effective NDC implementation
	Quality of government decision making	
Institutional framework	Effective coordination	<ul style="list-style-type: none"> Establish an inter-ministerial coordination mechanism with a clear mandate and designated member actors to enhance coordination between line ministries, and between central government and district governments Strengthen the technical and financial capacities of Districts to integrate low carbon development issues in their District Development Plans (DDP) and to implement climate mitigation actions Establish an expert advisory body to support transition-related policy development
	Knowledge infrastructure	
	Adequate resources	
Policy processes	Paris-compatible emissions pathway	<ul style="list-style-type: none"> Develop a Long-Term Strategy (LTS), including a pathway to meet the country's 2050 net zero CO₂ emissions goal Adopt a climate change law to enshrine the country's NDC targets and 2050 net zero CO₂ emissions goals into law as well as outline its governance framework, especially around inter-ministerial coordination
	Transparency framework	
	Ratchet-up mechanism	
Stakeholder engagement	Level and scope	<ul style="list-style-type: none"> Improve existing stakeholders consultation mechanisms to ensure better awareness and participation of beneficiaries in on-the-ground climate compatible projects/activities Include consideration of a Just Transition and the promotion of green jobs into the policy development process
	Just transition	
	Exogenous non-state interests and influence	

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1 Introduction

1.1 Domestic context

The Republic of Rwanda is a landlocked and fertile country located in east-central Africa. Rwanda is the most densely populated country in mainland Africa, with most of its population living in rural areas (The World Bank, 2022c; World Population Review, 2022).

The country has experienced substantial economic and developmental gains in the decades since the tragic 1994 genocide. Prior to the COVID-19 pandemic, GDP growth had been around 8% per year for the past two decades (The World Bank, 2022b).

The national poverty rate declined from 78% in 1994 to 38% in 2017, while inequality, measured by the Gini coefficient, was reduced from 52 in 2005 to 43.7 in 2017 (GoR, 2020d; The World Bank, 2019). Rwanda aims to become an upper middle income country by 2035 and a high income country by 2050 (GoR, 2020d).

The pandemic reversed the country's economic growth trend, compounding a difficult fiscal deficit situation. Real GDP fell by 3.4% in 2020 (The World Bank, 2021b). The debt-to-GDP ratio had risen substantially over the past decade as a result of a public sector-led development model, growing from 19% to 57% between 2010 and 2019. The ratio is estimated to have reached 71% of GDP in 2020, partly due to additional COVID-related spending (The World Bank, 2021b). However, the IMF estimates 2021 saw 10% GDP growth and is projecting an average of 7% growth over the next five years (IMF, 2022).

President Paul Kagame has been in office since 2000. He previously served as Vice President and Defense Minister of the Rwandan Patriotic Front (RPF), the rebel force that came to power in 1994 and ended the genocide, before becoming President. Kagame won direct elections in 2003, 2010 and 2017. A constitutional amendment in 2015 allowed Kagame, who would otherwise have reached his term limit in 2017, to run for a third presidential term. After Kagame's current seven-year term expires in 2024, Presidents will be limited to two five-year terms, though Kagame himself would still be eligible to run again (GoR, 2015a). Thus, it is possible that Kagame could remain in office until 2034. The President stated in 2019 that he intends to step down at the end of his current term in 2024 (AfricaNews, 2019), although he has made similar statements about stepping down in the past, without doing so (NewAfrican, 2011; Soudan, 2017).

The central government has been pursuing a policy of decentralisation for a number of years (MINALOC, 2021). Rwanda is comprised of four provinces and the City of Kigali (GoR, 2022). The provinces are further subdivided into four administrative layers: districts (*akarere*), sectors (*imirenge*), cells (*imidugudu*) and villages. Notwithstanding efforts to decentralise power to more local levels of government, President Kagame remains the key decision-maker on many issues (Congressional Research Service, 2021).

There are divergent views about Kagame's time in power (Freedom House, 2022). On the one hand, he is credited with ensuring the peace and stability that enabled Rwanda's economic and developmental gains (Agaba, 2017). Others claim that his authoritative tactics have led to serious restrictions on freedom of expression and other human rights abuses (Congressional Research Service, 2021; Hattem, 2017; United States Department of State, 2021).

Paul Rusesabagina, whose heroic efforts during the genocide were made famous by the film "Hotel Rwanda," has been a vocal critic of Kagame for years. He was sentenced in Rwanda to 25 years in prison on terrorism charges in 2021, a move criticised by the US administration (BBC, 2021). In the aftermath of Rusesabagina's arrest and imprisonment, some commentators have argued that Western governments should no longer overlook any potential abuses of the Kagame regime (The Washington Post, 2022).

Agriculture, particularly livestock, and transportation are the two largest sources of greenhouse gases (GHG) emissions in Rwanda (GoR, 2021c). The country emits more methane (due to its agricultural emissions) than CO₂. Its emissions intensity has fallen in the past decade as much of its GDP growth is fueled by the service sector (Yida et al., 2022). In 2019, Rwanda emitted 7.3 MtCO₂e (Gütschow et al., 2021).

Most of Rwanda's energy demand comes from the residential sector, where firewood or charcoal is used for cooking and heating (IRENA, 2020). Less than 5% of the population has access to clean cooking (IRENA, 2018). Rwanda has made significant progress in expanding access to electricity over

the past two decades (The World Bank, 2022a). It has gone from single digit access twenty years ago, to about half the population today, though access in rural areas continues to be much lower than in urban centres. Rwanda wants to achieve universal access to electricity by 2024 through a mix of on and off-grid access.

Rwanda generates a little over half of its power from hydroelectricity, with solar energy contributing just under 2% (REG, 2021a). It aims to produce 60% of its power from renewables by 2030. The remainder of its electricity comes from peat, methane gas, imports and diesel/heavy fuel oil. The latter is primarily used for peak demand.

Rwanda is currently expanding its production of electricity from hydro, peat and methane gas (HQPower, 2019; REG, 2021b; SYMBION, n.d.). Its methane gas production is unique, drawing from the dissolved methane found in the deep waters of Lake Kivu (The Conversation, 2020). The dissolved methane is effectively sealed by the chemical composition of the lake, but could be released by landslides or other disturbances, and thus poses a risk to the local population. Gas explosions of this kind have killed residents of other lakes on the continent in the past. Removing the methane decreases this risk, though is not without its own risks, including the potential to cause its own gas eruptions. Experts disagree as to how best to carry out such extraction safely (Jones, 2021). The lake holds 2.6 GtCO₂e worth of methane and could generate up to 500 MW over 50 years under current economic conditions (Jones, 2021; The Conversation, 2020).

Aside from methane gas, Rwanda is also considering building natural gas power plants later in the 2030s (REG, 2021b). Such plans are inconsistent with the Paris Agreement as unabated gas-fired power generation needs to be phased out by 2040 globally. CAT analysis has shown there are multiple benefits to transitioning to renewable energy in Africa (Climate Analytics and NewClimate Institute, 2022). Analysis by IRENA has shown that Rwanda has much greater potential for solar PV than is currently reflected in its energy planning (IRENA, 2020).

Rwanda is highly vulnerable to the impacts of climate change, given its development status and reliance on rain-fed agriculture (The World Bank, 2021a).

1.2 Climate governance snapshot

In 2011, Rwanda adopted its first national strategy for climate change and low-carbon development: the Green Growth and Climate Resilient Strategy (GGCRS) (GoR, 2011a). The GGCRS set out the country's actions and priorities on climate change relating to both mitigation and adaptation and how these will be mainstreamed within economic priorities, with the aim of making Rwanda a low-carbon economy by 2050.

The priority actions set out in the GGCRS provide a vision and guidelines for the development of further national and sectoral socio-economic development policies. The GGCRS is embedded in the Rwanda Vision 2020 and Rwanda Vision 2050, and in the National Strategy for Transformation (NST 1) (2017-2024) (GoR, 2017c). It also provides the basis for the development of Rwanda's initial Nationally Determined Contribution (NDC) in 2015 (GoR, 2015b).

In May 2020, Rwanda submitted an updated NDC to the UNFCCC (GoR, 2020c). It was one of only about a third of countries to keep to the original 2020 deadline for NDC updates agreed in Paris. Rwanda's first NDC did not contain a quantified emissions target, but was based on the priorities outlined in the GGCRS (MoE, 2017). Rwanda included a quantified target of 16% below business-as-usual levels by 2030, increasing to 38% with international support (excl. LULUCF) in its 2020 update (GoR, 2020c).

Its Vision 2050 includes GHG emission target indicators for 2035 and 2050 (GoR, 2020d). Climate mitigation is also central to its updated environmental policy (Ministry of Lands, Resettlement and Environment 2003; MoE, 2019). Its 2018 Environment Law includes provisions related to the reduction or prevention of anthropogenic GHG emissions, unlike the 2005 version of the law, which did not make any reference to climate change (GoR, 2005, 2018).

Rwanda does not have a climate-focused inter-ministerial coordinating body. The Ministry of Environment (MoE) oversees progress towards meeting the NDC, with implementation done through the relevant ministries. The Rwanda Environment Management Authority (REMA), under the supervision of MoE, is also tasked with implementing climate mitigation measures and advises the government on legislative and policy matters related to environmental management and monitors compliance with environmental laws. The Ministry of Finance, through the Rwanda National Fund for Environment (FONERWA), oversees resource mobilisation for climate actions.



Key Institutions

Ministry of Environment

The Ministry of Environment (MoE) is the lead agency on climate change. It has the mandate to develop climate related policies, strategies and programmes, monitor and evaluate the implementation of these across all sectors and mobilise resources for these activities.

Rwanda Environment Management Authority (REMA)

The Rwanda Environment Management Authority (REMA), under the supervision of MoE, is tasked with implementing climate mitigation measures. It also advises the government on legislative and policy matters related to environmental management and monitors compliance with environmental laws.

National Fund for Environment (FONERWA)

The Rwanda National Fund for Environment, which uses its French acronym FONERWA, and is also referred to as the Rwanda Green Fund, was established in 2012 (GoR, 2012, 2017b). FONERWA's core mission is to manage and to mobilise resources for environmental protection.

In 2017, its mandate was expanded to include collecting and managing funds to achieve the country's climate objectives. The Fund invests in public and private projects that have the potential for transformative change and that align with Rwanda's commitment to building a strong climate resilient and green economy. The Fund also provides technical assistance to ensure the success and impact of these investments.



Key Laws & Regulations

Law No. 48/2018 on Environment

The law determines the modalities for protecting, conserving and promoting the environment in Rwanda. It contains a number of climate related provisions including the requirement of sectors to mainstream climate change into their policies and strategies, provisions for public education and for reporting. It also requires the State of Rwanda to develop policies and plans aimed at "slowing down the increase of greenhouse gas emissions".

Law No. 39/2017 establishing the National Fund for Environment

See Key Institutions (above) for more on the National Fund.



Targets

Nationally Determined Contribution – NDC (May 2020)

Rwanda was one of the first countries to submit its updated NDC in 2020. Rwanda's first NDC did not contain a quantified emissions target, but was based on the priorities outlined in the GGCRS (GoR, 2015b; MoE, 2017).

Rwanda included a quantified target in its updated NDC (GoR, 2020c). Rwanda is committed to reducing its emissions by 16% below business-as-usual levels by 2030, increasing to 38% with international support (excl. LULUCF).



Key Plans & Strategies

Green Growth and Climate Resilience Strategy - GGCRS (October 2011)

Adopted in 2011, the GGCRS is the country's national strategy for climate change and low-carbon development, and aims to achieve a low carbon economy by 2050 (Republic of Rwanda, 2011 a). The GGCRS encompasses 14 Programmes of Actions (POA) which were formulated for reaching the vision and achieving the strategic objectives.

National Environment and Climate Change Policy - NECCP (June 2019)

The goal of the NECCP is to enable Rwanda to have "a clean and healthy environment resilient to climate variability and change that supports a high quality of life for its society". It has seven objectives, including promoting climate mitigation, strengthening climate governance and promoting green investment. It is an update of the 2003 Environment Policy, which did not consider climate mitigation.

Rwanda Vision 2050

Rwanda Vision 2050 is an aspirational document that articulates the long-term strategic direction of Rwandan development with the goal of creating: "the Rwanda we want". The overarching goals of Vision 2050 are to ensure economic growth and prosperity, and to provide a high-quality standard of living for all Rwandans. Rwanda aims to become an upper-middle income country by 2035, and a high-income country by 2050. Vision 2050 builds on its precursor, Rwanda Vision 2020.

The Vision references the desire to become carbon neutral and includes GHG emissions target indicators for 2035 and 2050, but provides no details on how these would be achieved.

National Strategy for Transformation (NST1) 2017-2024 (2017)

This Strategy sets out the priorities for the transition period between Rwanda's previous long-term vision, *Vision 2020* and its new *Vision 2050*. It does not include any GHG emissions related targets, though climate change is included as a cross-cutting issue. The strategy emphasises strengthening forest management and promoting forest cover, and reducing reliance on firewood for cooking, as part of its green growth strategy.

The strategy does mention that Rwanda has not 'fully exploited' its oil and gas potential, but does not contain any specific activities related to the sector.

2 National assessment

2.1 Political commitment

Political commitment

High-level government leadership

Quality of government decision making

President Paul Kagame has been committed to low carbon growth for more than a decade. Rwanda adopted a low carbon growth strategy in 2011 due, in part, to his leadership. On the international stage, the President has also stressed the need for a shared responsibility to fight climate, and the need for climate finance.

Line ministers often make reference to climate mitigation in their public comments and statements, indicating support and buy-in across government. Mitigation actions are included in the country's key long and short-term plans, indicating that addressing climate change is a priority for the government.

There has been consistent climate policy development over the course of President Kagame's regime. Given this policy consistency and Rwanda's good rankings on various governance and anti-corruption indices, the extent to which the government can be trusted to deliver on climate action and held accountable is likely high.

Analysis of opposition party manifestos suggests that there may, at least, be a continuation of current climate policy if there were to be a change in government. But, as it is possible that the current President may stay in power until 2034, cross-party support is likely not the decisive element for continued climate action.

High-level government leadership can be a driving force for stimulating economy-wide transformational changes and increasing climate mitigation ambition through top-down strategy setting and sending effective policy signals.

President Paul Kagame has been committed to low carbon growth for more than a decade. On the international stage, the President has long urged for greater mitigation action. At the UN Climate Change Summit in 2009, Kagame called for "a shared responsibility for a mitigation and adaptation strategy that leaves no one behind because we are all in this together", and said that developing countries should be incentivised to follow low-carbon growth (President Kagame, 2009). He continues to stress the need for a shared responsibility and climate finance (President Kagame, 2021, 2022). He has also noted the importance of switching to renewable energy and ensuring that pandemic recovery plans help in this transition (President Kagame, 2022).

These words have been followed up with actions. Rwanda adopted a low-carbon growth strategy in 2011 due, in part, to the leadership and stewardship of the President and his cabinet (Byamukama et al., 2011). The President was also a driving force behind the establishment of the Rwanda Climate Observatory, in partnership with Massachusetts Institute of Technology (MIT), which is helping to fill key data gaps and contribute to climate science in East Africa (DeWitt and Gasore, 2018).

Addressing climate change is a priority for the government. It is featured in the country's key long and short term plans (GoR, 2017c, 2020d). Rwanda has also been incorporating climate change considerations into its domestic budget planning processes for a number of years now (CABRI, 2021; Caldwell et al., 2015; MINECOFIN, 2021). It was one of the first countries to submit its NDC update in 2020 (GoR, 2020c).

Ministers often make reference to climate mitigation in their public comments, indicating support and buy-in across government (MINAGRI, 2018b; MINEDUC, 2021a; MININFRA, 2020a, 2020b; UNGA, 2021). For example, the Minister of Infrastructure has noted the importance of renewable energy, clean cooking (and associated biomass reduction) and electric mobility (MININFRA, 2020a).

Rwanda does stress that adaptation to climate change and enhancing resilience to its adverse effects is a key concern and priority due to the vulnerability of some sectors, especially agriculture. However, in its updated NDC, the government noted that, notwithstanding the fact that the country's emissions are relatively small, they were still significant enough to warrant "a mitigation response" (GoR, 2020c).

The Ministry of Environment (MoE) is the lead agency on climate change. It has the mandate to develop climate related policies, strategies and programmes, monitor and evaluate the implementation of these across all sectors and mobilise resources for these activities (GoR, 2020b). The Rwanda Environment Management Authority (REMA), under the supervision of MoE, is further tasked with implementing climate mitigation measures (GoR, 2013). The Ministry's mandate is broad and not explicitly linked to the country's long-term goal of becoming carbon neutral or achieving its GHG emission reduction targets set out in its NDC or 2050 Vision.

The **quality of government decision making** at the highest levels is a key factor in implementing ambitious climate policies, as national governments provide resources and direction for lower levels of government and can stimulate horizontal dynamics through mainstreaming, lesson-drawing, and cooperation (Jänicke, Schreurs, & Töpfer, 2015).

There has been consistent climate policy development over the course of President Kagame's regime. Rwanda developed the Five-year Strategic Plan for the Environment and Natural Resources (ENR) sector (2009-2013) in June 2009 (MINIRENA, 2009). The aim of the Plan was to ensure sustainable management of Rwanda's natural resources and environment to meet the country's development aspirations towards a green, clean, healthy and wealthy society. The policy focused on climate monitoring, adaptation measures, and developing the country's GHG inventory. Developing Clean Development Mechanism (CDM) projects was the extent to which it covered climate mitigation.

However, by 2011, the country had adopted its first national strategy for climate change and low-carbon development, the Green Growth and Climate Resilient Strategy (GGCRS) (GoR, 2011a). The Strategy set the aim of achieving a low carbon economy by 2050. The next five year plan (2014-2018) had more of an emphasis on climate mitigation (MINIRENA, 2013).

Rwanda's first NDC did not contain a quantified emissions target, but was based on the priorities outlined in the GGCRS (MoE, 2017). Rwanda included a quantified target in its 2020 NDC update (GoR, 2020c). Its Vision 2050 also includes GHG emission target indicators for 2035 and 2050 (GoR, 2020d). Climate mitigation is also central to its updated environmental policy (Ministry of Lands, Resettlement and Environment 2003; MoE, 2019).

The extent to which the government can be trusted to deliver on climate action and held accountable is likely high. Beyond its policy consistency, Rwanda generally ranks well on regional and international governance and anti-corruption indices. Rwanda ranks 11th on the Mo Ibrahim Index of Africa Governance, holding the number one spot on the Index for anti-corruption and falls in the middle on accountability and transparency measures (MIF, 2020). It is amongst the highest-ranking African countries on Transparency International's Corruption index, coming in at 52th out of 180 countries, and ahead of some European member states. Most Rwandans consider the level of corruption to be at medium to low levels and that the government is effective in combatting it (TI-Rwanda, 2021a).

Assessing corruption in relation to climate specific activities is more challenging. Rwanda comes in fourth on the Mo Ibrahim Index's environmental governance measures, though these are not focused on climate change. A 2018 survey found that beneficiaries of renewable energy projects perceived the level of corruption to be low (TI-Rwanda, 2018). Nepotism in project approval and selection and misuse of funds by project decision-making authorities were considered as the areas with the highest risk.

Given the President may potentially stay in power until 2034 and the concerns expressed by international observers about the lack of political freedom in the country (Freedom House, 2022), the relevance of broadscale political support for the transition in Rwanda is somewhat muted. Freedom House considers the Democratic Green Party of Rwanda (DGPR) to be the only genuine opposition party to have any representation in Parliament, having won two seats in the 2018 legislative elections (see also REUTERS, 2018). A representative of the party, along with an independent, split the 1.2% of the vote that was not cast for President Kagame in the 2017 presidential elections. Its name notwithstanding, the Green Party's 2018-2023 political programme is focused on democracy, justice and freedom; however, it does make brief reference to the need to fight climate change and has some measures focused on enhancing renewables in the energy and transport sectors (DGPR, 2018). It is not unreasonable to think that there would, at least, be a continuation of current climate policy if there was a change in government.

2.2 Institutional framework



Coordination amongst all levels of government could be improved. Rwanda does not have a climate-focused inter-ministerial coordination body with a clear mandate to lead and coordinate climate policy and action in the country.

Rwanda has been working on trying to mainstream climate considerations across policies for more than a decade. Rwanda's sectoral policies are generally aligned with its broader long-term vision and planning documents. Mainstreaming will be further improved as Rwanda moves to implement its transparency framework which has a greater focus on GHG emissions tracking and indicators.

Rwanda's knowledge infrastructure is good, but there is room for improvement. The country does not have an entity with the explicit mandate to provide advice and analysis on transition-related policies to the government, though it does have a history of seeking technical advice during its policy development process and does have some sector specific entities that can play an advisory role.

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Effective coordination across ministries and agencies as well as with sub-national governments affects the ability of actors to align overarching climate policy targets efficiently and consistently.

Rwanda does not have a climate-focused inter-ministerial coordination body with a clear mandate to lead and coordinate climate policy and action in the country. The updated NDC notes that the MoE will oversee progress towards the NDC, but that implementation will be done through the relevant ministries, with the Ministry of Finance/FONERWA overseeing resource mobilisation, though few specifics beyond the reporting/transparency structure are provided (GoR, 2020c).

Since 2015, Rwanda has had a high-level policy dialogue on the GGCRS, an inter-ministerial process that convenes twice a year to discuss the implementation of the Strategy (GGGI, 2018; MoE, 2021b), but few details on its modalities are available (Rugege, 2018). There may also be some coordination as part of the Joint Sector Review process, which assesses progress towards sectoral strategies; however, this is sectoral focused and does not provide an overview of all climate mitigation related activities across government (MINECOFIN, n.d.).

The 2011 GGCR had recommended the creation of a Technical Coordinating Committee (TCC) to facilitate inter-ministerial coordination. Committee membership would include key agencies, line ministries and non-governmental stakeholders, and seek to coordinate across the central government and at the sub-national level. Establishing a bespoke, climate-focused coordination mechanism was recommended in the 2017 NDC implementation Plan, possibly as part of a broader NDC implementation unit within the Ministry of Finance/FONERWA, as well as the 2018 review of the GGCRS implementation (GoR, 2017a; Rugege, 2018). It is not clear why this committee has not yet been established.

One of the objectives of the 2019 Environment and Climate Change Policy is to strengthen climate governance, including coordination mechanisms, an objective, which was also echoed in the updated NDC (GoR, 2020c; MoE, 2019). More broadly, the government's 7-year plan, the National Strategy for Transformation 1 (NST 1), also noted the need to improve sectoral coordination regarding environmental policy implementation (GoR, 2017c).

Coordination between the central and local governments appears to be limited. The operation and mandate for local governments is clearly delineated by regulation (GoR, 2018, 2021b). Environmental Protection Committees are supposed to be established at the lowest level of administrative units. All

committees have the responsibility to implement climate change related policies and plans, as well as other specific activities related to their level of government. The committees are composed of local officials and stakeholders and do not include representatives from the central government.

We could find no evidence that these committees are operational, notwithstanding the fact that a version of these committees has been set down in regulation for over a decade (GoR, 2010). The Ministry of Local Government (MINALOC) liaises with the District level on the data required for MRV reporting, generally coordinates the implementation of District Development Strategies (DDSs) and ensures that these are consistent with national policies (GoR, 2020c).

As noted above, climate related activities are included in the DDSs. Yet, there does not appear to be any established body or forum through which MINALOC coordinates, making the effectiveness of any coordination difficult to gauge (GoR, 2021b). On a more general level, the government's 2021 National Decentralization Policy noted that coordination between local and central governments needed to be improved (MINALOC, 2021).

Rwanda has been working on trying to mainstream climate considerations across policies for more than a decade (GoR, 2011b; UNEP, 2011). Its 2018 Environmental law includes an obligation on sectors to mainstream climate change within their policies and strategies, public education, climate mitigation policy development and reporting (GoR, 2018). Consideration of climate mitigation can be found in its latest sectoral policies and plans (MINAGRI, 2018a; MININFRA, 2018, 2021) and progress towards mainstreaming is tracked (REMA, 2020a).

Notwithstanding these developments, gaps remain. For example, while the latest agricultural sector plan includes activities to reduce emissions, there are no indicators tracking GHG emissions reductions (MINAGRI, 2018a). There is also no reference to climate change or enhancing carbon sinks in the recent legislation establishing the Rwanda Forestry Authority (GoR, 2020a).

Rwanda's sectoral policies are generally aligned with its broader Vision and planning documents; however, IRENA has noted that some of its energy plans vary on the extent to which they include solar power (IRENA, 2020). As Rwanda moves to implement its transparency framework (see below), it can be expected that mainstreaming further will be improved as the indicators outlined in the NDC start to become incorporated into the planning process and sectoral plans.

Another important criterion is the existence and utilisation of a **knowledge infrastructure capable of supporting strategic planning and policy development**, as this aids in the elaboration and application of decarbonisation analyses in climate policy development.

Rwanda does not have an entity with an explicit mandate to provide advice and analysis on transition policies to the government (Climate Change Committee, 2021; ICCN, 2021). The GGCRS recommended the creation of a Centre for Climate Knowledge for Development (CCKD) (GoR, 2011c). The Centre was not envisaged as a mitigation focused advisory body, but rather one that would sit alongside the Rwanda Meteorological Service and the then-proposed, now operational, Rwanda Climate Observatory. The Centre was never established, but the Centre of Excellence on Biodiversity and Natural Resources at the University of Rwanda, seems to be fulfilling part of that function (Rugege, 2018).

Rwanda does have a number of entities that either do - or could - provide advice on specific areas, like the Rwanda Forestry Authority, the Cleaner Production and Climate Innovation Centre, and the African Centres of Excellence in Energy for Sustainable Development and for Sustainable Cooling and Cold-Chain, both based in the University of Rwanda (Cooling Africa, n.d.; CPCIC, n.d.; GoR, 2020a). However, Rwanda would likely benefit from having a centralised entity looking across the entire economy with a clear decarbonisation mandate.

Rwanda seeks, and benefits from, the support of international technical advisory partners in its policy development processes. For instance, the GGCRS was developed with the support of the United Kingdom Department for International Development and UK experts (GoR, 2011a). Equally, Rwanda has received support from the NDC Partnership to update and plan the implementation of its NDC (NDC Partnership, n.d.). As part of the Partnership, Rwanda also received support on how to green its recovery from the COVID-19 pandemic. According to the government, the support allows it to identify strategic elements to stimulate low carbon development and create green jobs that can be incorporated into mid and long term economic recovery plans (MINECOFIN, 2020).

Capital and resource constraints are significant barriers to effective climate governance and have been impediments for developing countries in the past (Bhave, Conway, Dessai, & Stainforth, 2016). **Adequate resources and capacity** need to be made available to implementers, and efficiently used by them, in climate policy processes.

Rwanda has a good level of climate finance readiness. It established the award-winning National Fund for Environment in 2012 (FONERWA, 2021c; GoR, 2012, 2017b). The Fund, which uses its French acronym FONERWA and is also referred to as the Rwanda Green Fund, seeks to attract and streamline climate finance, as well as leverage private investment for low carbon initiatives (FONERWA, 2021b). At COP26, the GCF Executive Director remarked that: “When I’m asked about a country that is accessing climate finance and utilising it well, my first thought goes to Rwanda” (FONERWA, 2021a).

With this financial infrastructure in place, it is not surprising that Rwanda is among the top ten recipients of international climate financing in sub-Saharan Africa (Watson and Schalatek, 2020). It is also among a handful of countries that will test new methods to access climate finance as part of the Taskforce on Access to Climate Finance, launched at COP26 (REMA, 2021d). Rwanda had some experience with the CDM, market mechanism under the Kyoto Protocol, and has been testing new market approaches (REMA, 2020b; Spalding-Fecher et al., 2018).

Rwanda also has a long history of incorporating climate change considerations into its domestic budget planning processes (CABRI, 2021; Caldwell et al., 2015; MINECOFIN, 2021). Since the early 2010s, sectoral ministries have submitted an annex to their yearly budgets detailing climate compatible activities that will be implemented during the year in response to the Budget Call Circular (MINECOFIN, 2012). Climate change has been mentioned in budget speeches in the past. For 2022/2023, there will be a dedicated Environment and Climate Change Budget Statement that will summarise the anticipated climate-related expenditure for the year (CABRI, 2021; MINECOFIN, 2021).

The 2009 report, *Economics of Climate Change in Rwanda*, which examined the economic costs that climate change would have on the country, is often credited as one of the reasons for Rwanda’s early action on establishing climate finance infrastructure (CABRI, 2021; Caldwell et al., 2015; SEI, 2009). It may serve as an example for other countries to follow.

One area that Rwanda is seeking to improve upon is its ability to attract and leverage private sector financing. The National Fund for Environment aims to have the private sector engaged in 30% of its funding. To date, the government entities have received third quarters of the financing disbursed, while the private sector has received 4% (FONERWA, 2021b). The Fund is developing a Rwanda Green Investment Facility to help engage the private sector further.

Assessing the capacities of REMA in particular is a bit more challenging. REMA’s 2022 budget amounts to RWF 9,6 billion (USD 9,2 million), an increase of 23% compared to the budget of 2021. REMA has the largest budget allocation within the MoE department and is the sixth body out of the 23 big Agencies and Authorities in Rwanda (GoR, 2021a).

According to the budgetary perspectives, REMA’s budget allocation will slightly increase in the coming years. Data for climate related activities, including staff, is not available. For the Fiscal Year 2018/2019, climate change was estimated to be only 2% of REMA’s project-based spending, and does not include staff and overhead costs (REMA, 2020a). REMA has a number of staff dedicated to climate-related matters, though does not have a dedicated unit. Specifically, it has eight specialists working on inventory and data issues, policy, advocacy, mainstreaming, education and finance (REMA, 2021b). Graduate level education is common among key staff (REMA, 2021a).

There is evidence that institutional learning is high in Rwanda. REMA is used to conducting periodic assessment reports to evaluate the level of its achievements and to identify the gaps and the weaknesses, and to take advantages from the strengths for sound institutional learning (Mutabazi, 2010; REMA, 2019, 2020a; Rugege, 2018). For example, its most recent report to the UNFCCC was produced using national expertise for its GHG inventory and the development of the report, with international support to ensure the quality assurance (GoR, 2021c).

2.3 Process for policy development, implementation and review



Rwanda has committed to net zero CO₂ emissions by 2050, but has not yet defined a Paris-compatible decarbonisation pathway. That said, consideration of the long term has long been part of its climate policy process. The country lacks comprehensive climate mitigation legislation and would benefit from updating its existing laws to include its emissions targets and governance provisions.

Rwanda is in the process of establishing a comprehensive transparency framework to report, measure and monitor its climate action. The government provided a detailed overview of the institutional arrangements to track its NDC implementation. This structure builds on, and is imbedded into, the monitoring and evaluation processes that already exist as part of its national planning processes.

Rwanda does not appear to have a dedicated review mechanism that focuses on climate action, but will incorporate this into existing processes. Nor does it have a formal ratchet up mechanism to ensure regular review and continuous updating of its NDC, though it was among the countries to submit its updated NDC in 2020.

A **defined Paris-compatible decarbonisation pathway** is an important component to aid the long-term planning for, and alignment with, the Paris Agreement's overall objectives.

Rwanda has committed to net zero CO₂ emissions by 2050 (Climate Ambition Alliance, 2019; GoR, 2021d).¹ Its Vision 2050 planning document also references the desire to become 'carbon neutral'. Rwanda has not yet defined a Paris-compatible decarbonisation pathway; however, consideration of the long-term has long been part of its climate policy process.

The country's *Green Growth and Climate Resilience Strategy*, adopted in 2011, set the aim of achieving a low carbon economy by 2050 (GoR, 2011a). In its third National Communication to the UNFCCC, submitted in 2018, Rwanda explored low carbon mitigation scenarios out to 2050 (MoE, 2018). Its Vision 2050 includes GHG emission target indicators for 2035 and 2050, though there are no details on what lies behind the figures. Its first Biennial Update Report, submitted in December 2021, focused on the period to 2030 (GoR, 2021c).

Adopting climate legislation can assist in creating an enabling environment for developing and implementing progressive institutional arrangements necessary for good climate governance, and to support the development of policies and strategies.

Rwanda does not have a comprehensive climate mitigation-related law, but climate change is covered in a number of other pieces of legislation (see Rwanda Environment Management Authority, 2021 for an overview of environmental legislation). Its 2018 Environmental law does cover some climate related provisions, including an obligation on sectors to mainstream climate change within their policies and strategies, public education, climate mitigation policy development and reporting (GoR, 2018). The law also requires the State of Rwanda to develop policies and plans aimed at "slowing down the increase of greenhouse gas emissions". It would be beneficial if Rwanda updated this legislation to be consistent with its NDC targets and 2050 net zero CO₂ emissions goals.

An **enhanced transparency framework mechanism** is necessary in order to track progress towards achieving emission reduction targets in line with the Paris Agreement, as well as providing checks and balances for the government's climate commitments.

Rwanda is in the process of establishing a nationally comprehensive transparency framework to report, measure and monitor its climate action. In its updated NDC, Rwanda provides a detailed overview of the institutional arrangements to track its NDC implementation (GoR, 2020c). This structure builds on, and is imbedded into, the monitoring and evaluation processes that already exist

¹ Note the Prime Minister's COP26 speech referred to 'net zero by 2050', we assume this was in reference to Rwanda's commitment made at COP25 to net zero CO₂ emissions by 2050.

as part of its national planning processes. The NDC also includes the suite of indicators that Rwanda will use to track the implementation of mitigation measures.

Rwanda has a good track record of submitting its national reports to the UNFCCC along with timely inventory data (GoR, 2021c; MINIRENA, 2012; Ministry of Lands, Environment, Forestry, Water, 2005; MoE, 2018). Its 2021 Biennial Update Report (BUR) contains GHG inventory data for 2018, a notable achievement for a country at its level of development. The report also includes a detailed description and the status of its proposed mitigation measures, including quantified GHG emissions estimates for each activity. The 2018 Environmental Law establishes the general mandate to develop, update and publish a GHG inventory (GoR, 2018). The modalities for the country's national communications to the UNFCCC have been set down in a 2021 Ministerial order (MoE, 2021a).

REMA published an annual assessment of the implementation of all environment and climate change (ECC) activities across the government and at the sub-national level (REMA, 2019, 2020a). These reports are currently not focused on tracking GHG emissions *per se*, but rather the relevant indicators in various planning documents. That said, they do include indicators relevant to mitigation measures. As GHG indicators become more widespread in planning documents and sectoral strategies, one may assume that they will also start to be tracked in these annual reports.

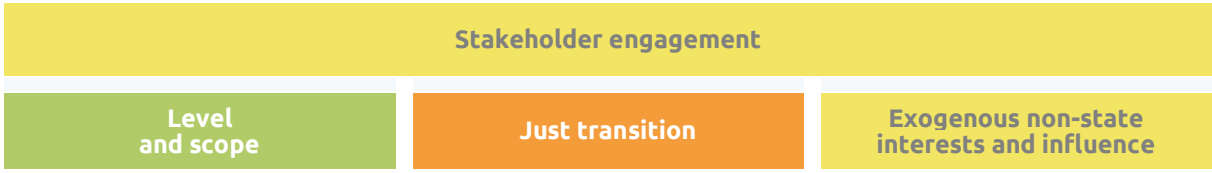
Rwanda has a climate portal website which serves as an information hub where interested stakeholders can find information on the policy developments as well as the relevant legal and policy documents (REMA, 2022b). The portal has not been set up to track the implementation of mitigation actions; however, users can explore recent GHG emissions sectors (2006-2018) at the national and sectoral level (REMA, 2022a). The portal does not always have the most recent reports available. For example, the 2019-2020 ECC assessment report or later versions are not yet available online (REMA, 2021c).

While Rwanda is establishing a solid transparency framework and has received support for its development, it still faces capacity constraints, including in relation to data collection and assessment (Conservation International, 2021; GEF, 2019; GoR, 2021c; ICAT, n.d.). The 2021 BUR notes that it would be ideal for each relevant Ministry to have a specific department responsible for the transparency framework with at least 2 staff members, suggesting that Rwanda has not yet achieved the full implementation of the system. While the system is integrated in the broader planning, monitoring and reporting structures, not all Ministries report using these systems and so some relevant data must be derived from their annual reports. Rwanda's long-term objective is to integrate all of the relevant climate reporting into this broader system.

Rwanda does not appear to have a dedicated review mechanism that focuses on climate action, but will incorporate this into existing processes. REMA has the responsibility to develop policy recommendations based on the monitoring and review of climate actions (GoR, 2021c). At a broader planning level, the 'Forward Looking Joint Sector Review' process brings different stakeholders together to review the status and progress of the sector, in this case, the environment and natural resources (ENR) sector, and to discuss and prioritise activities for the following year (MINECOFIN, n.d.). An evaluation of the implementation of the 2011 Green Growth and Climate Resilience strategy was commissioned in 2018 (Rugege, 2018). It is difficult to assess the extent to which the recommendations made in this review have been acted upon as the GGCR Strategy is currently being revised (REMA, 2020a), although it would appear as if some of the recommendations, such as to provide a legal mandate for certain committees, have not been implemented.

Rwanda has not put in place a formalised **ratchet up mechanism** to ensure a regular review and continuous updating of its NDC in line with the provisions of the Paris Agreement. However, Rwanda did submit an updated NDC in 2020, one of only about a third of the countries who kept to the original deadline agreed in Paris. There will be a mid-term review of its Vision 2050, which contains 2035 and 2050 GHG emission reduction targets, in 2035 with regular reviews every 5 years thereafter (GoR, 2020d). It is realistic to expect that the country would maintain a five-year revision cycle for its NDC targets.

2.4 Stakeholder engagement



Stakeholder consultation occurs regularly as part of the policy development process, though its effectiveness is not always guaranteed. A 2018 citizen report card on renewable energy projects revealed a lack of engagement with local stakeholders on decision-making matters or on the monitoring of project implementation, which may inhibit local buy-in. Rwanda does not have a formal body or policy to ensure a Just Transition.

Enhancing climate related education has long been a policy focus in Rwanda. Consideration of climate change has been incorporated into Rwanda’s basic K-12 curriculum and tertiary level programmes are being developed.

Rwandan civil society is active in the climate space. The knowledge basis to support advocacy for the transition is, however, limited. It is difficult to gauge the level of support amongst the general public for climate action as polling data is limited.

The government’s **level and scope of engagement** with stakeholders reflect how well it is aware of external knowledge and the expectations of its constituents, which, in turn, affects the ability for sound government decision-making.

Stakeholder consultation occurs regularly as part of the policy development process (GoR, 2011a; MoE, 2019). For example, a number of stakeholders, with a particular emphasis on the private sector, were consulted as part of the NDC revision process (NDC Partnership, 2020). One of the aims of the 2019 National Environment and Climate Change Policy (NECCP) is to promote public participation and enhance the engagement of specific stakeholder groups (e.g. women) in climate governance (MoE, 2019).

The effectiveness of this consultation, however, is not always guaranteed. There is evidence to suggest that local engagement, and thus buy-in, has been limited in some climate mitigation projects. A 2018 citizen report card on renewable energy projects revealed that there was a lack of engagement with local stakeholders on decision-making matters or on the monitoring of project implementation. Project beneficiaries often did not know how to access project-related information, notwithstanding the provisions for such information and engagement channels in project documents (TI-Rwanda, 2018).

Similar findings were found in relation to one of FONERWA’s flagship projects currently underway (TI-Rwanda, 2021b). This lack of awareness and ownership can put the long-term viability of these projects in jeopardy. Rwanda is working on enhancing its stakeholder engagement as part of its NDC implementation (FONERWA, 2020, 2021d).

Enhancing climate related education has long been a policy focus in Rwanda, with the 2011 Green Growth Strategy highlighting its importance (GoR, 2011a). This focus on increasing public awareness and formal education on climate matters remains a key policy aim of the 2019 NECCP (MoE, 2019). Climate mitigation and sustainable energy are priority sectors in 2020 science, technology and innovation (STI) policy, which will be achieved, in part, through streamlining these through all levels of education (NCST, 2020). Consideration of climate change has also been incorporated into Rwanda’s basic K-12 curriculum (Rwanda Education Board, 2015). REMA has created the Rwanda Climate Change Portal (REMA, 2022b) to serve as an information hub on climate change for the general public. It contributes to raising awareness and promoting actions on climate change in Rwanda.

Rwanda is also developing tertiary level programmes (MINEDUC, 2021a). For example, the Rwanda Climate Observatory is led and run by Rwandan researchers with the Massachusetts Institute for Technology (MIT) supporting training and advising staff (DeWitt and Gasore, 2018; MINEDUC, 2021b). In 2018, the first class of a new Masters’ Programme in Climate Science was launched. This programme will help build the capacity of Rwandans in the field of climate change and atmospheric sciences.

The African Centre of Excellence in Energy for Sustainable Development, based at the University of Rwanda, has a number of renewable energy related graduate level programmes. Rwanda is also pursuing some vocational skills training in the renewable energy sector, though more could be done to ensure the necessary skills are developed (GGGI, 2020). Attention is needed on the skills relevant for the entire project development cycle and not just in science, technology, engineering and mathematics (STEM) skills.

It is important that the transition towards net zero emissions is planned and implemented as a **Just Transition**, enabling wider benefits for the population as a whole and ensuring that no one is left behind.

Rwanda does not have a formal body or policy to ensure a Just Transition. It does not appear as a concept in key policy documents or reporting (GoR, 2020c, 2021c).

Rwanda has long had a strategy of focusing on green growth (GoR, 2011a), but far less attention is paid to green jobs in any formal way. For example, its recent NDC update did not include a green jobs assessment (ILO, n.d.), though FONERWA does report on the number of green jobs created through its activities (FONERWA, 2022).

Non-state actor interests and influence also have the ability to shape government policies, either to accelerate or impede the speed of the transition to a zero emissions society. Such influence may come from groups directly affected by the transition, either positively or negatively, or from the general public. An important consideration is to what extent these stakeholders can access and utilise country-specific analyses to influence the policy agenda.

Rwandan civil society is active in the climate space. The Rwanda Climate Change and Development Network, a umbrella group of those active on climate change, has close to 70 member organisations (Nsamaza, 2021). Civil Society Organisations (CSO) are often working with the government on climate efforts. For instance, the Rwanda Environmental NGO's Forum is working with the Ministry of Environment to enhance the capacity of CSOs, particularly with respect to implementing NDC projects (RCSP, 2021; RENGOF, n.d.).

The Rwanda Environment Awareness Organisation is working with the government on improving cooking stoves and reducing carbon emissions (CIVICUS, 2021; REAO, 2018). Rwanda's National Fund for Environment is also working on strengthening the financial viability of a number of the country's civil society organisations by training them on how to access green financing (FONERWA, 2021b).

A substantial amount of sectoral analysis was undertaken around the time Rwanda was developing its green growth strategy in 2011 (Carey and Hogarth, 2011b, 2011a; Cole and Hogarth, 2011; Dyszynski and Hogarth, 2011; Hogarth, 2011; Tyldesley and Hogarth, 2011; Warnest and Hogarth, 2011a, 2011b); however, there has been nothing as extensive on decarbonisation since that time. There is a limited amount of sector specific research and policy analysis (Bajpai and Bower, 2020; Franke et al., 2017; IRENA, 2020; Samo et al., 2022; Sudmant and Gouldson, 2020). This limited knowledge basis may inhibit the ability of civil society to advocate for the transition.

It is difficult to gauge the level of support amongst the general public for climate action as polling data is limited. Survey data of largely rural populations suggests a high level of awareness about climate change, its impacts and the benefits of renewable energy as a solution (TI-Rwanda, 2018).

Private sector actors form a broad and diffuse group in Rwanda. While half of the country's emissions are from agriculture, the sector is largely comprised of small landholders (GoR, 2020c). The building, transport and waste sectors make much of the rest, with only a small contribution from industry. It is difficult to gauge the extent to which non-state actors have influence over the government. With such an emissions profile, we expect it would be limited, though there is some evidence of advocacy for renewable energy. Energy Private Developers (EPD) is an association of private energy sector companies, focused on both renewable and fossil energy (EPD, n.d.). It has been active in advocating for a better regulatory environment to support off-grid renewables (GOGLA, 2021).

Rwanda is actively trying to enhance the engagement of its private sector in implementing its NDC. Committees have been established between Rwanda's Green Fund (FONERWA) and private sector associations as well as by the associations themselves to facilitate project identification and financing (NDC Partnership, 2020). FONERWA aims to have the private sector engaged in 30% of its funding. At present, that level is around 4% (FONERWA, 2021b). The government has created a Green Investment Facility to support projects using a blended public/private finance model (MoE, 2021c).

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NewClimate Institute is a non-profit institute established in 2014. NewClimate Institute supports research and implementation of action against climate change around the globe, covering the topics international climate negotiations, tracking climate action, climate and development, climate finance and carbon market mechanisms. NewClimate Institute aims at connecting up-to-date research with the real world decision making processes.

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References

- AfricaNews. (2019). Rwanda's Kagame "most likely" to step down in 2024. Retrieved June 24, 2019, from <https://www.africanews.com/2019/12/18/rwanda-s-kagame-most-likely-to-step-down-in-2024/>
- Agaba, A. K. (2017). The case for Kagame's third term in Rwanda. *The Washington Post*, 3(August), 2. Retrieved from <https://www.washingtonpost.com/news/global-opinions/wp/2017/08/03/the-case-for-kagames-third-term-in-rwanda/>
- Bajpai and Bower. (2020). A road map for e-mobility transition in Rwanda. International Growth Centre, (April), 7. Retrieved from <https://www.theigc.org/wp-content/uploads/2020/05/Bajpai-and-Bower-2020-policy-brief.pdf>
- BBC. (2021). Paul Rusesabagina: From Hotel Rwanda hero to convicted terrorist. Retrieved June 24, 2022, from <https://www.bbc.com/news/world-africa-58604468>
- Bhave, A. G., Conway, D., Dessai, S., & Stainforth, D. A. (2016). Barriers and opportunities for robust decision making approaches to support climate change adaptation in the developing world. *Climate Risk Management*, 14, 1–10. <https://doi.org/10.1016/j.crm.2016.09.004>
- Byamukama, et al. (2011). Baseline report of Rwanda's National Strategy on Climate Change and Low Carbon Development. Retrieved from <https://www.smithschool.ox.ac.uk/sites/default/files/2022-03/Rwanda-baseline-final.pdf>
- CABRI. (2021). Inclusive Budgeting and Financing for Climate Change in Africa: The integration of climate change into budgeting and finance. Retrieved from <https://www.cabri-sbo.org/uploads/files/Documents/Keynote-paper-The-integration-of-climate-change-into-budgeting-and-finance-EN.pdf>
- Caldwell et al. (2015). Climate compatible development in the "Land of a Thousand Hills": Lessons from Rwanda. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Climate-Compatible-Development-Lessons-from-Rwanda-July-2015.pdf>
- Carey and Hogarth. (2011a). Green Growth and Climate Resilience Strategy Appendix B: Cities and the Built Environment Sector Working Paper. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Cities-and-the-Built-Environment-Sector-Working-Paper-Rwanda-Green-Growth-Strategy.pdf>
- Carey and Hogarth. (2011b). Green Growth and Climate Resilience Strategy Appendix B: Transport Sector Working Paper. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Transport-Sector-Working-Paper-Rwanda-Green-Growth-Strategy.pdf>
- CIVICUS. (2021). COP26: 'We hope that at COP26 words will translate into commitments that will change behaviours.' Retrieved June 25, 2022, from <https://www.civicus.org/index.php/media-resources/news/interviews/5302-climate-we-hope-that-at-cop26-words-will-translate-into-commitments-that-will-change-behaviours>
- Climate Ambition Alliance. (2019). Annex list. Retrieved from <https://cop25.mma.gob.cl/wp-content/uploads/2020/02/Annex-Alliance-ENGLISH.pdf>
- Climate Analytics and NewClimate Institute. (2022). Natural gas in Africa: Why fossil fuels cannot sustainably meet the continent's growing energy demand. Retrieved from https://climateactiontracker.org/documents/1048/CAT_2022-05_Report_NaturalGasinAfrica.pdf
- Climate Change Committee. (2021). International Climate Council Network launches to support global climate action. Retrieved June 24, 2022, from <https://www.theccc.org.uk/2021/11/01/international-climate-council-network-launches-to-support-global-climate-action/>
- Cole and Hogarth. (2011). Mining Sector Working Paper: Rwanda Green Growth Strategy. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Mining-Sector-Working-Paper-Rwanda-Green-Growth-Strategy.pdf>
- Congressional Research Service. (2021). Rwanda: In Brief. Retrieved from <https://sgp.fas.org/crs/row/R44402.pdf>
- Conservation International. (2021). PROJECT IMPLEMENTATION REPORT (PIR) Strengthening the capacity of institutions in Rwanda to implement the transparency requirements of the Paris Agreement. Retrieved from https://publicpartnershipdata.azureedge.net/gef/GEFD-ocuments/35ed5976-df7c-e811-8124-3863bb2e1360/PIR/ProjectImplementationReportPIR_20210807CBIT-Rwanda-FY21-PIR.pdf
- Cooling Africa. (n.d.). Africa Centre of Excellence for Sustainable Cooling and Cold-chain (ACES). Retrieved June 24, 2022, from <https://coolingafrica.org/>
- CPCIC. (n.d.). Cleaner Production and Climate Innovation Centre. Retrieved June 24, 2022, from <http://cpcic.rw/index.php?id=3>
- DeWitt and Gasore. (2018). The Rwanda climate observatory: Developing climate science in East Africa. *Clean Air Journal*, 28(2), 2. Retrieved from https://www.researchgate.net/publication/330774220_The_Rwanda_Climate_Observatory_Developing_Climate_Science_in_East_Africa
- DGPR. (2018). Democratic Green Party of Rwanda Manifesto 2018-2023. Retrieved from <https://www.rwandagreendemocrats.org/sites/globalgreens.org/files/DGPR-Manifesto-English-version-for-MP-Elections-Dec-2018.pdf>
- Dyszynski and Hogarth. (2011). Forests and Tree-based Systems Sector Working Paper: Rwanda Green Growth Strategy. Retrieved from http://fonerwa.org/sites/default/files/2021-06/Forests-Sector-Working-Paper-Rwanda-Green-Growth-Strategy_0.pdf
- EPD. (n.d.). Energy Private Developers. Retrieved June 25, 2022, from <https://epdrwanda.com/>
- FONERWA. (2020). ENVIRONMENTAL and SOCIAL COMMITMENT PLAN (ESCP) - RWANDA NDC DEEP DIVE: ADVANCING FINANCIAL INNOVATION TO SCALE UP CLIMATE ACTION. Retrieved from <http://www.fonerwa.org/sites/default/files/2021-06/Environmental-and-Social-Commitment-Plan-NDC-Deep-Dive-Project.pdf>
- FONERWA. (2021a). Rwanda Green Fund. Retrieved June 24, 2022, from <http://www.fonerwa.org/>
- FONERWA. (2021b). Rwanda Green Fund 2021 achievement overview. Retrieved from http://fonerwa.org/sites/default/files/2021-12/Rwanda_Green_Fund_Overview_Dec_2021.pdf
- FONERWA. (2021c). Rwanda Green Fund 2021 factsheet. Retrieved from <http://fonerwa.org/sites/default/files/2021-12/Rwanda-Green-Fund-Fact-Sheet-Dec-2021.pdf>

- FONERWA. (2021d). STAKEHOLDER ENGAGEMENT PLAN (SEP) PROJECT: RWANDA NDC DEEP DIVE: ADVANCING FINANCIAL INNOVATION TO SCALE UP CLIMATE ACTION. Retrieved from [http://www.fonerwa.org/sites/default/files/2021-06/Stakeholder Engagement Plan_NDC Deep Dive Project.pdf](http://www.fonerwa.org/sites/default/files/2021-06/Stakeholder_Engagement_Plan_NDC_Deep_Dive_Project.pdf)
- FONERWA. (2022). Rwanda Green Fund - Investing in a green and climate resilient Rwanda. Retrieved from [http://www.fonerwa.org/sites/default/files/2022-04/Rwanda Green Fund_Factsheet updated April 2022.pdf](http://www.fonerwa.org/sites/default/files/2022-04/Rwanda_Green_Fund_Factsheet_updated_April_2022.pdf)
- Franke et al. (2017). Supporting affordable and green buildings in Kigali. Retrieved from <https://www.ifeu.de/fileadmin/uploads/RP-Mid-term-Poster-Kigali-green-buildings.pdf>
- Freedom House. (2022). Rwanda profile. Retrieved June 24, 2022, from <https://freedomhouse.org/country/rwanda/freedom-world/2022>
- GEF. (2019). Project Document : Building and strengthening Rwanda's national capacity to implement the transparency elements of the Paris. Retrieved from https://publicpartnershipdata.azureedge.net/gef/GEFDocuments/35ed5976-df7c-e811-8124-3863bb2e1360/ceoendorsement/Annexesappendixestheprojectdocuments_20190325_GEFID_9997_CI_Rwanda_CBIT_ProDoc.pdf
- GGGI. (2018). Is Rwanda heading toward a green growth pathway? Retrieved June 24, 2022, from <https://gggi.org/is-rwanda-heading-towards-green-growth-pathway/>
- GGGI. (2020). Employment Assessment of Renewable Energy: Power sector pathways compatible with NDCs and national energy plans. Retrieved June 25, 2022, from <https://gggi.org/employment-assessment-of-renewable-energy-power-sector-pathways-compatible-with-ndcs-and-national-energy-plans/>
- GOGLA. (2021). Strengthening the Off-Grid Solar Electrification Market through Improved Policy and Advocacy in East Africa. Retrieved June 25, 2022, from <https://www.gogla.org/resources/strengthening-the-off-grid-solar-electrification-market-through-improved-policy-and-0>
- GoR. (2005). Organic Law N° 04/2005 of 08/04/2005 Determining the Modalities of Protection, Conservation and Promotion of Environment in Rwanda, (May), 67. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Environment%2BOrganic%2BLaw.pdf>
- GoR. (2010). Prime Minister's order for Committees in charge of the Environment conservation and protection.pdf. Official Gazette of the Republic of Rwanda, 25(October), 79. Retrieved from [http://rema.gov.rw/fileadmin/templates/Documents/rema_doc/Laws and Regulations_Updated/Ministerial Orders/Prime Minister%27s order for Committees in charge of the Environment conservation and protection.pdf](http://rema.gov.rw/fileadmin/templates/Documents/rema_doc/Laws_and_Regulations_Updated/Ministerial_Orders/Prime_Minister%27s_order_for_Committees_in_charge_of_the_Environment_conservation_and_protection.pdf)
- GoR. (2011a). Green Growth and Climate Resilience-National Strategy for Climate Change and Low Carbon Development. The Way Forward in International Climate Policy. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Rwanda-Green-Growth-Strategy.pdf>
- GoR. (2011b). Guidelines for Mainstreaming Climate Change Adaptation and Mitigation in the Environment and Natural Resources Sector. Retrieved from [https://www.rema.gov.rw/rema_doc/IMCE_Doc/Guidelines Env-NR.pdf](https://www.rema.gov.rw/rema_doc/IMCE_Doc/Guidelines_Env-NR.pdf)
- GoR. (2011c). Rwanda's Centre for Climate Knowledge for Development: Proposal. Retrieved from [http://fonerwa.org/sites/default/files/2021-06/Centre for Climate Knowledge for Development - Proposal - Rwanda Green Growth Strategy.pdf](http://fonerwa.org/sites/default/files/2021-06/Centre_for_Climate_Knowledge_for_Development_-_Proposal_-_Rwanda_Green_Growth_Strategy.pdf)
- GoR. (2012). Law N°16/2012 establishing the National Fund for Environment. Official Gazette, (June), 79. Retrieved from [http://fonerwa.org/sites/default/files/2021-06/Law Establishing FONERWA_2012.pdf](http://fonerwa.org/sites/default/files/2021-06/Law_Establishing_FONERWA_2012.pdf)
- GoR. (2013). Law N°63/2013 determining the mission, organization, and functioning of REMA. Official Gazette, (August), 75. Retrieved from https://rema.gov.rw/fileadmin/templates/Documents/Law_on_environment.pdf
- GoR. (2015a). Constitution of the Republic of Rwanda of 2015. Official Gazette of the Republic, 24(December), 158. Retrieved from [https://www.rwandabar.org.rw/attached_pdf/Constitution of the Republic of Rwanda-1608275353.pdf](https://www.rwandabar.org.rw/attached_pdf/Constitution_of_the_Republic_of_Rwanda-1608275353.pdf)
- GoR. (2015b). Intended Nationally Determined Contribution (INDC) for the Republic of Rwanda. Retrieved from [http://fonerwa.org/sites/default/files/2021-06/Rwandas Intended Nationally Determined Contribution -INDC.pdf](http://fonerwa.org/sites/default/files/2021-06/Rwandas_Intended_Nationally_Determined_Contribution_-INDC.pdf)
- GoR. (2017a). Detailed Implementation Plan for the National Determined Contributions (NDCs) of Rwanda. Retrieved from https://www.environment.gov.rw/fileadmin/user_upload/Moe/Publications/Reports/Rwanda_INDC_Implementation_plan.pdf
- GoR. (2017b). Law N°39/2017 establishing the National Fund for Environment. Official Gazette, (August), 101. Retrieved from [http://fonerwa.org/sites/default/files/2021-06/Law establishing FONERWA and determining its mission%2C organisation and functioning %28No 39_2017 of 16_08_2017%29.pdf](http://fonerwa.org/sites/default/files/2021-06/Law_establishing_FONERWA_and_determining_its_mission%2C_organisation_and_functioning_%28No_39_2017_of_16_08_2017%29.pdf)
- GoR. (2017c). Rwanda National Strategy for Transformation 2017-2024, (Nst 1), 65. Retrieved from [http://fonerwa.org/sites/default/files/2021-06/Rwanda National Strategy for Transformation 2017-2024.pdf](http://fonerwa.org/sites/default/files/2021-06/Rwanda_National_Strategy_for_Transformation_2017-2024.pdf)
- GoR. (2018). Law N°48/2018 of 13/08/2018 on Environment. Official Gazette 9(01) 53, 9(1), 53. Retrieved from [https://waterportal.rwb.rw/sites/default/files/2018-10/Water law gazetted%2C2018.pdf](https://waterportal.rwb.rw/sites/default/files/2018-10/Water_law_gazetted%2C2018.pdf)
- GoR. (2020a). Law N°72/2019 establishing Rwanda Forestry Authority. Official Gazette, (January), 68. Retrieved from https://www.rfa.rw/fileadmin/user_upload/RFA/Publications/RFA_RWB_LAW_04_OG_no_04_of_03_02_2020.pdf
- GoR. (2020b). Prime Minister's Order determining mission, responsibilities organisational structure, salaries and fringe benefits for employees of the Ministry of Environment. Official Gazette. Retrieved from <https://gazettes.africa/archive/rw/2020/rw-government-gazette-dated-2020-10-19-no-32bis.pdf>
- GoR. (2020c). Republic of Rwanda Updated Nationally Determined Contribution, 96. Retrieved from [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Rwanda First/Rwanda_Updated_NDC_May_2020.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Rwanda_First/Rwanda_Updated_NDC_May_2020.pdf)
- GoR. (2020d). Rwanda Vision 2050. Retrieved from https://www.minecofin.gov.rw/fileadmin/user_upload/Minecofin/Publications/STRATEGIES/Vision_2050/English-Vision_2050_Full_version-Web.pdf
- GoR. (2021a). FY 2020/2021 revised budget. Official Gazette, 4(March), 532. Retrieved from https://www.minecofin.gov.rw/fileadmin/user_upload/Minecofin/Publications/REPORTS/National_Budget/Annual_State_Finance_Laws/2020-21_Revised_Budget_Law/2020-2021_Revised_Finance_Law.pdf

- GoR. (2021b). Prime Minister's Order governing environmental protection committees and their members. Official Gazette, 26(4), 119. Retrieved from <https://gazettes.africa/archive/rw/2021/rw-government-gazette-dated-2021-04-26-no-15.pdf>
- GoR. (2021c). Rwanda's First Biennial Update Report Under the United Framework Convention Climate Change (UNFCCC). Retrieved from https://unfccc.int/sites/default/files/resource/Rwanda_First_Biennial_Update_Report_Final_V.pdf
- GoR. (2021d). Rwanda National Statement at COP26. Retrieved from https://unfccc.int/sites/default/files/resource/RWANDA_A_cop26cmp16cma3_HLS_EN.pdf
- GoR. (2022). Rwanda's Administrative Structure. Retrieved June 24, 2022, from <https://www.gov.rw/government/administrative-structure>
- Gütschow et al. (2021). The PRIMAP-hist national historical emissions time series (1750-2019). Retrieved June 24, 2022, from <https://www.pik-potsdam.de/paris-reality-check/primap-hist/#scenario=histcr&id=rwa&entity=kyotoghar4>
- Hattem, J. (2017). Kagame seems set to win again in Rwanda: But is he a miracle man or a nascent dictator? The Washington Post, 2(August), 5. Retrieved from https://www.washingtonpost.com/world/africa/kagame-seems-set-to-win-again-in-rwanda-but-is-he-a-miracle-man-or-a-nascent-dictator/2017/07/31/069f832a-75fd-11e7-8c17-533c52b2f014_story.html
- Hogarth, R. (2011). Green Growth and Climate Resilience Strategy Appendix B: Finance Sector Working Paper. Retrieved from http://fonerwa.org/sites/default/files/2021-06/Finance_Sector_Working_Paper_-_Rwanda_Green_Growth_Strategy.pdf
- HQPower. (2019). When commissioned in 2019, HQ Power will become the biggest Peat Power Plant in Africa. Retrieved June 24, 2019, from <https://hqpower-rwanda.com/the-project/#powerplant>
- ICAT. (n.d.). Rwanda ICAT project details. Retrieved June 25, 2022, from <https://climateactiontransparency.org/country/rwanda/>
- ICCN. (2021). International Climate Councils Network. Retrieved June 24, 2022, from <https://climatecouncilsnetwork.org/members/>
- ILO. (n.d.). Green Jobs Assessment Model (GJAM). Retrieved from https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/genericdocument/wcms_678011.pdf
- IMF. (2022). Rwanda economic profile. Retrieved June 24, 2022, from <https://www.imf.org/en/Countries/RWA>
- IRENA. (2018). Rwanda Energy Profile. Retrieved from https://www.irena.org/IRENADocuments/Statistical_Profiles/Africa/Rwanda_Africa_RE_SP.pdf
- IRENA. (2020). The Renewable Energy Transition in Africa: Country Studies for Côte d'Ivoire, Ghana, South Africa, Morocco and Rwanda. Retrieved from https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2021/March/Renewable-Energy-Transition-Africa_Country_Studies_2021.pdf?la=en&hash=46D8ADF378CD917C90F85F899B3F2B33A787CB8
- Jänicke, M., Schreurs, M., & Töpfer, K. (2015). The Potential of Multi-Level Global Climate Governance. Institute for Advanced Sustainability Studies (IASS) Policy Brief, (2), 1–12. <https://doi.org/10.2312/iass.2015.021>
- Jones, N. (2021). How dangerous is Africa's explosive Lake Kivu? Retrieved June 24, 2022, from <https://www.nature.com/immersive/d41586-021-02523-5/index.html>
- MIF. (2020). Ibrahim Index of African Governance. Mo Ibrahim Foundation. Retrieved from <https://mo.ibrahim.foundation/sites/default/files/2020-11/2020-index-report.pdf>
- MINAGRI. (2018a). Rwanda Strategic Plan for Agriculture Transformation (2018-2024). Retrieved from http://fonerwa.org/sites/default/files/2021-06/Rwanda_Strategic_Plan_for_Agriculture_Transformation_2018.pdf
- MINAGRI. (2018b). THE STRATEGIC PLAN FOR AGRICULTURE TRANSFORMATION EMPHASIZES MAINSTREAMING CLIMATE CHANGE. Retrieved from <https://www.minagri.gov.rw/updates/news-details/the-strategic-plan-for-agriculture-transformation-emphasizes-mainstreaming-climate-change-hon-minister-mukeshimana>
- MINALOC. (2021). NATIONAL DECENTRALIZATION POLICY. Retrieved from <https://www.minaloc.gov.rw/index.php?eID=dumpFile&t=f&f=36377&token=bb5fe53e14a215bb74cb9ac01b864363f2942e98>
- MINECOFIN. (n.d.). Backward and Forward looking Joint Sector reviews. Retrieved July 22, 2022, from https://www.minecofin.gov.rw/1/publications/reports?tx_filelist_filelist%5Baction%5D=list&tx_filelist_filelist%5Bcontroller%5D=File&tx_filelist_filelist%5Bpath%5D=%2Fuser_upload%2FMinecofin%2FPublications%2FREP_ORTS%2FNational_Development_Planning_and_Research%2FJoint_Sector_Review%2F&cHash=00ba23a2e159c39e643e06b0a507fbfd
- MINECOFIN. (2012). 2012-2013 Budget Call Circular.pdf. Retrieved from https://www.minecofin.gov.rw/fileadmin/user_upload/Minecofin/Publications/REPORTS/National_Budget/Budget_Call_Circular/2012-13_Budget_Call_Circular.pdf
- MINECOFIN. (2020). Request Letter of Economic Advisor.pdf. Retrieved from https://www.dropbox.com/sh/gakvytjxqbecwdw/AADPUpKhN7Dnz5Y3jt6AmEa4a/Economic_Advisory_Initiative?dl=0&preview=Rwanda_RequestLetter_EconomicAdvisor.pdf&subfolder_nav_tracking=1
- MINECOFIN. (2021). First planning and budgeting call circular (PBCC) for the 2022/2023 Fiscal Year.pdf. Retrieved from https://www.minecofin.gov.rw/fileadmin/user_upload/Minecofin/Publications/REPORTS/National_Development_Planning_and_Research/Planning_and_Budgeting_Call_Circular/Central_Government/2022-2023_Budget_Call_Circular/1st_PBCC_for_CG_Signed.pdf
- MINEDUC. (2021a). MoU between REMA, University of Rwanda and Higher Education Council. Retrieved June 24, 2022, from https://twitter.com/Rwanda_Edu/status/1468138159276011521
- MINEDUC. (2021b). Rwanda Climate Change Observatory. Retrieved from <https://www.mineduc.gov.rw/climate-change-observatory>
- MININFRA. (2018). Energy Sector Strategic Plan (ESSP). Retrieved from https://www.reg.rw/fileadmin/user_upload/Final_ESSP.pdf
- MININFRA. (2020a). INFRASTRUCTURE SECTOR NEEDS TO DRAMATICALLY SCALE UP THE ADOPTION OF LOW CARBON SOLUTIONS. Retrieved from <https://www.mininfra.gov.rw/updates/news-details/infrastructure-sector-needs-to-dramatically-scale-up-the-adoption-of-low-carbon-solutions-minister-gatete>

- MININFRA. (2020b). Rwanda to promote private sector participation towards stimulation of solar innovation and massive outreach. Retrieved June 24, 2022, from <https://www.mininfra.gov.rw/updates/news-details/rwanda-to-promote-private-sector-participation-towards-stimulation-of-solar-innovations-and-massive-outreach>
- MININFRA. (2021). National Transport Policy and Strategy for Rwanda. Retrieved from https://www.mininfra.gov.rw/fileadmin/user_upload/Mininfra/Publications/Policies/Transport/NATIONAL_TRANSPORT_POLICY_AND_STRATEGY_APRIL_2021.pdf
- MINIRENA. (2009). FIVE-YEAR STRATEGIC PLAN FOR THE ENVIRONMENT AND NATURAL RESOURCES SECTOR (2009-2013). Republic Rwanda, (June), 97. Retrieved from https://rema.gov.rw/rema_doc/Policies/Final_ENRSSP.pdf
- MINIRENA. (2012). Rwanda Second National Communication on Climate Change. Retrieved from <https://unfccc.int/resource/docs/natc/rwanc2.pdf>
- MINIRENA. (2013). Five Year Strategic Plan for the Environment and Natural Resources Sector (2014 – 2018). Republic of Rwanda. Retrieved from https://www.climate-laws.org/rails/active_storage/blobs/eyJfcmFpbHMiOnsibWVzc2FnZSI6IkJBaHBBdjhlIiwizXhwlpudWxsLcJwdXliOiJibG9iX2ln19--909f698a9a38362ff1fb0091fedb89ed279a3eef/f
- Ministry of Lands, Environment, Forestry, Water, and M. (2005). Initial National Communication on Climate Change under the United Nations Framework Convention. Retrieved from https://unfccc.int/sites/default/files/resource/INITIAL_NATIONAL_COM_ENGLISH_VERSION_final_signed.pdf
- Ministry of Lands, R. and E. (2003). RWANDA ENVIRONMENTAL POLICY. Retrieved from https://rema.gov.rw/fileadmin/templates/Documents/rema_doc/Policies/Rwanda_Environmental_Policy_English.pdf
- MoE. (2017). Strategic Plan for the Environment and Natural Resources Sector - 2014 – 2018. Retrieved from https://chm.cbd.int/api/v2013/documents/4DCB4025-33B5-6C59-D28F-C7E7DCEA006D/attachments/213175/Environment_and_Natural_Resources_Sector_Strategy_2018-2024.pdf
- MoE. (2018). Rwanda Third National Communication on Climate Change. Retrieved from https://unfccc.int/sites/default/files/resource/nc3_Republic_of_Rwanda.pdf
- MoE. (2019). National Environment and Climate Change Policy. Ministry of Environment, Rwanda, (June), 59. Retrieved from http://fonerwa.org/sites/default/files/2021-06/Rwanda_National_Environment_and_Climate_Change_Policy_2019.pdf
- MoE. (2021a). Ministerial Order N°005/2021 relating to the national report on climate change. Retrieved from https://www.environment.gov.rw/fileadmin/user_upload/Moe/Publications/Laws/Ministerial_Order_relating_to_the_national_report_on_climate_change.pdf
- MoE. (2021b). Rwanda's Adaptation Communication to the United Nations Framework Convention on Climate. Retrieved from https://icapdatadissemiation.wikischolars.columbia.edu/file/view/TRAC+report_Rwanda+National+ART+Evaluation_Final_18Jan08.doc/355073978/TRAC+report_Rwanda+National+ART+Evaluation_Final_18Jan08.doc
- MoE. (2021c). RWANDA SHOWCASES GREEN INVESTMENT OPPORTUNITIES AT COP26 IN GLASGOW. Updates, 5(11), 3. Retrieved from <https://www.environment.gov.rw/news-detail/rwanda-showcases-green-investment-opportunities-at-cop26-in-glasgow>
- Mutabazi, A. (2010). Assessment of operational framework related to climate change in Rwanda. Retrieved from https://www.rema.gov.rw/rema_doc/Climate_change/Final_Report_CC_Dpt.pdf
- NCST. (2020). SCIENCE , TECHNOLOGY AND INNOVATION POLICY. Retrieved from <https://www.mineduc.gov.rw/index.php?eID=dumpFile&t=f&f=17135&token=c64ea84e90450da788598d96cc37bcd124d001e7>
- NDC Partnership. (n.d.). NDC Partnership - Rwanda Profile. Retrieved June 24, 2022, from <https://ndcpartnership.org/countries-map/country?iso=RWA>
- NDC Partnership. (2020). Partnership in action 2020: Keeping ambition alive. Retrieved from <https://ndcpartnership.org/news/rwanda-raises-its-mitigation-ambitions-and-builds-readiness-climate-finance%0A>
- NewAfrican. (2011). President Kagame "I will step Down in 2017." Retrieved June 24, 2022, from <https://newafricanmagazine.com/2795/>
- Nsamaza, S. (2021). Civil Society Organisation members of Rwanda Climate Change and Development Network. Retrieved June 25, 2022, from <https://rccdnetwork.org/?p=900>
- President Kagame. (2009). President Kagame addresses the UNGA Climate Change Summit – New York. Retrieved from <https://www.paulkagame.com/president-kagame-addresses-the-unga-climate-change-summit-new-york-22-september-2009/>
- President Kagame. (2021). G20 Session 2: Climate Change and Environment | Remarks by President Kagame | Rome, 31 October 2021. Retrieved June 24, 2022, from <https://www.paulkagame.com/g20-session-2-climate-change-and-environment-remarks-by-president-kagame-rome-31-october-2021/>
- President Kagame. (2022). Sustainable Energy for All Forum | Remarks by President Kagame | Kigali, 17 May 2022. Retrieved June 24, 2022, from <https://www.paulkagame.com/sustainable-energy-for-all-forum-remarks-by-president-kagame-kigali-17-may-2022/>
- RCSP. (2021). RWANDA CIVIL SOCIETY PLATFORM Bi-Annual Report. Retrieved from http://www.rcsprwanda.org/IMG/pdf/bi-annual_report_rcsp_jan-july_2021.pdf
- REAO. (2018). Improved cooking stoves in Nyagatare district. Retrieved June 25, 2022, from <https://reao.rw/improved-cooking-stoves-in-nyagatare-district/>
- REG. (2021a). Annual Report For Rwanda Energy Group 2020-2021. Retrieved from https://www.reg.rw/fileadmin/REG_ANNUAL_REPORT_2020-2021_V3.pdf
- REG. (2021b). Rwanda Least Cost Power Development Plan 2020-2040. Retrieved from https://www.reg.rw/fileadmin/user_upload/Least_Cost_Power_Development_Plan_2020-2024.pdf
- REMA. (2019). Assessment Report 2017-2018 for the implementation of Environment and climate change activities. Retrieved from https://rema.gov.rw/fileadmin/templates/Documents/rema_doc/Reports/Assessment_report_ECC_Implementation_2017-2018.pdf

- REMA. (2020a). 2018-2019 Assessment Report for the Implementation of Environment and Climate Change activities by Sector Ministries and Districts. Retrieved from https://pea4sdgs.org/sites/default/files/2020-10/ECC_Implementation_Assessment_report_2018-2019_Draft%281%29.pdf
- REMA. (2020b). Piloting a Standardized Crediting Framework for Scaling Up Energy Access Programs - Lessons learnt from Rwanda Pilot Programme. Retrieved from https://www.ci-dev.org/sites/cidev/files/2020-11/SCF_Rwanda_lessons_learned_final_UPDATE.pdf
- REMA. (2021a). About the team of the Rwanda Environment Management Authority. Retrieved June 25, 2022, from <https://www.rema.gov.rw/about/our-team>
- REMA. (2021b). Organizational Structure of REMA.pdf. Retrieved from https://rema.gov.rw/fileadmin/templates/Documents/rema_doc/Structure/REMA_New_Structure.pdf
- REMA. (2021c). RWANDA 2021 State of Environment and Outlook. Retrieved from https://www.rema.gov.rw/fileadmin/user_upload/Rwanda_SOER_Final-05February2022-LR.pdf
- REMA. (2021d). Rwanda Selected as Pioneer Country in Taskforce on Access to Climate Finance, (November), 3. Retrieved from <https://www.environment.gov.rw/news-detail/rwanda-selected-as-pioneer-country-in-taskforce-on-access-to-climate-finance>
- REMA. (2022a). Climate Change Data in Rwanda. Retrieved June 25, 2022, from <https://climateportal.rema.gov.rw/index.php?id=23>
- REMA. (2022b). Rwanda Climate Change Portal. Retrieved June 25, 2022, from <https://climateportal.rema.gov.rw/index.php?id=2>
- RENGOF. (n.d.). Rwanda Environmental NGO's Forum. Retrieved June 25, 2022, from <https://rengofrwanda.org/>
- REUTERS. (2018). Two opposition lawmakers elected in Rwanda for the first time. Reuters, 5(September), 10. Retrieved from <https://www.reuters.com/article/us-rwanda-politics/two-opposition-lawmakers-elected-in-rwanda-for-the-first-time-idUSKCN1LL2HI>
- Rugege, D. (2018). Evaluation of the Green Growth and Climate Resilience Strategy (GGCRS) Implementation. Retrieved from https://www.environment.gov.rw/fileadmin/user_upload/Moe/Publications/Reports/GGCRS_-_Final-Evaluation_Report_-_Oct_2018.pdf
- Rwanda Education Board. (2015). Competence-based Curriculum: Summary of Curriculum Framework Pre-Primary to Upper Secondary 2015. Retrieved from https://reb.rw/fileadmin/competence_based_curriculum/syllabi/CURRICULUM_FRAMEWORK_FINAL_VERSION_PRINTED.compressed.pdf
- Rwanda Environment Management Authority. (2021). Rwanda State of Environment and Outlook Report 2021. Retrieved from https://www.rema.gov.rw/fileadmin/user_upload/Rwanda_SOER_Final-05February2022-LR.pdf
- Samo et al. (2022). Consistency case study: Actions supporting Article 2.1c of the Paris Agreement in Rwanda. Retrieved from https://www.climateworks.org/wp-content/uploads/2022/02/iGST_21c_Case_Study_Rwanda.pdf
- SEI. (2009). Economics of Climate Change In Rwanda. Economics of Climate change in Rwanda. Retrieved from http://fonerwa.org/sites/default/files/2021-06/Economics_of_Climate_Change_in_Rwanda_-_2009.pdf
- Soudan, F. (2017). Paul Kagame : « Ce sera sans doute mon dernier mandat ». Jeune Afrique, 22(May), 12. Retrieved from <https://www.jeuneafrique.com/mag/437683/politique/interview-paul-kagame-ce-sera-sans-doute-mon-dernier-mandat/>
- Spalding-Fecher et al. (2018). Roadmap for Rwanda Pilot Standardized Crediting Framework. Retrieved from https://ci-dev.org/sites/cidev/files/2020-01/SCF_Roadmap_for_Rwanda_Pilot.pdf
- Sudmant and Gouldson. (2020). Electric mobility and transport leapfrogging in Kigali, Rwanda. Retrieved June 25, 2022, from <https://www.theigc.org/project/electric-mobility-and-transport-leapfrogging-in-kigali-rwanda/>
- SYMBION. (n.d.). Rwanda Kivu-56/56 MW. Retrieved June 24, 2022, from <http://www.symbion-power.com/rwanda-kivu/>
- The Conversation. (2020). Rwanda extracts methane from Lake Kivu for electricity. How it works. Retrieved June 24, 2022, from <https://theconversation.com/rwanda-extracts-methane-from-lake-kivu-for-electricity-how-it-works-133952>
- The Washington Post. (2022). Rwanda deserves UK censure over handling of "Hotel Rwanda" Hero. Retrieved June 24, 2022, from https://www.washingtonpost.com/business/rwanda-deserves-uk-censure-over-handling-of-hotel-rwandahero/2022/05/30/330582aa-dfd6-11ec-ae64-6b23e5155b62_story.html
- The World Bank. (2019). Poverty and equity in Rwanda. Retrieved from https://databank.worldbank.org/data/download/poverty/95142451-550D-4C1B-A389-26FD74C6B018QA-2019/Global_POVEQ_RWA.pdf
- The World Bank. (2021a). Rwanda climate risk country profile. Retrieved from https://climateknowledgeportal.worldbank.org/sites/default/files/2021-09/15970-WB_Rwanda_Country_Profile-WEB.pdf
- The World Bank. (2021b). The World Bank in Rwanda. Retrieved from <https://www.worldbank.org/en/country/rwanda/overview#1>
- The World Bank. (2022a). Access to electricity (% of population) - Rwanda. Retrieved June 24, 2022, from <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=RW>
- The World Bank. (2022b). GDP growth (annual %) - Rwanda. Retrieved June 24, 2022, from <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=RW>
- The World Bank. (2022c). Rural population (% of total population) - Rwanda. Retrieved June 24, 2022, from <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=RW>
- TI-Rwanda. (2018). PROMOTING TRANSPARENCY AND ACCOUNTABILITY IN CLIMATE CHANGE FINANCE IN RWANDA PART II. Citizen Report Card survey. Retrieved from https://tirwanda.org/IMG/pdf/2018_march_crc_and_climate_change_report_final_2_.pdf
- TI-Rwanda. (2021a). Rwanda Bribery Index 2021. Retrieved from https://www.tirwanda.org/IMG/pdf/rwanda_bribery_index_rbi_2021.pdf
- TI-Rwanda. (2021b). The Assessment of Climate Change Governance of Green Gicumbi project: The use of Political Economy Analysis approach. Retrieved from https://www.tirwanda.org/IMG/pdf/assessment_of_climate_change_governance_of_green_gicumbi_project_the_use_of_political_economy_analysis_approach.pdf

- Tyldesley and Hogarth. (2011). Green Growth and Climate Resilience Strategy Appendix B: Energy Sector Working Paper. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Energy Sector Working Paper - Rwanda Green Growth Strategy.pdf>
- UNEP. (2011). Mainstreaming resource efficient and cleaner production in Rwanda's policies and strategie. Retrieved from <https://wedocs.unep.org/bitstream/handle/20.500.11822/32307/Rwanda.pdf?sequence=1&isAllowed=y>
- UNGA. (2021). Readout of meeting between President of General Assembly and the Minister of Foreign Affairs and Cooperation of Rwanda. Retrieved from <https://www.un.org/pga/76/2021/09/24/readout-of-meeting-between-president-of-general-assembly-and-the-minister-of-foreign-affairs-and-cooperation-of-rwanda-h-e-vincent-biruta/>
- United States Department of State. (2021). Rwanda 2021 Human Rights Report. Retrieved from https://www.state.gov/wp-content/uploads/2022/03/313615_RWANDA-2021-HUMAN-RIGHTS-REPORT.pdf
- Warnest and Hogarth. (2011a). Land Sector Working Paper: Rwanda Green Growth Strategy. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Land Sector Working Paper - Rwanda Green Growth Strategy.pdf>
- Warnest and Hogarth. (2011b). Water Sector Working Paper. Retrieved from <http://fonerwa.org/sites/default/files/2021-06/Water Sector Working Paper - Rwanda Green Growth Strategy.pdf>
- Watson and Schalatek. (2020). Climate Finance Regional Briefing: Sub-Saharan Africa. Retrieved from <https://climatefundsupdate.org/publications/climate-finance-regional-briefing-asia-2020/>
- World Population Review. (2022). Rwanda Population 2022. Retrieved June 24, 2022, from <https://worldpopulationreview.com/countries/rwanda-population>
- Yida et al. (2022). Emission accounting and drivers in East African countries. Retrieved June 24, 2022, from <https://www.sciencedirect.com/science/article/pii/S0306261922002525>