The Coalition of Finance Ministers for Climate Action

Institutional architecture and mobilization of private capital for adaptation: the case of Rwanda

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Key messages

- Ministries of Finance can spearhead the creation of appropriate institutional frameworks for mobilizing and monitoring adaptation finance by setting a clear national vision and goals.
- They can conduct several diagnostics to identify gaps in the policy, regulatory, and financial architecture to mobilize adaptation action and finance.
- Policies and projects to address gaps should be developed in ways that engage with local people and communities for greater impact and sustainability and align with broader development and poverty reduction agendas.

Background

Public investment in resilient and sustainable infrastructure stimulates new jobs, trade, growth, and access to water, energy, education, and healthcare (Thacker et al, 2021; UNEP, 2023). Therefore, to achieve the UN SDGs, new infrastructure investments of well over US$1 trillion per year are needed until 2040 (High-Level Expert Group on Scaling Up Sustainable Finance in Low- and Middle-income Countries, 2024). The bulk of this finance (70%) is required for investments in emerging and developing economies (EMDEs), which not only are the focus of the human development agenda but also bear the brunt of climate change. Given the sizable constraints on fiscal expenditure many EMDEs face, there has been an increased focus on how countries can allocate scarce public funds to effectively mobilize more private investment into infrastructure.

Improving the risk-to-return ratio for private investors at an early stage—for example, through cofinancing—can help get adaptation-relevant projects off the ground and "crowd in" private finance for adaptation and resilience. Several authors have pointed to the significant fiscal benefits of such investments, in terms of both reduced costs (e.g., of reconstruction, recovery, disruption to critical services, and taxation) and long-term macroeconomic trajectories (e.g. high employment and growth rates) (Thacker et al., 2021; UNEP, 2023; Hallegatte et al., 2019; Hall et al., 2019; Bassi et al., 2021; Rozenberg and Fay, 2019). To reap these benefits cost-effectively, the use of public funds should be kept proportional to the societal benefit of a given investment project. Dedicated institutional frameworks with a broad mandate to coinvest adaptation and climate resilience are starting to take shape, as outlined by the example of Rwanda.

This technical note explores how MoFs can, in coordination with other stakeholders, help build such a proactive institutional architecture to enable climate adaptation through targeted fiscal spending. This includes—but is not limited to—state investment banks and development finance institutions (DFIs) tasked with coordinating blended finance deals. These insights are an abridged version of a detailed report by the University of Oxford, commissioned by the UN Environment Programme as part of an ongoing collaboration on Sustainable Fiscal Policy (Ranger et al., 2025).

Institutional architecture and private capital mobilization to maximize impact

Fiscal policy is most effective where it is aligned with and part of a wider regulatory and governance landscape. Here, Rwanda is presented as a case study of how proactively designed elements of the institutional architecture jointly deliver both adaptation and transition finance with greater efficiency than before. Starting from a well-defined mission statement, written into national targets and adaptation taxonomies, innovative sovereign financing measures are key aspects that can align public finance with national plans. Private sector finance is mobilized through a blended finance architecture and developing an enabling regulatory environment.

Rwanda's institutional landscape

In 2000, Rwanda's development plan Vision 2020 ignited an all-around, climate-sensitive revision of the national policy landscape. The Vision recognized climate change as a key cross-cutting area (alongside gender and information and communications technology), making the mainstreaming of

climate change mandatory across all sectors of economic development (Munyazikwiye and Michaelowa, 2022). Since Vision 2020, climate change has been integrated in the subsequent development plans, Vision 2050, as well as the national strategy for transformation. Today, climate change considerations are incorporated into all planning and budgets submitted by districts and sectors to the Ministry of Economic Planning and Finance (MINECOFIN) and the country has committed to become a "climate resilient, low-carbon economy by 2050" under its revised Green Growth and Climate Resilience Strategy (Government of Rwanda, 2022). Rwanda was also the first African country to submit a Nationally Determined Contribution (NDC) with updated climate targets to the UNFCCC in 2020.

The Rwanda Environment Management Authority (REMA) monitors the progress of climate change policies, while MINECOFIN and the Ministry of Environment issue an environment and climate change budget statement to monitor investments in climate change. The Revised NDC (2020) draws on Rwanda's 2011 Green Growth and Climate Resilience Strategy to set adaptation and resilience priorities, including water, agriculture, land and forestry, human settlements, health, mining, and cross-cutting (Government of Rwanda, 2022). The revised NDC specifies a US$5.7 billion financing need for mitigation measures, and a further US$5.3 billion in needs for adaptation, while setting the aim to reduce emissions by up to 38% by 2030 (WRI and UNCC, 2024). This implies investments representing 7% of GDP per year (IMF, 2023).

But are public commitments of this magnitude fiscally sound? Rwanda has experienced several climate disasters in past years and represents the 32nd most vulnerable country to climate change (and the 88th most ready) globally according to the ND-GAIN index (ND-GAIN, 2023). The World Bank's Rwanda Country Climate and Development Report estimates that assuming a business-as-usual climate scenario, the country's "GDP levels can drop by 5–7% below baseline in multiple years by 2050, with negative impact on private consumption, exports and government revenues" (Rwanda Green Fund 2022). Building resilience ahead of time has the potential to not only absorb some of these damages, but also curtail socioeconomic knock-on effects and cascading risks. This is an instance where preparing against a risk is financially preferrable to paying for recovery once damages occur (Ranger et al., 2023).

Resilience Sustainability Trust funding

In 2022, Rwanda became the first low-income country and the first African nation to receive Resilience and Sustainability Trust (RST) funding from the IMF, which channels concessional finance to lower- and middle-income countries. Rwanda's receipt of RST funding was preceded by the creation of institutional foundations for operationalizing climate finance measures, notably through the creation of the Green Economy Department within its MoF. The initial RST arrangement consisted of a US$319 million grant for a duration of 36 months (IMF, 2023), under the conditions of a 10-year grace period, 20 years maturity and 0.5% concessional funding. In December 2023, the IMF approved a new Stand-by Credit Facility (SCF) arrangement for 14 months. The RST loan is fully directed toward climate resilience and aims to "generate tangible changes in public financial management, including protecting climate-spending in the context of fiscal consolidation" (Wainer, 2023). Rwanda's RSF funding has also enabled the "Rwanda Climate Finance Partnership", which facilitates PPPs to scale-up climate finance.

Sustainability-Linked Bond and catalyzing private investment

In September 2023, the Development Bank of Rwanda launched a Sustainability-Linked Bond (SLB) on the Rwanda Stock Exchange—making it the first national development bank to issue an SLB globally. The bond was designed to bolster Rwanda's development policy objectives, such as increasing women-led business loans and financing for affordable housing, and targeting FRw30 billion (US$24.8 million), with a seven-year maturity. By its closing in October 2023, the bond was oversubscribed, with demand from over 100 different investors.

Rwanda's SLB had several unique features that made it successful. First, the bond benefited from a US$10 million credit enhancement funded through a World Bank loan, which helped collateralize the

bond and mobilize private sector capital. Additionally, the SLB was designed with a lower, step-down coupon (in contrast to other SLBs issued globally), to incentivize the borrower "to set meaningful targets" (Alatabani et al., 2023). The SLB's key performance indicators evolved around the country's sustainable economic development objectives (Government of Rwanda, 2023). More specifically, they focused on "increasing environmental, social, and governance (ESG) compliance in the local financial sector, boosting funding to women-led projects from the current 15% to 30% of the bank's portfolio, and financing 13,000 affordable housing projects by 2028"(Government of Rwanda, 2023). The SLB allowed for a successful shift away from government dependency, enabling the Development Bank of Rwanda to expand and diversify its funding channels. Additionally, the bond mitigated risks regarding foreign exchange fluctuations by raising funding in Rwandan francs.

Rwanda was also among the first countries in Africa to adopt the African Development Bank's recommendations (AfDB, 2021) to establish national, country-driven Climate Finance Facilities (CFFs or "Green Banks"). CFFs are dedicated, catalytic financial institutions designed to address domestic market gaps, take ownership of climate finance, and crowd-in private investments in low-carbon and resilient projects (CPI, 2024). The Rwanda Green Fund (RGF) was established by the Government in 2012 with the aid of UK-provided seed money worth £22.5 million. As of 2024, it had mobilized US$247 million for 47 projects, and its mandate is to build a market for green investment for "public and private projects with the potential to create transformational change, build an ecosystem to incubate, accelerate and provide growth capital to high-impact green ventures and play a catalytic role to attract climate finance and green investment" (Rwanda Green Fund, 2024). In 2021/2022, RGF launched a separate facility, called Intego, to support public-sector initiatives on climate change adaptation and mitigation and thus incentivize action on NDC priorities (Rwanda Green Fund, 2022).

Ireme Invest is another CFF aimed at spurring private sector engagement in climate adaptation, which the Rwandan Government launched in 2022 during COP27. It is currently fully capitalized, with US$240 million originating from development partners. Ireme Invest's key role is to provide concessional finance to small- and medium-sized enterprises (SMEs), which dominate the private sector landscape in the country. SMEs have long been neglected by the traditional banking sector, which remains focused on large enterprises and operates with high interest rates without mainstreamed "green investment" considerations. It has two key components: a project preparation facility, which offers equity and grants combined with project support (located within the RGF), and a credit facility, which offers concessional loans and credit guarantees (located at the Development Bank of Rwanda). Priority sectors covered by Ireme Invest include clean energy, smart mobility, sustainable cities, climate smart agriculture, and waste and the circular economy.

Green taxonomy

The final component of the architecture is the sustainable finance framework, within which the green taxonomy plays an important role. Green taxonomies are intended to create clarity and coherence around what constitutes, for example, green or adaptation-aligned investments (Spacey Martín et al., 2024). A Green Taxonomy White Paper was published in December 2023 and suggests the development of the Rwandan taxonomy will be gradual. In the first instance, a green taxonomy with environmental and climate objectives will be created with a focus on four key sectors: agriculture, energy, construction, and transportation.

At a later stage, the taxonomy is envisaged to expand to incorporate a sustainable taxonomy including social objectives. Furthermore, it will initially prioritize climate change mitigation objectives, "with the additions of climate change adaptation where possible" (Government of Rwanda, 2023). Nevertheless, the White Paper points to some indicative options for the development of adaptation objectives, including (1) generic criteria drawing on vulnerability assessment and risk reduction (as in South Africa and EU taxonomies), (2) a whitelist of activities most closely related to adaptation (e.g., nature-based solutions, ecosystem restoration, stormwater systems), and (3) agriculture activities related to adaptation, as in the Colombian and Mexican taxonomies (Government of Mexico, 2023; Government of Colombia, 2022). By expanding its taxonomy toward climate adaptation, Rwanda would join a

growing group of countries that actively define and target adaptation investments (see the map in the Appendix).

Conclusions

Significant lessons can be learnt from the experiences of pathbreaking countries, such as Rwanda, who stand as examples of how markets for green investment can be nurtured and grown intentionally. These data points can be used to build a diagnostic framework and a set of best practice principles for MoFs to approach setting an enabling environment for green fiscal policy for adaptation. This contribution has identified several priorities relevant for MoFs across contexts and may prove transformative in the transition toward more resilience and sustainable growth in EMDEs.

MoFs are uniquely well-positioned to lead the charge to tackle the triple challenge of climate change, nature degradation, and human development proactively and effectively. The building blocks of an effective institutional landscape, as shown by the example of Rwanda, include ambitious NDCs coupled with a context-appropriate green taxonomy, a national green bank, and an array of innovative finance mechanisms to mobilize private capital, possibly including green bonds or securities.

Public financial institutions should target investments intentionally toward those projects that promise the highest societal benefits from the lowest amount of concessional public capital, while crowding-in as much private investment as possible. Moreover, evidence-based and country-contextualized decision-support toolkits, such as the UNEP Sustainable Budgeting Approach (SBA) (UNEP and University of Oxford, 2024), can help MoFs identify, track, and resource strategic policy opportunities (spending and taxation) that simultaneously bolster national economic development outcomes and address critical environmental and social objectives (O'Callaghan et al., 2022).

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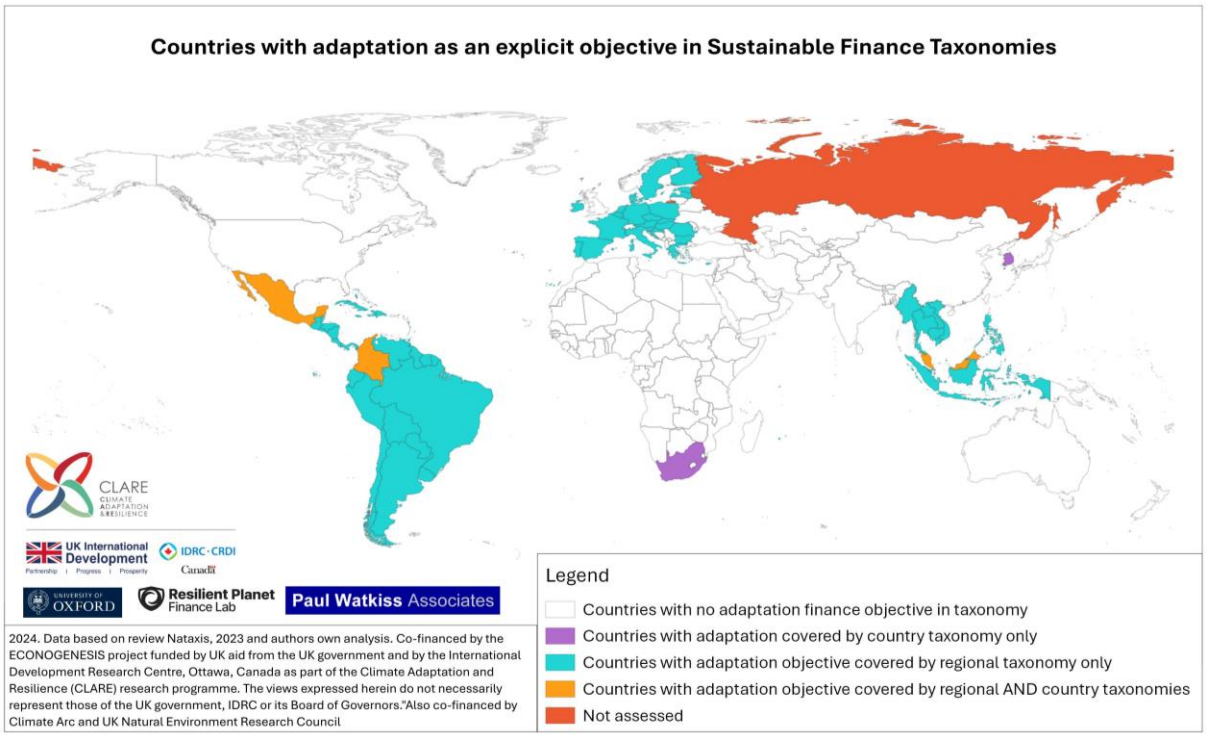
Appendix. Adaptation taxonomies around the world

Figure 1. Countries with adaptation as an explicit objective in sustainable finance taxonomies



Source: Spacey Martín et al. (2024)