Financing Sub-Saharan Africa's Climate Action

Implementing Green Public Finance Management (PFM) in Debt Distressed Countries

July 2023

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Summary of key points and actions

While sub-Saharan Africa has a lower carbon intensity compared to that of the G7 developed nations and the global average, and contributes only 3% of global greenhouse gas emissions, the region is the most vulnerable globally to the adverse effects of climate change. The impact of temperature variability is 60% larger than the average for emerging markets and developing economies in other regions.

According to the Climate Policy Initiative, African countries need $2.8tn during 2020-2030 to implement their climate action commitments. However, the global supply of bilateral and multilateral funding is not nearly enough to cover this. The Paris Summit on a New Global Financing Pact (convened in June 2023) certainly made progress in building a consensus on what the future of climate funding needs to look like. However, as noted by the Climate Action Network International, a lot more money is needed to make this new consensus a reality.

At the same time, African governments are unable to finance their climate responses beyond the 10% of cost already committed due to existing high levels of public debt. In 2022, total public debt across the region equalled $1.1tn, having doubled over the preceding decade. Worryingly, some 22 sub-Saharan African countries were in, or at high risk of, debt distress as of May 2023.

There are several key areas where governments can take action to increase revenue and reduce expenditure (towards narrowing fiscal deficits) and reorientate their approach to debt management. Debt restructuring, reprofiling and relief options are high on the agenda at present as many countries globally face crippling debt obligations in the wake of the fiscal challenges brought on by COVID-19. For example, Zambia secured a $6.3bn debt restructuring deal in June 2023.

Innovative restructuring options include debt-for-climate swaps: a mechanism that provides support to both budgetary relief as well as finance climate mitigation and adaptation action. (Seychelles, for example, is the first country to complete a debt-for-climate swap specifically aimed at protecting its oceans.) Major bilateral (e.g. the United Kingdom) and multilateral creditors are also moving towards including climate resilient debt clauses into their financing deals that would allow debt repayments to be suspended when climate shocks disrupt supply chains and business operations.

At PwC we are providing support to public sector clients on righting their fiscal trajectory through Public Finance Management (PFM) transformation. This is a necessary step towards 1) freeing up domestic capital for the climate agenda as well as 2) creating transparency and confidence around the management of fiscal funds that international funders will look for. African governments need to fix their PFM now so that they are ready - and have more mature finance structures - to effectively engage with international financiers when more climate funding becomes available.

Moving beyond the traditional financial management structures, we are also advocating for Green PFM: the integration of a climate-friendly perspective into PFM practices, systems, and frameworks with the objective of promoting fiscal policies that respond to climate concerns.

Citizens and lenders are demanding more from governments and PFM systems. To this end, we have been supporting governments across the world in transitioning to accrual accounting – seen as an essential tool for achieving fiscal transparency. We also assist governments and relevant public sector institutions in enhancing their readiness for green financing by assisting in the development of clear policies and strategies that align with national climate and environmental goals as well as attracting private capital through green financing.

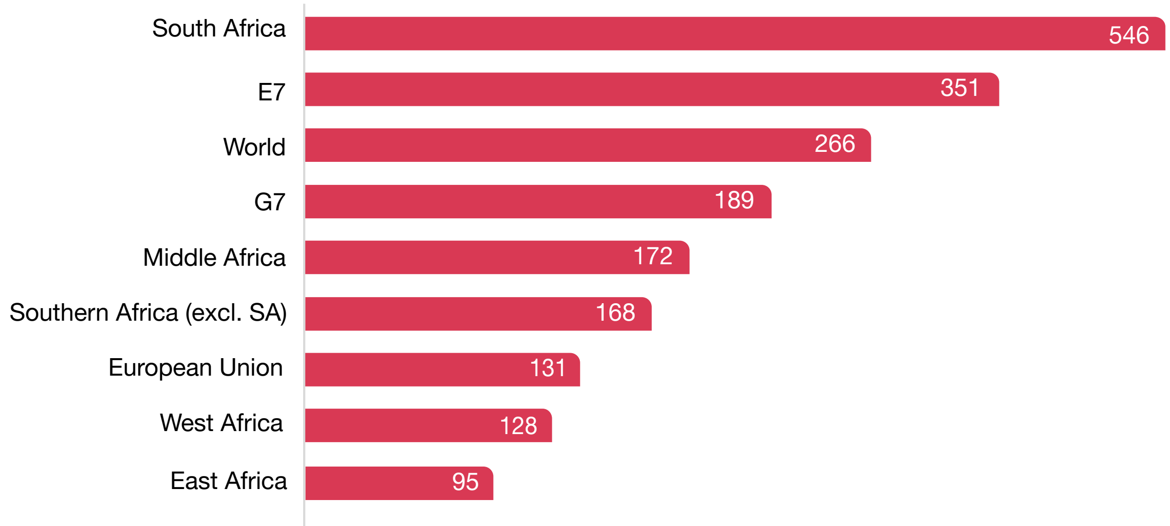
African governments need to prepare themselves to achieve the national goals they have adopted to address the region's economic, social, technological and climate challenges. The international development community plays a key role in supporting this. As a community of solvers, PwC Africa's International Development practice is uniquely placed to support international donors and African governments in achieving inclusive and sustainable development outcomes.

Climate change and the impact on economic activity

Green growth - where economies grow without adding to their carbon intensity - is evident across sub-Saharan Africa's major geographies. In the West, East, and Southern Africa (excluding South Africa) regions, carbon intensity (tonnes of CO_2 required to produce $1m worth of GDP) is currently the same as it was a decade ago, despite high levels of economic growth over this period. In Middle Africa, carbon intensity has actually declined.

In 2021, sub-Saharan African regions had a lower carbon intensity (ranging from 95 to 172 tCO_2/GDP $m) compared to that of the G7 developed nations (189 tCO_2/GDP $m) and the global average (266 tCO_2/GDP $m). The exception was South Africa (546 tCO_2/GDP $m) whose dependence on coal-fired electricity results in a carbon intensity more than double the global average. For the rest of sub-Saharan Africa, carbon intensity readings are also more favourable compared to other emerging market groupings like the E7 (351 tCO_2/GDP $m).

Figure 1: Regional carbon intensity (tCO_2/GDP $m), 2021



Source: PwC calculations based on bp data

G7 = Canada, France, Germany, Italy, Japan, UK, USA
E7 = Brazil, China, India, Indonesia, Mexico, Russia, Türkiye

With widespread green growth over the past decade, Africa still only contributes up to 3% of global greenhouse gas emissions. However, at the same time, it suffers disproportionately from the impacts of global climate change. The sub-Saharan African region is the most vulnerable globally to the adverse effects of climate change, with nine out of the top ten most vulnerable economies globally falling within the region.[1]

Some 52% of sub-Saharan African business leaders surveyed in PwC's 26th Global CEO Survey expect a 'moderate', 'large' or 'very large' impact from climate risk on their company's cost profile over the next 12 months. These costs include insurance liabilities, asset depreciation and financial outlays to comply with new regulations.[2]

Business leaders are understandably concerned. Rising day-and night-time temperatures, rising ocean levels, and precipitation anomalies are increasing the frequency and intensity of natural disasters.[3] High water stress is estimated to affect about 250 million people in Africa and 80% of African countries are unlikely to have sustainably managed water resources by 2030. At that same point, over 100 million people on the continent are expected to be exposed to sea-level-rise risk.[4]

The year 2022 was a costly period for sub-Saharan Africa in terms of climate change damage. For example, the floods in South Africa's KwaZulu-Natal and Eastern Cape provinces were the third-most expensive climate disasters globally. Other major climate-related disasters included heavy rainfall and floods in West Africa as well as Tropical Storm Ana and Tropical Cyclone Batsirai causing landfall in South and East Africa. In all of these cases, climate change increased the amount of rainfall associated with the storms. Elsewhere, the four-year drought in the Horn of Africa continued.[5]

The region's climate challenges are having a significant impact on economic activity (and socio-economic wellbeing) and need to be addressed. Research by the International Monetary Fund (IMF) found that: "...economic activity in a given month can shrink by 1.0% when the average temperature is 0.5°C above that month's 30-year average. This impact is 60% larger than the average for emerging markets and developing economies in other regions, reflecting sub-Saharan Africa's agricultural dependence and the temperature sensitivity of its crops."[6] In the region's most fragile states, a 1.0°C increase in temperature decreases income per capita growth by 1.8 percentage points.[7]

The financial cost of the climate challenge – now and in the future.

The ongoing impact of the climate crisis already has many sub-Saharan African countries spending between 2% and 9% of their fiscal budgets in unplanned allocations to respond to extreme weather events.[8] For example, in response to the 2022 floods in KwaZulu-Natal and the Eastern Cape, the South African government appropriated more than $430m in disaster relief and to support rebuilding and humanitarian efforts in these coastal provinces.[9]

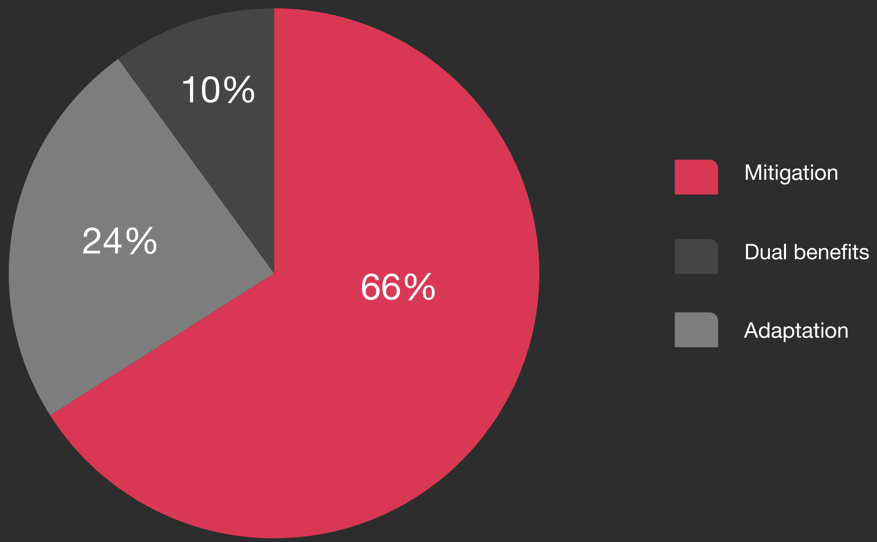
Looking ahead, African countries need $2.8tn during 2020-2030 to implement their climate action commitments and Nationally Determined Contributions (NDCs). This includes the estimation of loss and damage when provided by countries. As at mid-2022, African governments had committed just over $250bn of domestic public resources, i.e. about 10% of the total cost. The remaining $2.5tn is the region's climate finance needs. This figure is equal to the value of its total GDP during 2022.[10]

Put differently, with $2.5tn needed over the decade, Africa needs to spend money equivalent to 10% of its GDP towards 2030 to implement climate action commitments. To put this into context, the region currently spends an equivalent 5% of GDP on healthcare.[11] Research by the OECD indicates that the annual financial support required to fight climate change challenges in low- and middle-income countries would drain budgets for any other development priorities.[12]

Sub-Saharan Africa's climate finance needs are estimated at $1.8tn during 2020-2023.

Mitigation measures will account for two-thirds (66%) of the 2020-2030 funding needs, split between transport (58% of the total mitigation cost), energy (24%), industry (7%), and agriculture, forestry, and other land use (9%). Adaptation is expected to account for 24% of the funding need, with agriculture (25% of total adaptation cost), water (17%), infrastructure and buildings (12%), disaster prevention and preparedness (10%), and healthcare (8%) the key focus areas.[13]

Figure 2: Segmentation of climate finance needs 2020-2030



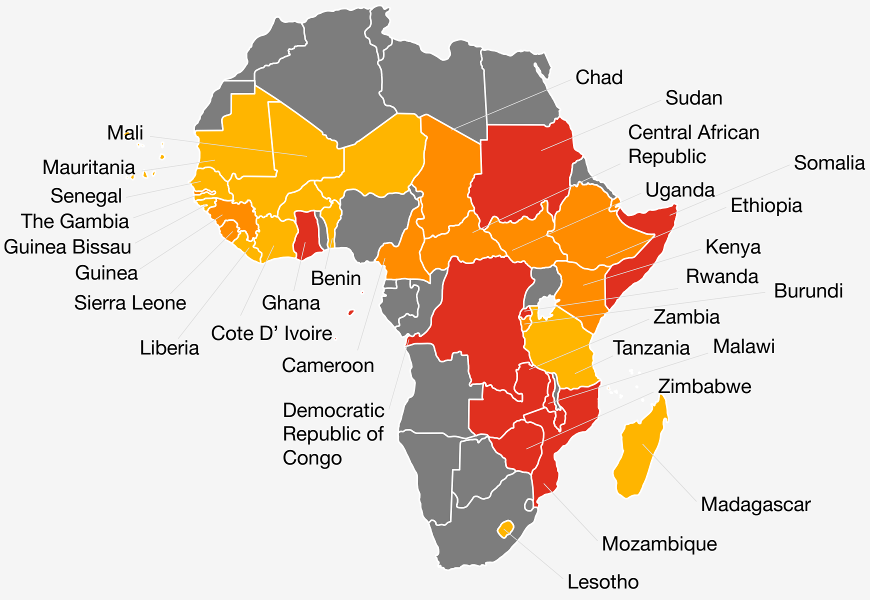
Source: Climate Policy Initiative

Fiscal dilemma: Many governments are already in debt distress.

The global supply of bilateral and multilateral funding is not nearly enough to cover this. The Paris Summit on a New Global Financing Pact (convened in June 2023) certainly made progress in building a consensus on what the future of climate funding needs to look like. However, as noted by the Climate Action Network International, a lot more money is needed to make this new consensus a reality. At the same time, sub-Saharan African governments are unable to finance their climate responses beyond the 10% of cost already committed. In 2022, total public debt across the region equalled $1.1tn, having doubled over the preceding decade.[14] Public debt in sub-Saharan Africa has again increased to an equivalent 60% of GDP,[15] erasing the fiscal benefits from wide-scale debt relief in the early 2000s. With better PFM structures in place, this situation could have played out very differently.

The majority of countries in the region now spend more on debt servicing than on healthcare.[16] Worryingly, 22 sub-Saharan African countries were in, or at high risk of, debt distress as of May 2023. Those already in debt distress were: Ghana, Malawi, Mozambique, the Republic of Congo, São Tomé and Príncipe, Somalia, Sudan, Zambia and Zimbabwe.

Figure 3: African countries in risk of debt distress (as of 30 May 2023)



In debt distress
High
Moderate

Source: International Monetary Fund (IMF)[17]

The Bridgetown Initiative (convened in July 2022 by Barbados Prime Minister Mia Mottley) warned that if this fiscal stress is left unaddressed, “there will be deepening hardship, debt defaults, widening inequality, political upheaval and a delayed shift to a low-carbon world.” The 2022 Bridgetown Agenda for the Reform of the Global Financial Architecture argues that global leaders are now – in the wake of the COVID19 pandemic – experienced in managing crises. “They know what to do and have the means necessary. We must act now. We cannot be good at rescuing banks but bad at saving countries.”[18]

How has the region's fiscal fortunes deteriorated so much?

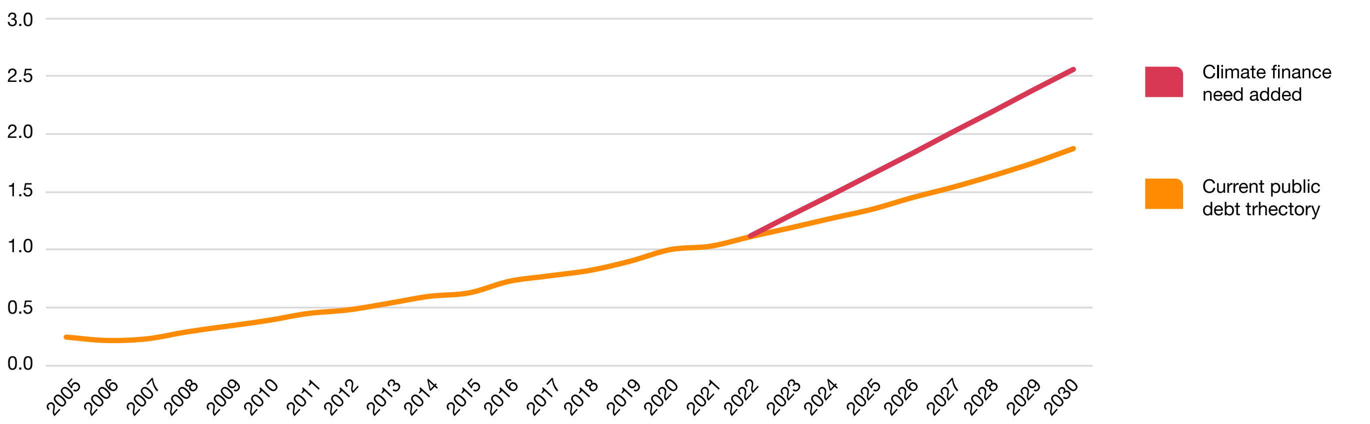
A sluggish rebound in tourism, remittances, and commodity prices after COVID-19 have constrained public finances for tourism – and oil-dependent countries.[19] The rise in food and energy prices from Russia's invasion of Ukraine, as well as spells of drought and flooding in some countries, have resulted in an average inflation rate of nearly 14% across African countries during 2022 - the highest rate in over a decade.[20] The situation is compounded by tighter monetary policy and a strong US dollar.[21]

Apart from the above, there have been other factors that also contributed to the steady fiscal deterioration seen in recent years. For example, many African countries rolled out countercyclical infrastructure spending after the previous global recession in 2009, increasing their debt levels significantly. Regarding financial markets, the 2014 commodity price shock led to exchange rate depreciation in many of these economies and a sharp rise in foreign currency-denominated debt.[22] Some countries have also opted for accessing non-concessional debt with higher interest rates and lower maturities instead of multilateral creditors with stringent conditions.

At the same time, while fiscal space for climate spending is severely limited, the reality of the situation in 2023 is that African countries will have to self-fund a large proportion of their climate funding needs over the next decade. To deal with these complex challenges will require coordinated contributions from official development assistance, foreign direct investment, as well as domestic (regional) revenues of the public and private sector.[23]

What will this do to public debt? Well, if the additional financing needed is added to the combined public sector debt portfolio across sub-Saharan Africa, this debt load will increase to nearly $2.6tn by 2030, from $1.1tn today. This would be financially ruinous to the region's governments and economies.

Figure 4: Africa's public sector debt and required climate finance up to 2030



Source: Fitch Solutions (historic and baseline forecast), PwC analysis (climate finance needed)

Potential solutions to the current public debt burden.

How can sovereigns reduce fiscal deficits and debt accumulation in order to create space to tackle climate change? The answer to this challenge is much easier during favourable economic and geopolitical conditions, as seen during the mid-2000s. At present, however, the world (and sub-Saharan Africa) faces unfavourable economic and political winds, making the challenge of prudent fiscal management all the more challenging.

There are several key areas where governments can take action to increase revenue and reduce expenditure (towards narrowing fiscal deficits, which requires borrowing to finance) and reorientate their approach to debt management (towards reducing current or future debt obligations). Figure 5 lists the main approaches.

Figure 5: Debt-focussed fiscal reform levers

Revenue	Expenditure	Borrowing to finance the deficit
• Higher economic growth – E.g. growth-stimulating policy reforms supporting business activity and associated tax revenue • Increased revenue collection – E.g. Improved tax compliance and collection enforcement	• Reduced expenditure – E.g. implementing zero-based budgeting • Improved fiscal management to reduce leakage – E.g. increased transparency, anti-corruption initiatives, digitization, cash management practices	• Revised borrowing strategy – E.g. different funding sources, longer maturities, alternative structures, etc. • Debt restructuring – Change maturities – Reduce principal amount – Reduce the interest rate

Source: PwC

Ideally, a country can combine revenue gains and expenditure prudence to reduce fiscal pressures. However, well-designed fiscal consolidation may not be enough to make a meaningful impact on the debt load, in which case the IMF noted (in April 2023)[24] that debt restructuring may be necessary. In May 2023, Ghana secured a $3bn assistance package with the IMF brokered on the back of guarantees from China and the Paris Club that they would provide debt relief (by taking losses on their loans) to Ghana.[25]

Debt restructuring, reprofiling and relief options are high on the agenda at present as many countries globally face crippling debt obligations in the wake of the fiscal challenges brought on by COVID-19. Zambia, for example, reached a deal with creditors in June 2023 that will see it restructure $6.3bn in debt owed to other governments.[26]

A green approach to debt restructuring: Debt-for-climate swaps

In the sub-Saharan Africa context, the Seychelles serves as a good example of how a combination of levers could be effective in reducing debt. The country's public debt reached 180% of GDP in 2008 but dropped to 84% of GDP by 2010 following debt restructurings with both official Paris Club and private external creditors. Fiscal consolidation, however, had the biggest impact on the debt ratio during 2009-2015, cutting nearly 50 percentage points of the debt-to-GDP number.[27] (Seychelles is also featured in this report as a case study focussing on its debt conversion for marine conservation and climate adaptation.)

The process for debt restructuring is well-known. A Debt Sustainability Analysis (DSA) will determine if debt restructuring is necessary and viable. The sovereign debtor then hires a financial and legal advisor to guide it through the process. The sovereign debtor then prepares proposals and indicative restructuring scenarios for the debt restructuring sought and the methods to be applied. A multilateral organisation like the IMF usually vets this documentation. The sovereign then engages and negotiates with creditors. Sovereign debtors can use carrots and sticks to cajole their lenders to participate and prevent holdout creditors who break ranks with the rest. Carrots include sweeteners such as value recovery instruments and contractual improvements. Sticks include exploiting local law advantage and shielding vulnerable assets from attachment.[28]

There are several approaches to debt restructuring, including:

- Debt equity: A debt swap in which external debt is converted into a form of equity. However, the debtor country's resources will be held by foreigners.
- Debt-rescue/buy-backs: The debt is repurchased in the secondary market.
- Debt-debt: A transaction/swap in which creditors use the debt to interchange as foreign loans.

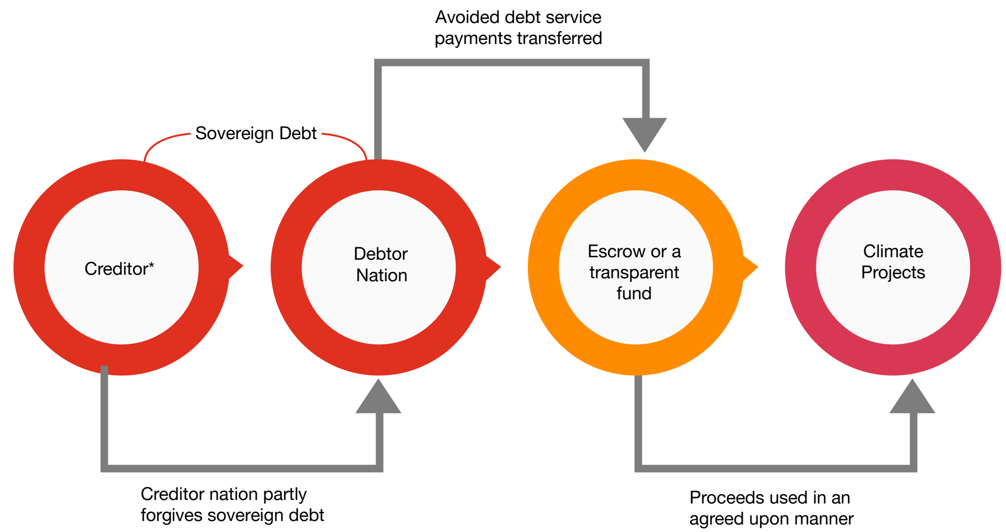
Debt-for-nature swaps are a novel debt-equity swap that most often involve the purchase of debt at a discounted value in the secondary debt market after which the investor forgoes the debt in return for environmental-related action by the debtor. There are four variations of debt-for-nature swaps:

- Official debt relief to support the efforts of the debtor's environmental management goals.
- The purchase of debt by environmental organisations, which is then sold at a discounted value to a multinational corporation to support environmental investments.
- The donation of debt to a local environmental organisation for investment in environmental projects.
- The conversion of debt by the central bank into local currency or local debt such as bonds, which are to be held by a local environmental organisation for investment in projects.

Debt-for-nature swaps have been a major source of international nature conservation funding since the 1980s. The mechanism aims to simultaneously cancel or forgive a portion of a developing country's debt in return for the funding of conservation activities in the country. The primary objective of a debt-for-nature swap is to reduce a developing country's debt stock or service in exchange for a commitment to protect nature.[29]

Debt-for-climate swaps is a variation of the debt for nature swaps but differs in that it expands from conservation to include climate adaptation and mitigation while also promoting multilateral debt relief.[30] These swaps have been promoted as an innovative debt-relief mechanism to provide support to both budgetary relief and finance climate mitigation and adaptation action. In a debt-for-climate swap, the debtor nation makes payments in local currency to finance climate mitigation and adaptation projects domestically instead of continuing to make external debt payments in a foreign currency. The mechanism has the ability to reduce the level of indebtedness whilst simultaneously freeing up fiscal resources for green investments.[31]

Figure 6: Figure x. Illustrative example of a generic debt for climate swap transaction



**Creditor is likely to be another sovereign, but private sector creditors are also encouraged to participate in a DFC swap*

Source: Climate Policy Initiative[32]

Debt-for-climate swaps can be utilised to generate the following debt-beneficial outcomes:

- Reduced external sovereign debt: This will assist highly indebted nations reduce debt service and therefore free up cash flows for additional investments
- Boosting economic recovery: The investments have the potential to stimulate private investment and assist in economic recovery whilst incorporating climate resilience and biodiversity protection.
- Enhanced climate spending: The avoided debt service payments are redirected towards climate friendly investments or to incentivise participation in climate friendly projects.

The utilisation of debt for climate swaps to finance adaptation and mitigation efforts in developing countries has significant advantages such as reducing strain on national budgets, facilitating domestic financing of adaptation efforts and the provision of finance for developing countries' climate commitments. The United Nations Framework Convention on Climate Change (1992), The Kyoto Protocol (1992) and The Paris Agreement (2015) have all recognised the need for developed countries with the financial capacity to assist those that are vulnerable to limited liquidity and climate change. Climate finance plays a pivotal role in ensuring developing nations build resilience and capacity to deal with climate change impacts.[33]

Box 1: Options for affordable climate finance

Sub-Saharan Africa contains a range of examples of innovative instruments and arrangements for the raising of climate finance.

Climate-related debt relief

Debt can be reduced or written off with an obligation to invest in specific climate action. Cape Verde entered into an agreement during 2023 with the Portuguese government where repayments of US$150m in debt would accumulate in an environmental and climate fund. This fund would be used for the Cape Verde government's energy transition and climate change initiatives.[34]

Green, blue and other bonds

Labelled bonds and sustainability-linked bonds are often used to raise debt finance. The Seychelles was one of the recipients of The Nature Conservancy's Blue Bonds for Ocean Conservation initiative. The funds raised from the bond issue were used to swap the country's commercial debt with reduced loans on more favourable terms in return for environmental and policy commitments relating to marine conservation.[35]

Climate funds

Climate funds have become increasingly popular as vehicles for collecting funding from multiple donor sources, as well as committing government spend to sustainability goals. Kenya's climate change governance mechanism, for example, targets local climate action. Local communities control and select the climate projects that are financed by the County Climate Change Fund, which also includes specific legislative measures and influences national climate policy.[36]

Multilateral / regional initiatives

The Central African Forest Initiative (CAFI) is a partnership between six Central African countries, donors and international organisations. Gabon became the first country in 2021 to be paid under this initiative to protect its rainforest and reduce carbon emissions.[37]

Role of the private sector

Climate finance is often sourced from developed countries, multilateral funds and development finance institutions. More recently, it has become clear that the contribution of the private sector is critical to achieving sustainability and climate goals. In this context, blended finance arrangements are becoming more common. This involves the strategic use of development finance to mobilise private sector investment in climate projects. Private equity and impact investment also contribute to the financing of sustainability and energy-transition projects.

Box 2: A new global financing pact – including climate-resilient debt deals.

The Summit for a New Global Financing Pact was held in June 2023 to rethink the global financial architecture and to mobilise financial support for developing and low-income countries (DLICs) facing the challenges posed by excessive public debt and climate finance needs.

Global leaders attending the summit acknowledged that there can be no sustainable development when countries are in debt distress. As such, they discussed ways to ensure that debt is used as a viable tool to finance sustainable development needs, but that traditional debt facilities provide room to manoeuvre when natural catastrophes occur.[38]

To this end, the UK, US, France, Spain, Barbados, the World Bank and Inter-American Development Bank issued a call to bilateral, multilateral and private sector lenders to include climate-resilient debt clauses in their financing deals by the end of 2025.

Some early movers have pledged to do so by COP28 so that borrowing nations have the necessary fiscal room to respond fully to environmental shocks. For example, UK's international development minister Andrew Mitchell announced in April 2023 already that UK Export Finance (UKEF) will offer to build climate resilient debt clauses into its financing deals. These clauses will allow debt repayments to be suspended when climate shocks disrupt supply chains and business operations.[39]

From a multilateral perspective, the IMF and the World Bank were encouraged to include climate vulnerability in their debt sustainability analyses – in particular to reflect the positive impact of climate-focused investments.

Looking ahead, leaders from Colombia, Kenya and France proposed the establishment by COP28 of a Global Expert Review on Debt, Nature and Climate, to assess the impact of debt on the capacity of low- and medium-income countries to preserve nature, adapt to climate change, and decarbonise their economies.[40]

Case study: Seychelles debt conversion for marine conservation and climate adaptation.

In 2017, the African island nation of Seychelles became the first country to complete a debt-for-climate swap specifically aimed at protecting the world's oceans.

Figure 7: Table x: Seychelles debt conversion for marine conservation and climate adaptation.

Country	Seychelles
Sector	Marine conservation, Adaptation
Project/Investment Amount	$21.6m
Status	Completed
Development Partners	Official creditors include Belgium, France, Italy, and the UK
Investor(s) and Funders	Grant providers (foundations and individuals), Loan capital (The Nature Conservancy)
Project Objective	Disburse $280,000 per year over 20 years by converting sovereign debt payments into funding towards marine conservation and climate adaptation.
Project Outcomes	The overall objective of the debt swap was to increase protection for Seychelles' waters from less than 1% to an estimated 30% of the country's Exclusive Economic Zone. This entailed the following: • Supporting the creation of the Indian Ocean's second largest marine reserve • Provision of permanent funding for ongoing climate adaptation and marine conservation by restoring coral reefs and mangroves • Development of a coastal zone management policy and programmes to manage climate change
Project Success	• Seychelles presented idealistic pre-conditions for a debt conversion, i.e. the government invested in the promotion of marine conservation and climate in addition to official creditors willing to sell its debt. • The manner in which the debt conversion was structured; which required an estimated four years and extensive negotiations with multiple stakeholders
Project Challenges	• The debt buyback model requires long term commitment from all parties and therefore the model is highly context specific • Long term negotiations • Government funding commitments and policy alignment
Outcome(s)	• Seychelles converted $21.6m of its national debt • The country raised an additional $15m from international investors looking to finance sustainable marine projects and boost their own green credibility. • Seychelles' success in gaining support from both public and private investors proved that countries can attract additional capital through environmental protection plans.

Source: Sharm El Sheikh Guidebook for Just Financing[41]

Case study: How South Africa can finance its Just Energy Transition Investment Plan (JET IP).

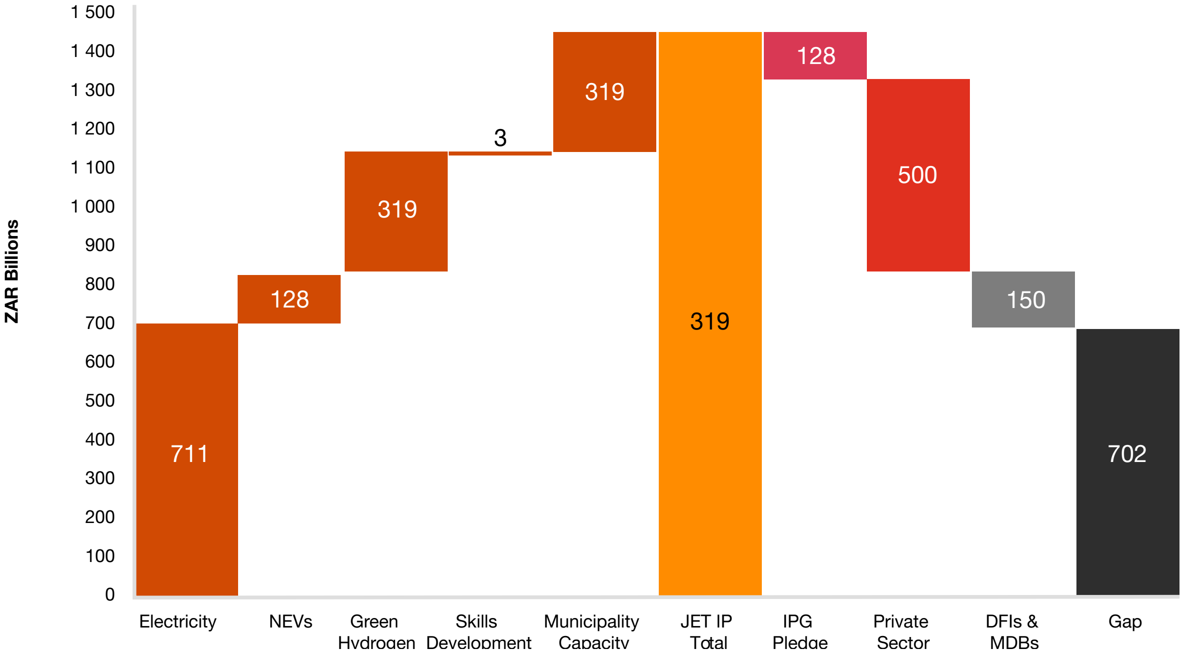
South Africa has the highest fuel factor (CO_2 emitted per unit of energy consumer) among the G20 nations due to its reliance on coal for electricity production. A green energy transition would create an opportunity for the country to move towards a long-term, low-carbon economy that supports economic growth and development. Introducing green technologies would also act as a catalyst for industrial development, economic diversification and innovation.[42]

To this end, in November 2021, the governments of France, Germany, the UK, the US, and the European Union announced a long-term Just Energy Transition Partnership (JETP) to support South Africa's decarbonisation goals as set out in its NDCs. The International Partners Group (IPG) pledged $8.5bn for the first phase of financing through various mechanisms, including grants, concessional loans, investments and risk sharing instruments, as well as mobilising the private sector.

A year later, South Africa published a Just Energy Transition Investment Plan (JET IP) which set out the investments required in 2023-2025 to achieve a just transition. The country will need nearly $100bn over the coming five years to enable a just transition. To date, the $8.5bn in concessional climate financing offered by IPG is the only substantial funding pledge received for JET IP, accounting for just 8.5% of the money needed during 2023-2027.

The IPG offer is expected to crowd in development funding from Development Finance Institutions (DFIs) and Multilateral Development Banks (MDBs) to the tune of $10bn. These types of organisations provide funding via, for example, project loans, debt financing, equity financing, guarantees, etc. Furthermore, according to the JET IP, many of South Africa's large financial institutions have made public commitments of up to $33bn over the next three to five years to fund climate finance assets, specifically towards the electricity sector.[43]

Figure 8: JET IP financing requirement and planned sources



Source: Just Energy Transition Investment Plan (JET IP)[44]

When funding is secured, the JET IP proposes prioritising projects to achieve the highest probability of moving South Africa towards its NDC commitment, while bearing in mind the need to deliver these efficiently and effectively for the benefit of vulnerable communities, workers, and municipalities immediately at risk.[45]

The JET IP document makes scant reference to the outstanding amount of climate finance – equal to 47% of the planned cost. By February 2023, there were no further details on the outlook for JEP IP funding, with the country's fiscal budget making no reference to this financing. This suggested that the state is not planning to add to its debt load – public debt is expected to reach 73.6% of GDP in the 2025/2026 fiscal year – with direct funding of the transition plan.[46]

As with most sub-Saharan countries, the sources of financing for South Africa's just transition remains largely uncertain. The government is well aware of the funding constraints, with the JET IP signalling:

"The catalytic use of concessional and grant funding, as well as guarantees from government, DFIs (in addition to the IPG pledges), climate finance institutions, and philanthropies, will need to be deployed in a way that mobilises additional local and international private sector capital."

This wording underscores the importance of combining different financing approaches for JET IP.

Innovative funding approaches can be applied to meet the competing needs of stakeholders

Just Energy Transition funds

Climate or transition funds are set up to collect and distribute financing from a variety of sources. Rigorous governance and transparency rules are usually applied to prevent corruption or other misuse of funds.

Examples:

- International development funds
- Regional funds
- Sovereign finance funds
- Blended finance funds

Debt instruments

Climate bonds are issued on condition that the proceeds are used for specified sustainability projects or goals.
With loans, interest or capital payments are reduced in return for investment in specific climate or sustainability actions

Examples:

- Green, social and sustainability bonds
- Transition bonds
- Sustainability-linked bonds
- Sustainability-linked loans

Debt-for-climate swaps

Debt-for-climate swaps occur where sovereign debt is written off or reduced in return for investment in climate-related projects or activities.

Examples:

- Cape Verde debt to Portuguese government: repayments used to fund energy transition and climate action initiatives.
- The Nature Conservancy assisted the Seychelles to transfer commercial debt with more favourable terms in return for conservation commitments.

Collaborative models

Collaborative models entail the formation of partnerships or associations to combine resources from a variety of stakeholders. They often include beneficiaries as decision-makers in the governance process.

Examples:

- Public-private partnerships
- Community-led associations
- Industry-led collaborative models

An essential component to attracting this mix of funding is the right regulatory environment and a sound Public Finance Management (PFM) strategy.

Tomorrow's Public Finance Management (PFM), today.

Righting their fiscal trajectory through Public Finance Management (PFM) transformation is a necessary step for African governments towards 1) freeing up domestic capital for the climate agenda as well as 2) creating transparency and confidence around the management of fiscal funds that international funders will look for. African governments need to fix their PFM now so that they are ready - and have more mature finance structures – to effectively engage with international financiers when more climate funding becomes available.

Strong PFM processes and systems are essential for effective and efficient delivery of public services, transparent public finances, and trust between government and citizens (and financiers).[47] Every sound PFM system is founded on four key elements that contribute to its strength and efficiency, which are:

- **Financial management –** How governments manage finances is foundational to the future viability of their countries. Robust fiscal policies and administration, as well as an outcome-based budgeting framework, are crucial to ensure efficient and sustainable mobilisation and allocation of resources.
- **Governance framework and risk management** – Clear rules and regulations are needed for public finances to be transparently managed. This framework should ensure the public financial management system has the required resources and is operating in a timely, inclusive, open and accountable manner, in order to mitigate and minimise the impact of potential risk.
- **Reporting** – Continuous reporting and scrutiny of public budgets creates transparency for both citizens and governments. This is a key channel for governments to trust, ensuring that funds are spent as allocated and presented to the public.
- **Performance management –** Robust performance management can be a game-changer for public financial management systems struggling to attract and retain talent. When governments improve the efficiency and effectiveness of the institutions' key operations, they will see increased performance.[48]

According to the Public Expenditure and Financial Accountability (PEFA) programme, while many governments have implemented improvements in their PFM systems over the years, significant weaknesses still remain.[49] Many governments have found weakness in their PFM systems during the current dispensation of crisis around the globe. This is mainly attributed to the challenge of taking financial decisions that are geared towards securing funds and spending them, among numerous needs and demands.

Going forward, the Association of Chartered Certified Accountants (ACCA) recommends that governments should invest greater focus on improving the following areas:

- Improving transparency and accountability of government spending
- Improving linkages between governments' strategic plans and allocation of resources
- Intensifying the focus on risk management
- Focusing PFM improvements on service delivery, i.e, asking service delivery providers what kind of services they need to deliver, to whom, and using what PFM system and tools
- Implementing accrual basis of accounting along with a broader balance sheet approach in public finance to provide more comprehensive financial information for better decision making
- Improving transparency in procurement.[50]

Implementing Green PFM principles in sub – Saharan Africa.

Green PFM is the integration of a climate-friendly perspective into PFM practices, systems, and frameworks — especially the budget process — with the objective of promoting fiscal policies that respond to climate concerns. IMF research[51,52] has already delineated a list of guiding principles for a successful Green PFM reform strategy, including, but limited to:

- A strategy is necessary to successfully implement Green PFM reforms
- 'Greening' PFM systems makes sense only if the basic elements of a functional PFM system are in place
- Strong political backing and ownership is even more necessary than for a standard PFM reform agenda.
- Some degree of 'green' expertise needs to be developed for key actors in the PFM processes.
- The MoF has to be solidly in the driver's seat of green PFM reforms, while coordinating with relevant line ministries
- This central role of the MoF also means that it can assess what changes in the budget cycle are realistically possible without hampering the overall effectiveness of PFM processes
- Green PFM reforms should be dovetailed into the overall PFM reform agenda to ensure they are mutually reinforcing, whatever the level of capacity.
- Managing green PFM reforms would draw upon the same set of skills as the design and implementation of other PFM reforms
- It is logical for governments to start with green PFM reforms along the upstream part of the budget cycle, before moving downstream
- It may be beneficial to roll out green PFM reforms gradually, starting with a few pilot ministries or agencies or with a limited set of new practices
- Communications on green PFM reforms and gathering feedback early on is important to gradually build awareness and buy-in among internal and external stakeholders
- The MoF can make use of a broad spectrum of communication tools to provide updates on the reform.

Recommended next steps - PwC's approach to PFM transformation.

Citizens are demanding more from governments and PFM systems

From a fiscal and debt perspective, sub-Saharan African governments cannot afford to finance their climate response. At the same time, their societies cannot afford to not respond to climate challenges. In the end, sub-Saharan African governments will need to shoulder a large financial burden in the fight against climate change. This requires a serious reorientation of how public finance decisions are made and implemented, especially with regards to Public Finance Management (PFM) and the role of climate finance within this.

PFM, in simple terms, is how governments manage public resources. This includes all phases of budgeting, processes and procedures related to expenditure management, resource mobilisation, and debt management. It is the framework for governments to consider the medium- to long-term implications of today's policy decisions and assess potential risks on climate change and related matters. Citizens are demanding more from governments, and PFM systems should reflect their needs. As governments are confronted with an ever-changing world, policies and reforms need to ensure transparent and efficient use of public budgets that are adjusted to the current climate and focused on achieving their development objectives.

Transparent financial reporting through the adoption and implementation of IPSAS

PwC has been at the forefront in supporting governments across the world in transitioning to accrual accounting: recording the economic substance of transactions when they occur rather than when cash settlement happens. The International Public Sector Accounting Standards (IPSAS) is, increasingly, being adopted by governments as their primary financial reporting framework. This accrual reporting methodology is considered by many experts as an essential tool for achieving fiscal transparency, accountability and sustainability. It is expected by the International Federation of Accountants (IFAC) that 50% of governments worldwide will by 2025 apply the accrual basis on accounting as a financial reporting framework.

Financial reports prepared by governments in compliance with IPSAS enhance transparent and comprehensive reporting by public sector entities, which assists governments in enhancing trust in the PFM systems by relevant stakeholders. Transparent and comprehensive reporting is an essential step in debt management, finance restructuring and green outcomes in the public sector. PwC views public sector financial reporting as much more than an accounting exercise as it cuts across the entire spectrum of government operations.

Developing talent and building capacity at PwC's Business School

PwC prioritises practical learning and capacity building in the public sector as essential elements of our service delivery in the region. Through our state-of-the-art business schools, on the African continent and across the globe, we foster a hands-on approach and in-country learning culture among public sector representatives. Our experience demonstrates that this approach is vital for successful capacity building on fiscal planning, debt management and climate financing. Our business schools have been used to provide practical learning to public sector accountants and professionals across sub-Saharan Africa. Through these interventions, we have tailor made programmes for newly elected public sector and government officials in some of our territories as part of their onboarding in this new environment.

Human driven and tech enabled

Finance staff need more training. The potential for technology to add value to public sector organisations is recognised by employees, but there is strong demand for more training. In this regard, PwC's New Equation focuses on how human ingenuity combines with technology innovation and experience. This approach has contributed immensely in the delivery of critical public sector services which, in turn, enhance tech-enabled PFM transformation. This includes smart audits of essential public sector institutions (which enhance trust) as well as tech-powered capacity building programmes designed to improve the technical capabilities of public sector technocrats.

Readying for green PFM

Guidance published by the IPSAS Board in May 2023 on reporting sustainability programme information is timely to deepen the need for trust and transparency in reporting climate actions to citizens. We continue to assist governments and relevant public sector institutions in enhancing their readiness for green financing by assisting in the development of clear policies and strategies that align with national climate and environment goals as well as attracting private capital through green financing. We also specialise in assisting public sector entities optimise their investment potential by developing impactful policies, preparing bankable green projects, accessing diverse sources of green finance, and enhancing transparency and reporting on climate and environmental aspects.

Ministry of the Future

African governments need to prepare themselves to achieve - quickly and effectively – the national goals they have adopted to address the region's economic, social, technological and climate challenges. However, before they can greenify PFM and help transform their countries, governments need to become fit-for-transformation in seven ways. They must become:

- **Digitally powered –** Relying on advanced and emerging technologies to enable solutions and conduct operations
- **Anticipatory and proactive –** Utilising horizon scanning, foresight, scenario analysis, and best practices to address emerging and potential challenges and opportunities
- **Customer-centric and holistic –** Adopting a customer-focused, whole-of-life approach to service delivery
- **Collaborative and participatory –** Taking advantage of the collective resources, capacities, and expertise of the public sector, private sector, and citizens in order to design, deliver, and assess solutions
- **Agile and dynamic –** Employing lean and flexible organisational structures staffed with fluid, cross-functional, and accountable teams
- **Innovative and resilient –** Ideating, prototyping, piloting, and delivering creative and future-proof solutions that make government resilient
- **Evidence-based and result-oriented –** Using targets and indicators to set, monitor, and evaluate clearly defined objectives, impacts, and outcomes

To ensure that each of their component agencies supports a fit-for-transformation government, leaders should adopt an ambitious new vision that we call the Ministry of the Future. The Ministry of the Future operates as an invisible platform that delivers proactive and seamless whole-of-life service. It achieves this using a particular set of capabilities, including delivery accelerators, collective and experimental governance, alternative funding and pricing models, smart anticipatory regulations, integrated and collaborative procurement, and accountability capabilities that are, in turn, enabled by human capital, data, systems, tools, and processes.

About PwC International Development

Making a difference and delivering on our purpose in Africa, for Africa, by Africa.

While significant strides have been made in recent years, Africa continues to face complex development challenges. The lasting impact of the COVID-19 health crisis and the compounding impacts of climate change and rising public debt levels impose an urgency to address the economic, environmental and social risks faced by African populations today. The international development community plays a key role in supporting Africa's growth and strengthening its resilience for the future.

At PwC, we work closely with governments, donors, and recipients of international development assistance to transform the lives of the poorest and most vulnerable people on the continent. With a presence in 34 countries across the continent, we have built trusted networks and relationships across government and the private sector that cannot easily be replicated.

Our global International Development practice with teams based across global territories connects the best expertise across the network and with the local context, considering the unique characteristics and challenges of each region in Africa.

As a community of solvers, PwC Africa's International Development practice is uniquely placed to support international donors and African governments in achieving inclusive and sustainable development outcomes. Supporting growth and resilience is at the heart of PwC's societal purpose strategy and we are committed to helping donors and governments navigate these complexities:

- **Economic transformation:** Diversifying away from carbon-intensive industries, attracting investment, facilitating trade and creating inclusive and equitable opportunities.
- **Health:** Transforming the way healthcare is delivered to improve the quality, accessibility and affordability of healthcare services.
- **Climate change and resilience:** Supporting stakeholders in preparing for the impacts of climate change, ensuring their resilience to unforeseen events and mitigating the risk of biodiversity loss.
- **Infrastructure and cities:** Supporting our clients through every stage of their capital and infrastructure projects as enablers for economic growth, sustainability and peace.
- **Education:** Driving innovative and meaningful change for learners, teachers and their communities by enhancing access to basic services and quality education.
- **Social development –** We place the 'leave no one behind' concept at the heart of our work, adopting approaches which seek to address social, economic and political exclusion, include the most marginalised in society, and respect human rights.
- **Governance and finance –** We stimulate informed debate on public services and make effective, practical contributions to creating accountable and effective institutions. We do this by building capacity to deliver more responsive and inclusive public services which deliver value for money, increase transparency and accountability, improve public financial management, and tackle corruption.

PwC contacts

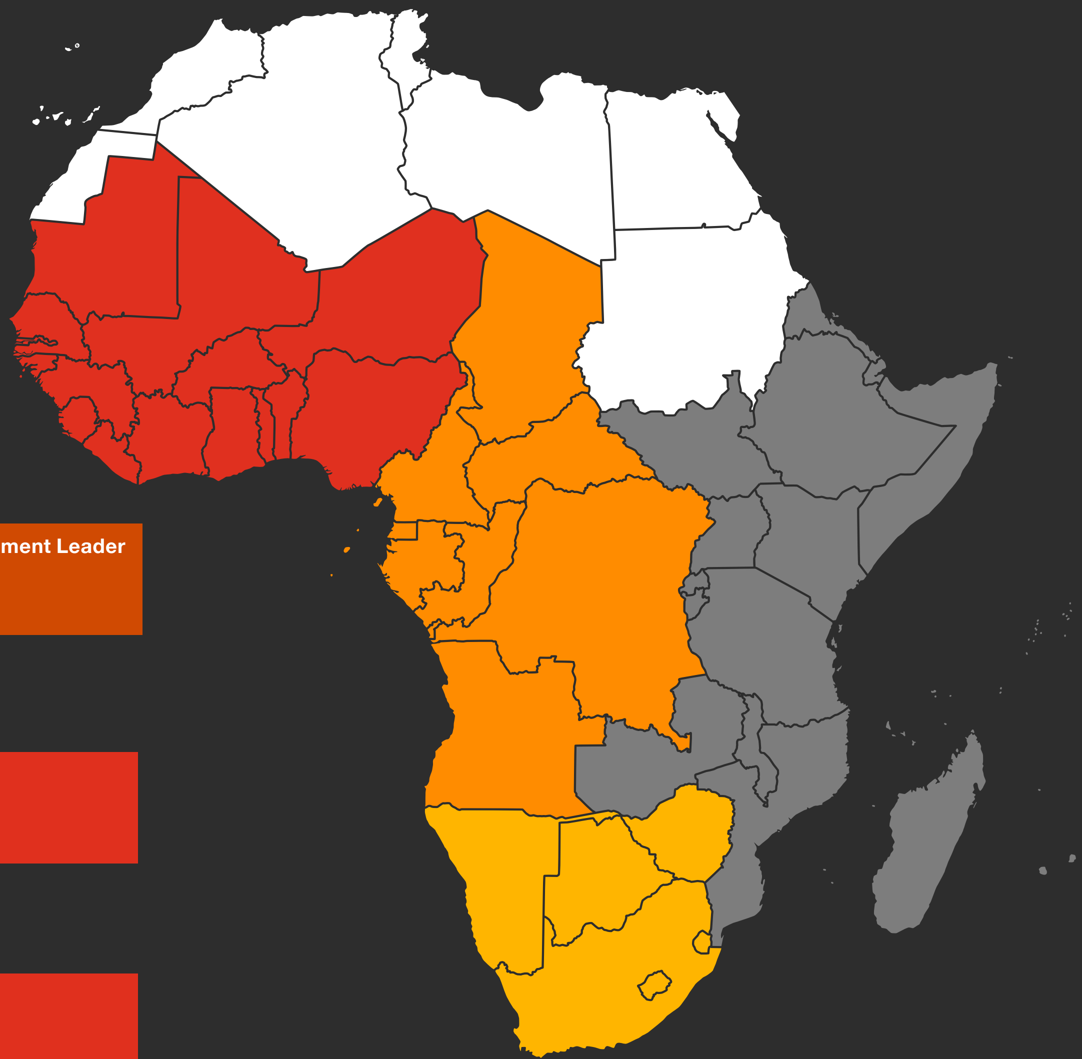
Legend

West Africa

Central Africa

East Africa

Southern Africa



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