



African Carbon Registries

A SNAPSHOT OF NATIONAL REGISTRIES



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As Africa strives to contribute to global climate goals and attract financing for green investments, robust national carbon registries are crucial enablers. Carbon registries are one of the functional infrastructures that facilitate the trading of carbon credits and provide transparency around emissions data, allowing countries to demonstrate progress towards their climate commitments. But what is the state of carbon registries in Africa? How many countries in Africa have carbon registries? How functional are they? What are the challenges and opportunities for African governments to better utilize carbon registries to facilitate climate finance?

This report presents a snapshot of national carbon registries across the African continent based on publicly available information as of December 2023. The findings reveal a concerning gap.

As of December 2023, the snapshot across the 53 African countries showed that:

- Three (3) have carbon registries
- Two (2) of the three (3) countries with national carbon registries have live projects listed
- Twelve (12) countries do not have national carbon registries but have announced plans to establish national carbon registries
- Thirty-eight (38) African countries do not have national carbon registries and have not declared intentions of establishing national carbon registries

It is however important to acknowledge that several countries on the continent are developing policies and regulatory frameworks targeted at creating an enabling carbon market. In addition, some countries (Zambia, Gabon, Egypt, Ghana and Zimbabwe etc) without functioning national registries have recorded carbon transactions. Such carbon deals were undertaken either through internationally recognized private

registries or the Climate Change Fund Management Unit (SCCFM) of the World Bank.

As a nascent market, Africa faces critical challenges in developing a credible carbon market ecosystem, ranging from regulatory uncertainties to concerns around revenue sharing and market credibility raised by project developers. Greenwashing, double counting of emissions reductions, and lack of community involvement also pose risks.

Key recommendations to harness Africa's potential in the burgeoning global carbon market include:

- Facilitating inclusive multi-stakeholder consultations to develop robust legal and regulatory frameworks before establishing national registries.
- Prioritizing capacity building in carbon accounting and market readiness.
- Mitigating social risks by incorporating local community concerns into regulatory frameworks and project design.



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Africa's potential to contribute to global climate goals of carbon neutrality and net zero is not in doubt. In addition to the continent possessing 40% of the world's renewable energy resources¹, the Congo Forest and peatland make Africa a significant carbon sink. The Continent's savanna grasslands, mangroves, swamps, coral reefs, and marine reserves possess the capacity for Greenhouse Gas (GHG) reduction.²

Despite this tremendous climate mitigation potential, Africa lacks the needed financing for GHG emission reduction investments and climate adaptation. Africa's yearly climate financing need is estimated at \$250 billion with about 88 percent of the financing still unmet.³ A well-developed carbon market allows African countries to monetize and trade their renewable and green resources.⁴

Africa, however, controls a paltry 2% of the world's carbon trading market⁵. Carbon registries are essential for creating the enabling market needed for Africa to scale up carbon transactions and facilitate Africa's participation in the fast-developing global carbon market.

Creating carbon registry systems within a well-developed legal framework that ensures transparency and fairness in risk allocation and benefit-sharing is crucial to building investor confidence in national carbon registries. The objective of this report is to present a brief overview of the national carbon registry landscape in Africa. The report also highlights some issues of concern to investors, and emerging regulations in the carbon market ecosystem.

¹ African Leaders Nairobi Declaration on Climate Change (Sep 2023) | African Union

² Forests for Climate: Scaling up Forest Conversation to Reach Net Zero (Sep 2022) | World Economic Forum

³ Climate Finance Needs of African Countries (June 2022) | Climate Policy Initiative

⁴ Can carbon markets solve Africa's climate finance woes? (Nov 2023) | Mongobay World Economic

⁵ Forum | Green finance can unlock Africas vast potential and aid the global fight against climate change

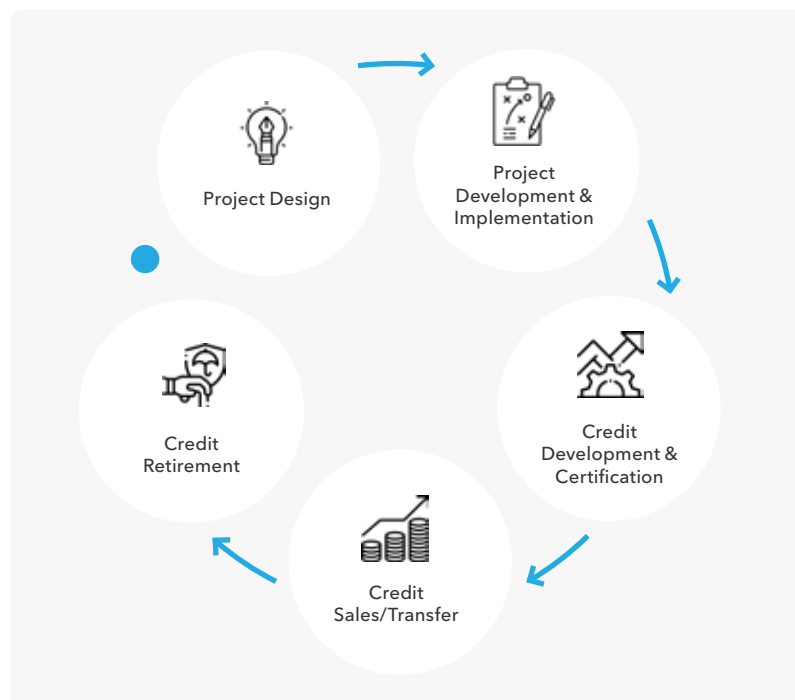
What are carbon registries and how do they facilitate the carbon credits ecosystem?

Carbon registries are databases that track carbon credits' ownership, issuance, transfer, and retirement. In essence, a carbon registry provides a system that maintains a record of each carbon credit, the details of the project that generated it, and the entities that have purchased, sold, or retired the credits.⁶ They also ensure that carbon credits are quality and follow internationally accepted standards.

The life cycle of carbon credits

Carbon registries play a pivotal role throughout the various stages of Carbon credit. Carbon credit goes through various stages including Project Design, Project Development and Implementation, Credit Development Stage, Credit Sales, and Credit Retirement Stage.⁷

FIGURE 1: LIFE CYCLE OF CARBON CREDIT



⁶ What are Carbon Registry systems? - ESG | The Report

⁷ Carbon Credit Explained | Climate Impact Partners

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The Continental: Progress Towards Establishing National Carbon Registries

As of December 2023, three (3) African countries had National Carbon Registries: Tanzania, South Africa and Ghana. Two are operational (Tanzania Carbon Registry and South Africa's Carbon Offset Administration). Ghana's is not operational.

Twelve (12) African countries (representing 22% of African countries) do not have operational registries but have indicated plans to establish national carbon registries.

Thirty-Eight (38) African countries do not have carbon registries and have not announced plans to establish national carbon registries.



Credit: stock.adobe.com

Below is a concise profile of the National Carbon Registries in Africa.

TABLE 1: PROFILE OF NATIONAL CARBON REGISTRIES IN AFRICA

National Registry	Profile
Carbon Offset Administration (South Africa)	It is a registry managed by the Department of Energy of South Africa. ⁸ It facilitates the application, and retirements of carbon offsets. Carbon projects registered on the registry are screened under three globally accepted standards namely, Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), and the Gold Standard (GS).
Tanzania Carbon Registry	It is managed by the Tanzania National Carbon Monitoring Centre; a government institution responsible for managing Tanzania’s REDD+ systems. ⁹ It was established to facilitate the registration of projects and trading of carbon credits. Individuals and corporations in Tanzania can purchase carbon offsets traded there.
Ghana Carbon Registry	It is a voluntary registry established by the government of Ghana to serve as an online database for carbon projects in Ghana. ¹⁰ It is managed by the Carbon Markets Office of Ghana, a secretariat designed to provide operational and technical services to the general public and assist with the execution of the Ghana international carbon market and non-market methods framework. ¹¹ As of December 2023, no carbon credit projects were listed on its platforms.

⁸ Carbon Offset Administration | South Africa
⁹ National Carbon Monitoring Centre | Tanzania
¹⁰ Ghana Carbon Registry
¹¹ Ghana Carbon Market Office

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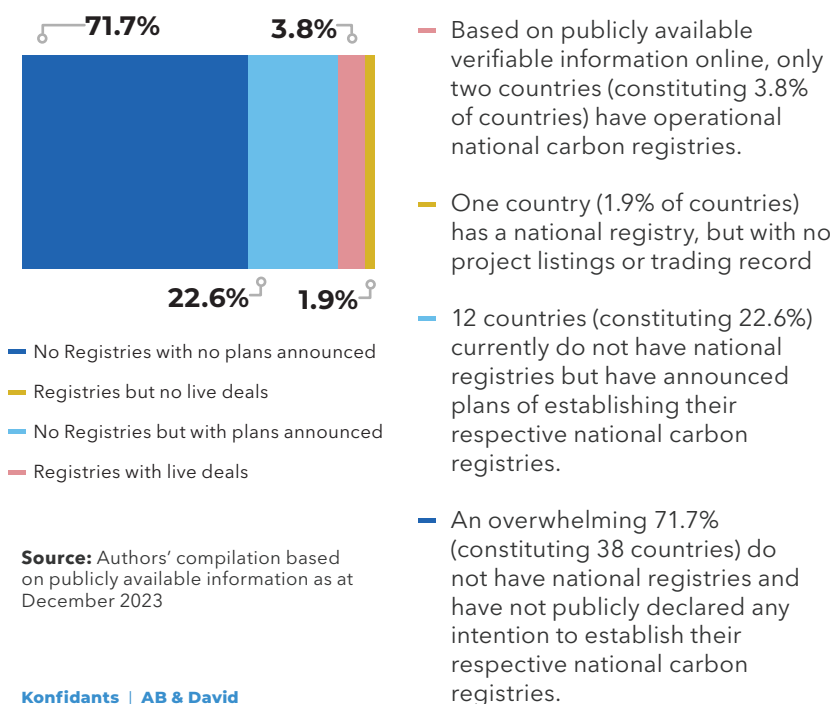
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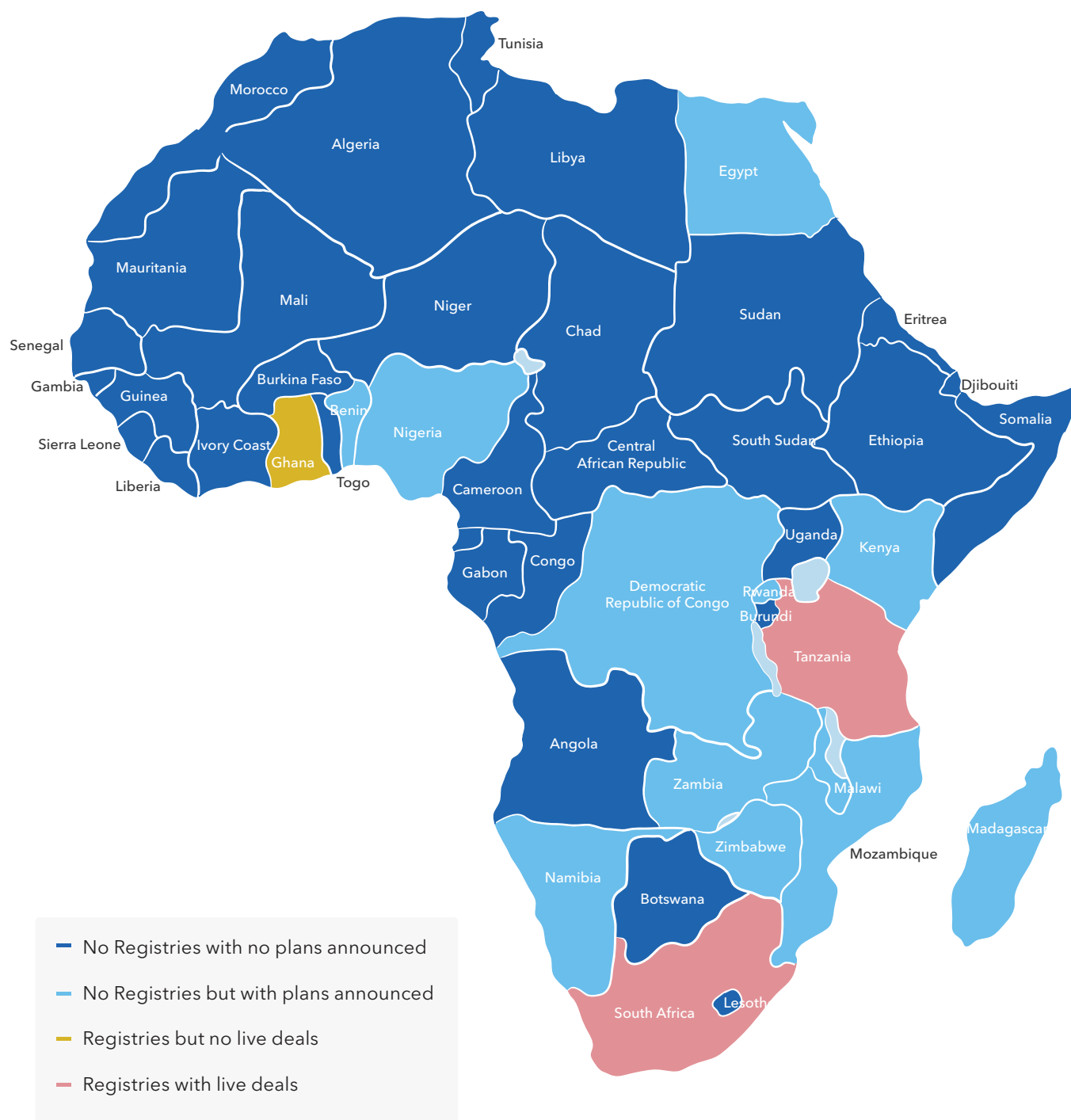
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FIGURE 1: THE PROGRESS ESTABLISHING NATIONAL CARBON REGISTRIES

Tracking the Continental Progress Toward Establishing National Carbon Registries



Credit: stock.adobe.com



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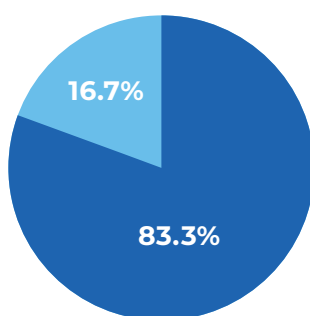
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Sub-regional Breakdown of the Progress Toward Establishing National Carbon Registries

FIGURE 2: NORTHERN AFRICA BREAKDOWN

Northern Africa



- No Registries with no plans announced
- No Registries but with plans announced

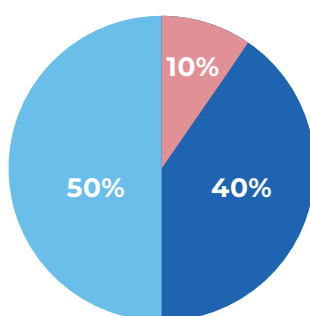
Source: Authors' compilation based on publicly available information as at December 2023

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- No country in North Africa has Carbon Registries.
- Egypt has however announced intentions of establishing a National registry with the Egyptian Exchange Holding Company for Capital Market Development, the Agric Bank of Egypt and Libra Capital Group, signing a framework agreement in 2022 to establish a Carbon Certificates Trading Company.
- Algeria, Libya, Morocco, Sudan, and Tunisia are yet to publicly declare intentions to establish National Carbon Registries.

FIGURE 3: SOUTHERN AFRICA BREAKDOWN

Southern Africa



- Registries with live deals
- No Registries with no plans announced
- No Registries but with plans announced

Source: Authors' compilation based on publicly available information as at December 2023

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- South Africa is the only Southern African Country with a National Carbon Registry (constituting 10%).
- Angola, Botswana, Eswatini (Swaziland) and Lesotho have not publicly declared intentions to create a National Carbon Registry (constituting 40%).
- Malawi, Mozambique, Namibia, Zambia, and Zimbabwe have all declared public intentions to establish National Carbon Registries (constituting 50%).

FIGURE 4: EASTERN AFRICA BREAKDOWN

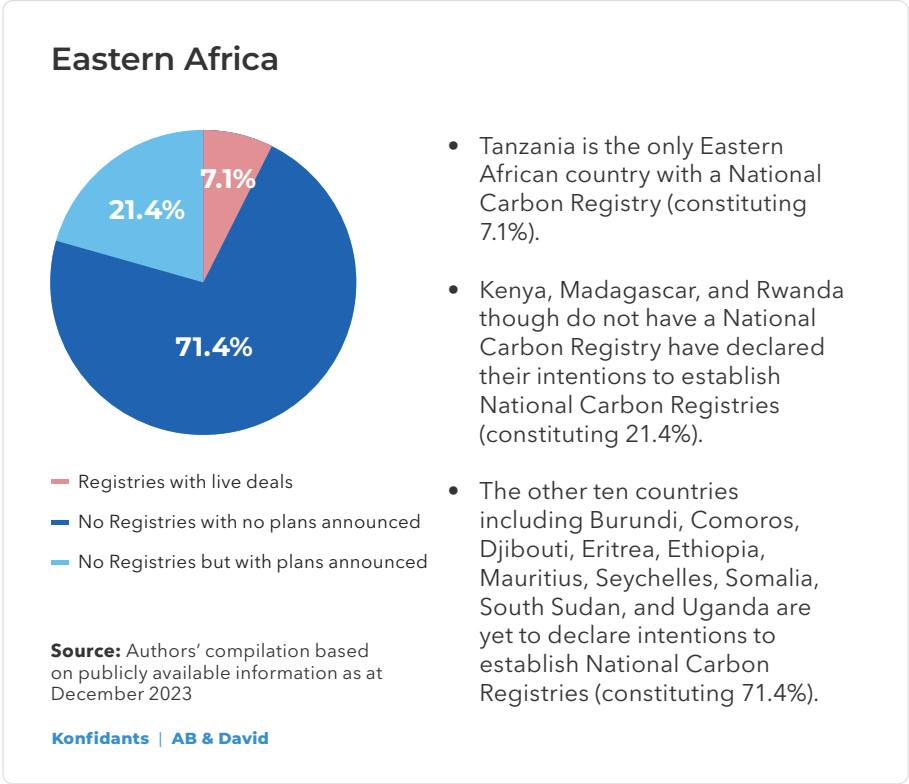
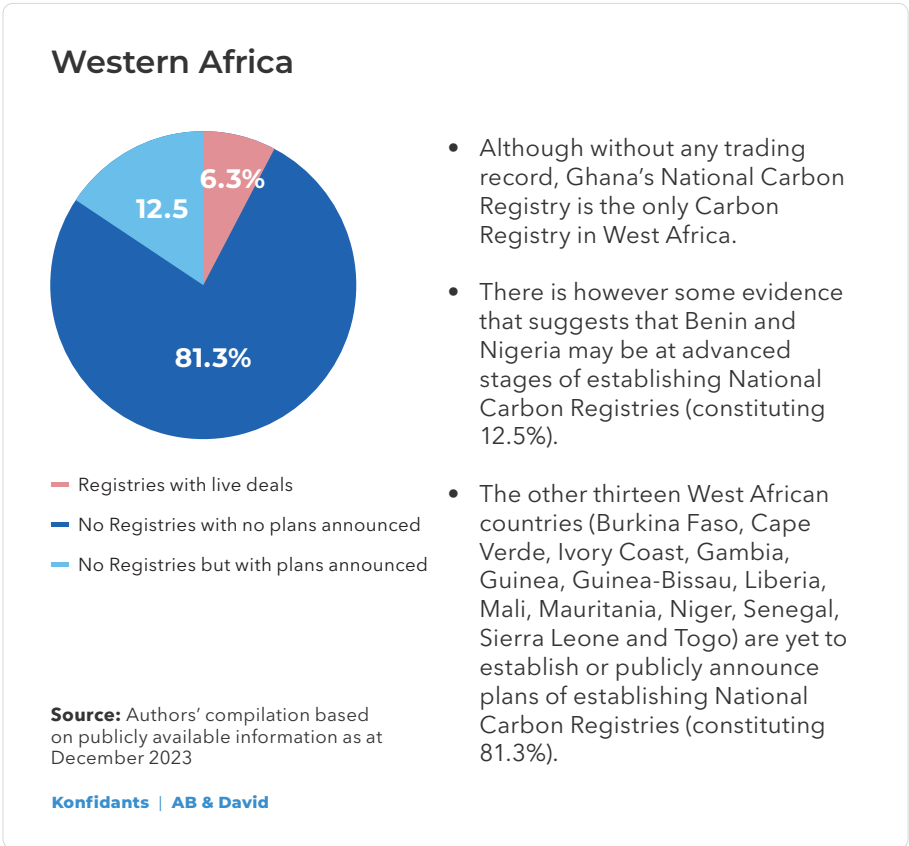


FIGURE 5: WESTERN AFRICA BREAKDOWN



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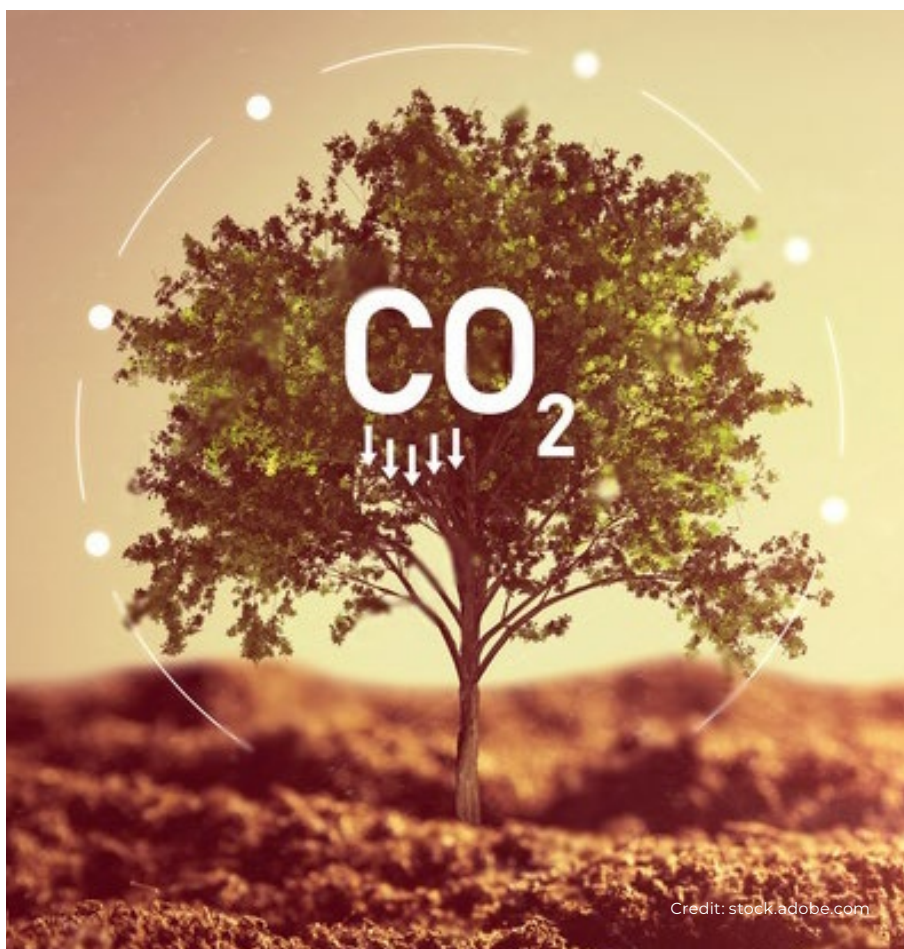
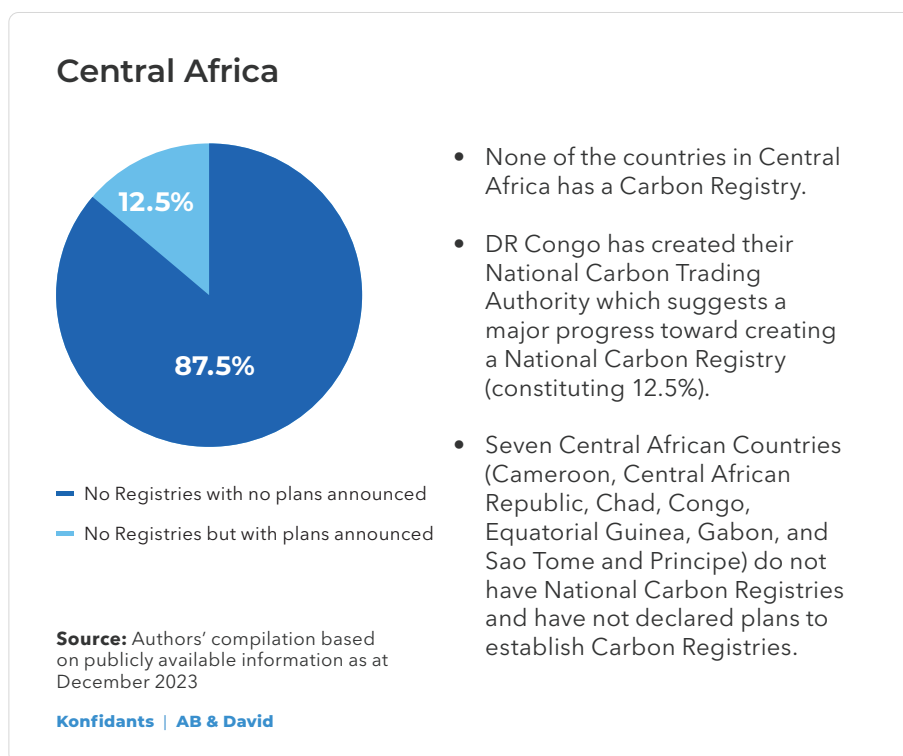
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FIGURE 6: CENTRAL AFRICA BREAKDOWN



Our Observations: Emerging issues in Africa's carbon credit market

In our initial scan of the nascent carbon market, we have identified the following emerging issues that present good lessons that should shape how Africa can approach its carbon market development efforts. The issues range from legal frameworks to institutional arrangements and emerging investor concerns in the African carbon credit market.

1. Some African countries are leading the way in developing regulatory frameworks for carbon trading to curb greenwashing and ensure monetary gains from carbon credits are shared equitably among stakeholders. Kenya's recently accepted legal framework for carbon projects and trading, among other things, require that;
 - All land-based projects have community development agreements with host communities.
 - An environmental impact assessment will be conducted for all carbon credit projects.
 - All carbon credit projects and carbon trading be registered with the National Carbon Registry.

In Zambia, the government is on the verge of passing the regulatory framework for carbon credit activities in the country. The regulation, when passed, is expected to regulate carbon credit trading activities in the country, end-to-end.

2. Some Countries are expanding the mandate of existing Stock Exchanges to include Carbon Project Registering and Trading.

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Examples of countries in this category include Zimbabwe and Egypt. In Egypt, the Egyptian Exchange (EGX) Holding Company for Capital Markets Development, in collaboration with partners such as the Agricultural Bank of Egypt, has signed a framework to establish a Carbon Certificates Trading Company.

In Zimbabwe, the government put forward a legislative proposal to compel carbon credit projects to list on the stock exchange- with an initially proposed 50% - 50% revenue split with the government - which has now been reviewed downward to 30%.

3. Project developers are concerned about the credibility of national registries and their ability to attract international carbon credit buyers.

One of the chief concerns of carbon credit project developers in Zimbabwe, for which a group of 13 carbon project developers (controlling over \$100 million in investment) decided to form the Zimbabwe Carbon Association, was the forced use of the national registry - which developers are concerned will not attract international carbon credit buyers due to the lack of international recognition of the national registry.

4. Despite the general lack of regulatory and institutional framework across the continent, African governments are trading carbon but predominantly within the Clean Development Mechanism Framework financed by World Bank-managed climate trust funds such as the Forest Carbon Partnership Facility, Carbon Initiative for Development (Ci-Dev) and Carbon Partnership Facility (CPF) using Emission Reductions Payment Agreements (ERPAs).¹²

Ghana, Mozambique, the Democratic Republic of Congo, Gabon, and Egypt are examples of countries that have traded large volumes of carbon under one of the listed World Bank-managed climate funds, across different

¹² Emission Reductions Payment Agreements (ERPA) | Climate Explorer - World Bank

sectors. In Ghana, the Democratic Republic of Congo, and Mozambique, depending on performance, the ERPAs could unlock as much as \$50 million for each country.

5. The private carbon market on the continent is fast-developing, and records much higher levels of deals than the “public market”, thanks to globally recognized private registries operating in the continent.

This shows much higher investor confidence in international private registries compared to national registries. It is therefore not surprising that we are seeing inertia and pushback from project developers in some countries regarding forced listing of projects on national registries. VERRA (Verified Carbon Standard) and Gold Standard are examples of globally recognized private registries operating on the continent.

In conclusion, as a nascent market, it is extremely crucial for Africa to not only get the foundational institutional and legal architecture right, but also institute measures that address emerging investor concerns to boost investor confidence and ensure the long-term success of the continent’s carbon market. African policymakers must prioritize taking the right steps to ensure that Africa is on a sustainable path to developing its carbon market to monetize the continent’s rich green resources for climate financing.



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Based on this initial scan and the emerging issues spotlighted above, the following recommendations are made for the consideration of all stakeholders in Africa's carbon market ecosystem. These recommendations, would help clarify some of the emerging institutional/legal uncertainties in the market, and address investor concerns that are contributing to not only the slow pace of progress toward establishing national registries but also increase investor activity and deal flows on national registries.

1. For Countries Yet to Establish National Registries, "Put Not the Cart Before the Horse"; facilitate stakeholder consultations as the first step.

We caution countries against rushing to establish national registries without putting in place well-thought-through policies and legal/regulatory and institutional frameworks grounded in robust stakeholder consultative processes. All stakeholders from both the demand -side(institutions and individuals seeking to offset their carbon emissions or buy carbon credits) and supply-sides (carbon registry, project developers, independent auditors, etc.) must be involved in crafting policy and regulatory frameworks.

Legal/Regulatory frameworks put forward that are not inclusive risk pushbacks from key stakeholders - as in the case of Zimbabwe where project developers are pushing back on the proposed legislation on a number of issues including revenue split. If a well-developed legal/regulatory framework precedes the establishment of national registries, it will help allay some of the emerging investor concerns highlighted and boost investor confidence in national registries.

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2. To Boost Carbon Deal Flows and Scale Climate Financing, Prioritize Capacity Building.

The carbon market globally is generally relatively young and emerging. If Africa is to derive monetary value from its renewable/green assets in line with global standards, the capacity of players in the carbon and climate finance ecosystem generally needs to be enhanced to credible market-ready carbon deals as well as regulate the carbon market. Carbon accounting is a critical area of urgent capacity-building need.

3. Even without national registries, carbon deals are flowing. Enact laws to guard against greenwashing, project double-counting, and other risks that may arise from poor disclosure standards.

Ultimately, investor activity and deal flow in Africa's carbon is heavily dependent on investor trust in the market. Allowing carbon deals to happen in the private market without proper regulation puts the wider carbon market on the continent at risk as any incident of greenwashing or project double counting recorded could send a very bad signal to the global investor community and erode investor trust in Africa's carbon market. It is for this reason that countries, including those that do not have immediate plans to establish a national registry, must endeavor to develop legislation that prevents any form of illicit and unethical carbon trading.

4. Mitigate social risk by including local communities in the regulatory framework development process, and on-ground project design & implementation.

For land-based carbon projects, it is impossible to achieve success without the cooperation of the host communities. Given this, green resource-rich communities must be consulted in the regulatory policy development process

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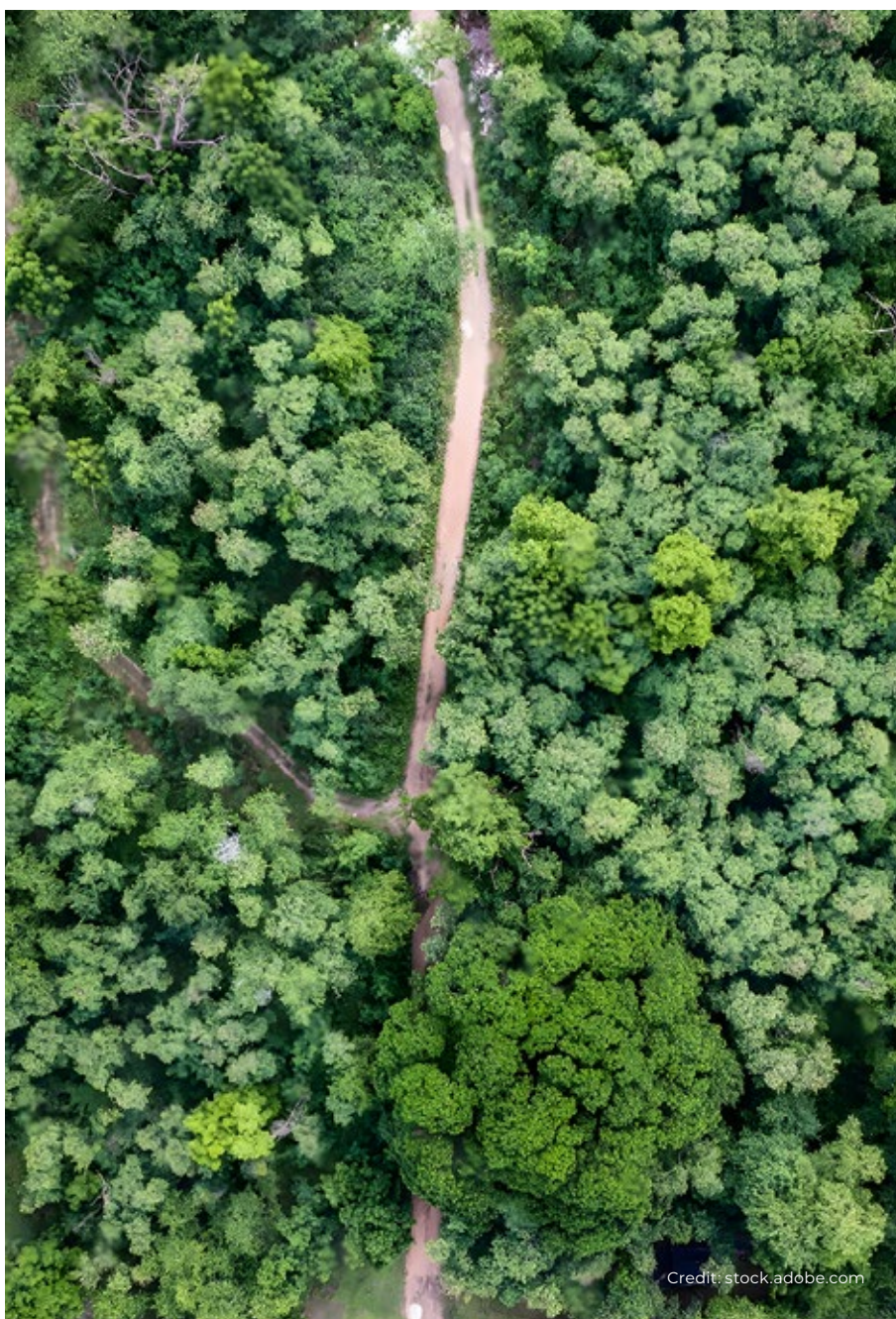
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and their concerns adequately addressed in the regulatory framework that will ultimately be developed. This will aid project acceptability by host communities. Kenya's example presents a good example for the continent, in this regard. In situations where such well-developed regulatory frameworks do not exist, project developers must engage the communities at the project design phase and ensure the project design captures their concerns. Too often, project developers only start to engage host communities at the project development and implementation phase.



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