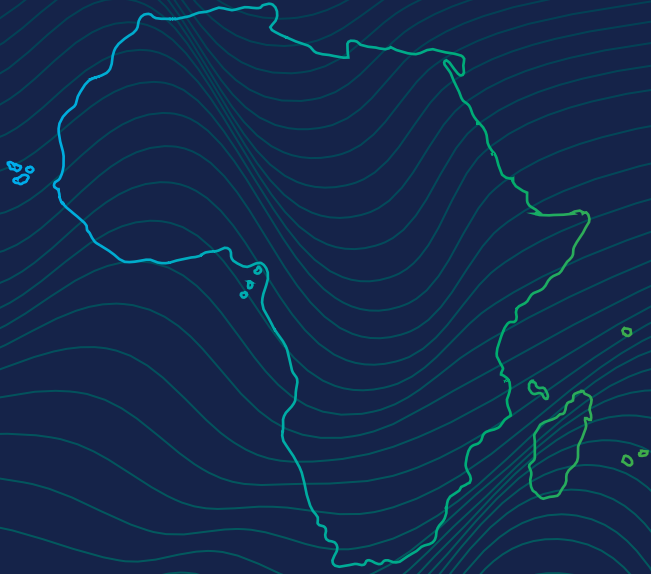




**UNU  
INRA**



# **CARBON MARKET ECONOMIES:**

**Crafting a New Narrative of Opportunity and  
Sustainable Growth for Climate Action in Africa**

**2024**



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# Voluntary Carbon Markets: Crafting a New Narrative

Voluntary Carbon Markets (VCMs) have become a crucial tool in global climate finance and strategies to reduce emissions. Nevertheless, implementing these solutions in Africa involves taking complex socio-political and economic factors into account. This paper provides a critical analysis of the political economy of VCMs in Africa by synthesising key interviews with policy-makers and leading experts in climate and development discourse. It explores the tensions between market-oriented approaches and the need for sustainable development, providing insights into questions of equity, governance, and the monetization of natural resources. The findings highlight the importance of adopting a new perspective that focuses on fair and sustainable solutions, prioritizing the interests of local communities and genuine climate action rather than profit-driven imperatives.

Climate change poses an existential threat, prompting a redefinition and renegotiation of power dynamics and sustainability imperatives towards a carbon-neutral future. Meanwhile, vulnerable countries in the Global South are struggling to enact climate action, leaving frontline communities vulnerable. In the same vein, financially and technologically advanced countries negotiate carbon reductions while grappling with global power dynamics, thereby striving to mitigate climate impacts.

Voluntary Carbon Markets (VCMs) have gained traction as a mechanism for financing climate action, offering opportunities for emission-reduction projects and carbon offsetting. African carbon markets represent 16% of the global market, indicating their growth potential.<sup>1</sup> However, their implementation in Africa has been subject to intense scrutiny due to concerns regarding equity, governance, and the commodification of nature.

The renewed interest in Voluntary Carbon Markets (VCMs) among African countries can be attributed to a critical evaluation of the current climate finance landscape. Access to funding for climate adaptation and mitigation remains a significant challenge, particularly in light of the delayed fulfilment of international commitments. At COP15 in 2009, developed countries pledged to provide \$100 billion annually to support climate action in developing countries by 2020, which, however, failed to materialize by the intended date.<sup>2</sup> Although claimed to have been met for the first time in 2022,<sup>3</sup> this climate finance target has mainly taken the form of loans, exacerbating African countries' burgeoning debt burdens.<sup>4</sup> During the recent UNFCCC COP29 in Baku in November 2024, the New Collective Quantified Goal on Climate Finance (NCQG) set the goal of increasing finance to developing countries to at least \$300 billion annually by 2035.<sup>5</sup> However, this finance goal has been criticized for being not nearly enough, with the Africa Group highlighting that adaptation needs alone amount to \$400 billion a year.<sup>6</sup>



1 Africa Carbon Markets Initiative (ACMI) (2024). [Status and Outlook Report 2024-25](#).

2 Sabrina Camélia Pagop & Luc Savard (2024). [Voluntary Carbon Markets in Africa: A Deep Dive Into Opportunities and Challenges](#).

3 World Resources Institute (2023). [STATEMENT: Developed Countries Meet Long Overdue \\$100 Billion Commitment](#).

4 UNFCCC (2024). [From Billions to Trillions: Setting a New Goal on Climate Finance](#).

5 UNFCCC (2024). New collective quantified goal on climate finance. [Draft decision -/CMA.6](#).

6 IISD Earth Negotiations Bulletin. (2024). [Summary of the 2024 Baku Climate Change Conference: 11-22 November 2024](#).

**BOX 1**

## COP29: What the Article 6 Resolution Means for the Continent

The COP29 resolution on Article 6 is a historic breakthrough in global climate governance, addressing long-standing challenges in carbon markets and non-market cooperation. It establishes mechanisms for cross-border collaboration through bilateral carbon trading (Article 6.2) and a centralized emissions reduction framework known as the [Paris Agreement Crediting Mechanism](#) (Article 6.4), with potential annual savings of \$250 billion in implementing NDCs (COP29, 2024).<sup>7</sup> For Africa, it unlocks opportunities to attract private investments, finance adaptation projects through the Share of Proceeds (SOP) principle, and strengthen monitoring, reporting, and verification (MRV) systems, enabling meaningful participation in global carbon markets. Non-market solutions, such as renewable energy and community-led reforestation, are aligned with Africa's sustainable development goals, with explicit provisions for Indigenous Peoples and local communities (UNFCCC, 2024).<sup>8</sup>

Under Article 6, the carbon market landscape has shifted significantly from the Kyoto Protocol's Clean Development Mechanism (CDM). Stricter rules now require host country authorizations, avoidance of double counting, and detailed reporting, ensuring projects align with national sustainable development goals and NDCs. Unlike under the CDM, where weak oversight allowed low-quality projects, the Paris framework places governments at the center of transactions, increasing accountability.

***“Now with the Paris Agreement, both developed and developing countries have commitments in mitigation. This means there is an implication for a host country to transfer their units as it means they can't be used for the host country. – Mbaye Diagne***

However, challenges remain. Accountability gaps, the transition of outdated CDM credits, and unresolved issues around removals and permanence threaten the system's integrity (Carbon Market Watch, 2024).<sup>9</sup> While transparency requirements offer marginal improvements, delayed reporting and weak enforcement expose the mechanism to potential misuse. Critics emphasize the need for high-quality standards and independent scrutiny to avoid low-trust markets dominated by questionable credits.

Despite loopholes, such as weak compliance and low-quality credit trades under Article 6.2's bilateral agreements, countries like Ghana exemplify strong governance through transparent frameworks and capacity building. Institutional arrangements, including robust national systems and transparent processes, are critical to ensuring accountability and preventing reliance on cheap offsets.

Africa's success in Article 6 depends on strengthening technical and institutional capacities, such as conducting marginal abatement cost analyses across sectors like renewable energy, forestry, and clean cooking. Examples like Senegal's collaboration with the World Bank show how detailed cost assessments can guide strategic decision-making. Regional alliances, such as the West African Alliance on Carbon Markets, further demonstrate the power of collective bargaining to influence global carbon pricing, mirroring successful strategies by nations like Brazil, India, and China.

***“If countries can come together and agree on a price, the investor will treat them as a collective. Africa can influence the debate and the price.” – Mbaye Diagne***

By uniting on pricing strategies, regulatory frameworks, and capacity building, African countries can amplify their influence, align carbon markets with national development priorities, and maximize benefits. Balancing these opportunities with transparency, accountability, and equity challenges will be key to long-term success.



7 COP29 (2024). [COP29 achieves full operationalisation of Article 6 of Paris Agreement - Unlocks International Carbon Markets.](#)

8 UNFCCC (2024). [Article 6 - Cooperative Implementation.](#)

9 Carbon Market Watch (2024). [COP29: Complex Article 6 rules pave way to unruly carbon markets.](#)

Several initiatives are influencing the development of Africa's carbon markets ecosystem, including the Africa-Europe Carbon Markets Working Group, the Africa Carbon Markets Initiative (ACMI), regional alliances like the Eastern Africa Alliance on Carbon Markets and the West African Alliance on Carbon Markets, the Glasgow Financial Alliance for Net Zero (GFANZ), the Voluntary Carbon Markets Initiative (VCMI), the Science Based Targets Initiative (SBTi), and the Integrity Council for Voluntary Carbon Markets (ICVCM). For instance, the Africa Carbon Markets Initiative (ACMI) was launched at COP27 with the goal of significantly expanding voluntary carbon markets across Africa. ACMI aims to scale the market to retire 300 million carbon credits annually by 2030, reaching 1.5 billion credits annually by 2050.<sup>10</sup> This initiative also aims to unlock \$6 billion in revenue by 2030 and over \$120 billion by 2050, while supporting 30 million jobs by 2030 and over 110 million jobs by 2050.<sup>11</sup>

Seven African countries, namely Kenya, Gabon, Malawi, Mozambique, Togo, Nigeria, and Burundi, have signed up for the initiative, with \$200 million having been secured in advanced market commitments at COP27.<sup>12</sup> Furthermore, seven countries and seven corporate buyers are near making a commitment to the program, indicating progress in recent months. During the recent Africa Climate Summit, the UAE Carbon Alliance pledged to acquire \$450 million worth of African carbon credits by 2030, demonstrating a significant commitment to supporting the continent's efforts in carbon reduction. At COP28, several events and announcements were emphasized. Notably, the Voluntary Carbon Markets Integrity Initiative (VCMI), the GHG Protocol, and the 'We Mean Business Coalition' collaborated to draw up thorough, science-based guidance for the utilization of carbon credits.

However, the initiative faces criticism and challenges. Critics argue that carbon markets primarily benefit polluters, fossil-fuel companies, and market brokers, potentially driving pollution beyond acceptable climate limits.<sup>13</sup> Sceptics also contend that carbon offsets may hinder genuine African development pathways and are based on the assumption that Western companies will continue to pollute despite exceeding safe emissions limits.<sup>14</sup> In 2024, several publications emphasised the credibility challenges facing carbon markets, especially regarding the accuracy of emissions reductions claimed by projects in Africa. REDD+ projects have faced scrutiny over alleged exaggerations of their benefits, particularly concerning the accuracy of reported emission reductions. Likewise, cookstove initiatives, which are designed to lower emissions by providing more efficient stoves to communities, have been criticized for allegedly overstating their emission reduction achievements.<sup>15</sup> These challenges are often linked to a lack of transparency, the inconsistent application of standards and weak governance, leading to questionable carbon credits, and undermining trust in the market.

Additionally, concerns have been raised about the financialization of African nature and the climate crisis through carbon credits, which are accused of dealing in an imaginary commodity of tonnes of carbon saved.<sup>16</sup>

Overall, while the ACMI has the potential for significant carbon-market expansion in Africa, it also confronts issues regarding its impact on climate change, development pathways, and the financialization of environmental resources. Addressing these challenges will be crucial for ensuring the initiative's effectiveness in contributing to sustainable development and climate mitigation efforts across the continent.

<sup>10</sup> See: <https://climatechampions.unfccc.int/africa-carbon-markets-initiative-announces-13-action-programs/>

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> See, for example, Ashoka Mukpo (2023). [Can carbon markets solve Africa's climate finance woes?](#)

<sup>14</sup> See, for example, Power Shift Africa (2023). [The Africa carbon markets initiative: A wolf in sheep's clothing.](#)

<sup>15</sup> [ACMI \(2024\)](#)

<sup>16</sup> See Ian Scoones (2024). [Zimbabwe as the new carbon frontier: dangers ahead.](#)

**BOX 2**

## Mozambique's Carbon Market Development<sup>17</sup>: A Raw Deal

With ACMI's support, Mozambique established its Inter-Ministerial Task Force on Carbon Markets, leading to the full launch of its Carbon Market Activation Plan (CMAP) in November 2023 and attracting donor support for carbon market development. Under the Zambezia Integrated Landscape Management Program (ZILMP), part of Mozambique's national REDD+ strategy, the World Bank agreed to purchase 10 million tCO<sub>2</sub>e reductions at just \$5 per tCO<sub>2</sub>e. This price is far below those in developed countries, highlighting the need for a more equitable global carbon market. While the global average for nature-based carbon credits stands at \$7.59, Europe averages considerably higher at \$25.41.<sup>18</sup> Of the projected \$45 million in net payments for emissions reductions, the government plans to allocate 70% to community projects, 20% to private-sector initiatives, and the remaining 10% among district, park, and provincial authorities, channelling an estimated \$31.5 million to local communities.

## Transforming the landscape for carbon-induced opportunities in the voluntary carbon market

Voluntary carbon markets are seen as a powerful tool to drive significant changes in behaviour, facilitate progress, and accelerate efforts towards climate action. They are viewed as financial and market mechanisms with the capacity to initiate the fundamental shifts necessary to move swiftly towards sustainable development in the face of persistent climate challenges. In countries such as Zambia, the advantages of carbon trading are obvious in relation to development and improved standards of living, particularly for the beneficiaries. Similarly, the carbon market's potential as a source of revenue for emissions reductions is seen as an attractive feature of carbon credits. Currently, African carbon-credit projects are primarily concentrated in three sectors: agriculture, which makes up around 5% of the projects; forestry and land use, comprising about 45%; and cookstoves and energy, which account for approximately 50% of all projects.<sup>19</sup> This distribution highlights the need for diversification in the African carbon credit market and emphasizes the importance of sustainable land management, as well as the potential for expansion in the agricultural sector. When implemented on a large scale, it can help achieve significant development goals and potentially offset the high debt-to-GDP ratios in certain countries. Among other outcomes, the findings confirmed the following:

- Africa's voluntary carbon market is growing at a rate of 36%, of which 65% is taking place in five countries, with Kenya dominating.
- The Africa Carbon Markets Initiative (ACMI) was launched at COP27 with the aim of dramatically scaling up voluntary carbon markets across Africa by:
  - Scaling up the market to 300 million carbon credits retired annually by 2030, and 1.5 billion credits annually by 2050
  - Unlocking \$6 billion in revenue by 2030 and over \$120 billion by 2050
  - Supporting 30 million jobs by 2030 and over 110 million jobs by 2050
- At COP 27, \$200 million was secured in advanced market commitments from global corporates.
- At present, Africa's ability to fulfil the worldwide need for carbon credits is not being fully utilized, as evidenced by its limited involvement in Voluntary Carbon Markets (VCM) and difficulties in accessing trading platforms like the European Union (EU) Emissions Trading Scheme (EU ETS). From 2012 to 2022, projects originating from Africa represented just about 9% of the credits retired in the global VCM, and between 2016 and 2021 only 11% of all retired credits in the VCM were from Africa (Africa-Europe Foundation, 2023).
- In 2022, the overall trading value in VCM amounted to approximately \$2 billion and underwent substantial expansion from 2020 to 2022, more than doubling in value in this period. Growth projections vary, with most estimates predicting that VCM will reach \$10 to \$40 billion by 2030 (Africa-Europe Foundation, 2023).

<sup>17</sup> CIP (2024) [Mozambique's Carbon Credits: Low Revenues, Rising Deforestation, and Limited Benefits for Communities](#).

<sup>18</sup> Environmental Finance (2024). [The Emergence of European Nature-based Carbon Credit Markets](#).

<sup>19</sup> [ACMI \(2024\)](#)

- The Climate Action Platform for Africa (CAP-A) analysis reveals that nature-based carbon-removal opportunities alone, priced at \$50 per tonne, have the potential to generate \$15 billion in annual revenue, and create better livelihoods and new employment opportunities for over 85 million Africans. Moreover, at a rate of \$100 per tonne, these opportunities could yield \$57 billion in yearly revenue, supporting over 140 million Africans (Climate Action Platform Africa, 2023).
- Beyond the market benefits, credits can enable capital to flow from investors and carbon operators to traders in carbon, i.e. communities in specific installations.
- Certain communities have gained financially from forest management and protection through carbon-trading initiatives. The Mikoko Pamoja project in southern Kenya, a Blue Carbon initiative, sold carbon credits from mangrove preservation, reducing 3,000 tons of CO<sub>2</sub> equivalent per year in VCM. As the first community-based project to successfully trade mangrove-derived carbon credits, Mikoko Pamoja showcases the potential of carbon trading to generate financial benefits for local communities and support climate-mitigation efforts. By promoting sustainable forest management and preserving critical ecosystems, carbon-trading initiatives can provide valuable economic and environmental benefits for African communities (Camélia et al. 2024).

However, renegotiating and reviving a framework based on fairness and the fair exchange of goods and services would increase the chances of levelling the playing field and resolving the unfair inequalities caused by unequal access to knowledge, location, technology, and finance. The market seems to favour carbon-trading permits, but upstream opportunities from carbon sites to offsetting regions could maximize the advantages.

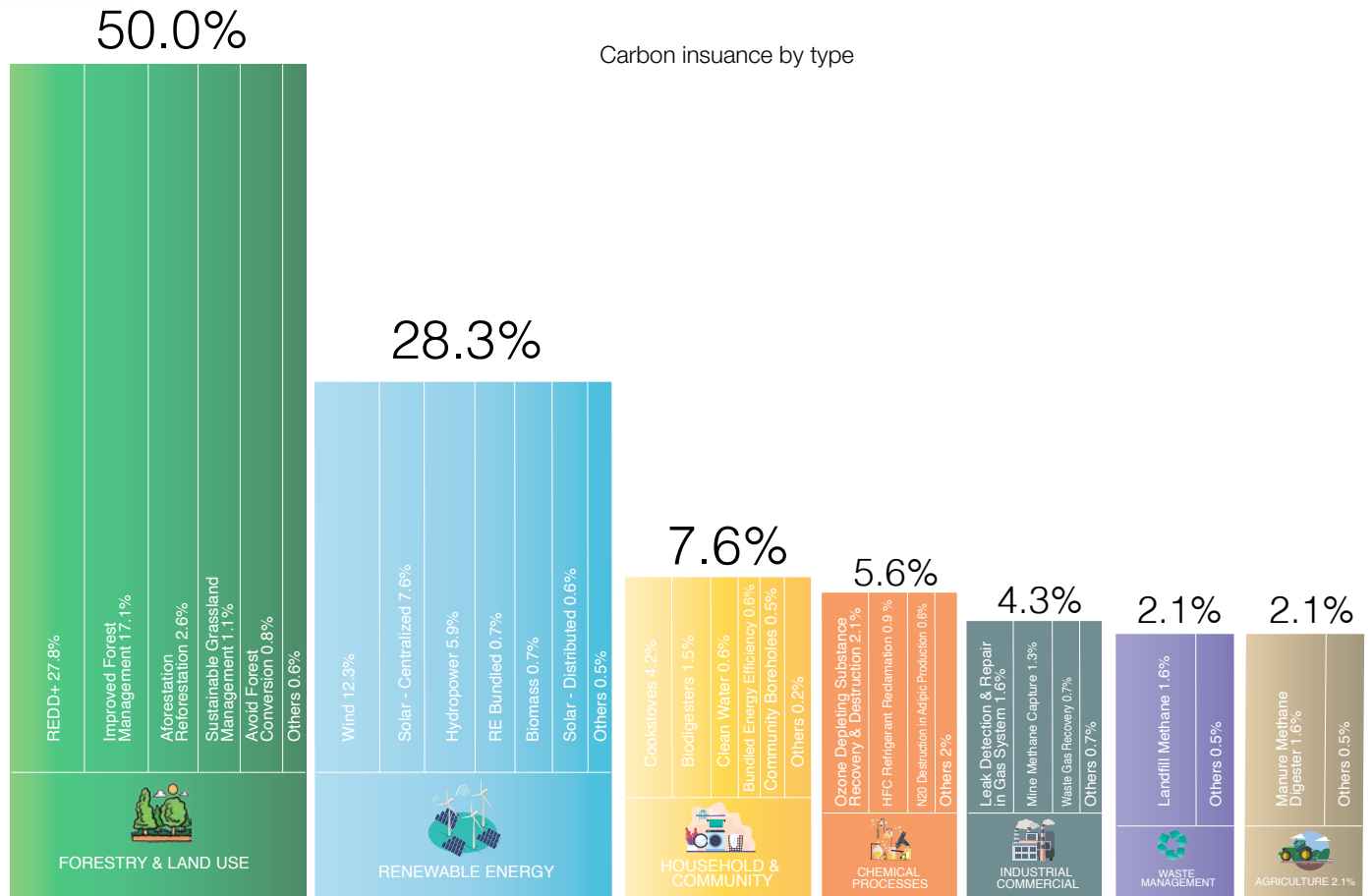


**VCM IN AFRICA HAVE GROWN AT A RATE OF 36% ANNUALLY OVER THE PAST FIVE YEARS**

## AFRICA CARBON CREDIT PROJECTS







Carbon credits issued by African Projects, VCM only

## NATURE-BASED CREDITS MARKET (2023)

90%

**TOP 10 COUNTRIES ACCOUNTED FOR NEARLY 90% OF THE TOTAL SUPPLY**

**KENYA RANKED 8<sup>TH</sup> WITH 4 MtCO<sub>2</sub>e**

# Voluntary carbon markets: ‘A case of making hay while the sun shines’!

There is a strong sense that formidable forces have already recognised the potential of the carbon market and will continue to exert maximum leverage until they obtain the greatest possible profit. Africa should therefore not “cut off its nose to spite its face.” The preparation necessary to position oneself cannot be outsourced to others. African governments can seize opportunities by engaging in stakeholder platforms that incorporate local contexts and realities into broader norm-setting frameworks. As one interviewee noted, it is essential to move beyond involving public-sector officials from environmental ministries alone to create boardrooms with professionals such as bankers, investors, insurers, and lawyers instead. These individuals possess expertise in risk assessment and the mechanisms by which capital operates, flows, and can be optimized.

However, shifting the narrative will mean that Africa must assume:

**1) Leadership.** There is a lack of leadership, and this will undermine the instrument’s efficacy and its potential for both upstream and downstream activities. Africa is not leading the voluntary carbon market, it is following its lead and markets imperatives that are designed elsewhere. Greater agency will catalyse the following:

**2) Co-ordination platforms.** Continent-wide deliberation on carbon market objectives within regional frameworks such as the Southern African Development Community (SADC) and Economic Community of West Africa States (ECOWAS) is essential because countries are drawing up their carbon-trading boundaries and objectives. Zimbabwe’s demand for fifty per cent of carbon trade revenues<sup>20</sup> underscores the criticality of averting a downward spiral in negotiations and a race to the bottom.

**3) Fair exchange and benefit sharing.** Carbon markets can yield short- and long-term benefits, provided this does not delegitimize local innovation and aspirations towards adaptation and mitigation. This is important for offsetting activities to seek ways of empowering local communities and enhancing the social benefits of greater climate resilience.

**4) Transparency and integrity.** African countries can demand stricter accountability measures. It is crucial that genuine trade prerequisites form the foundations of the market to ensure transparency in the exchange of goods and services. A failure to address integrity issues could discourage potential investors. The Voluntary Carbon Market (VCM) faces criticism for potentially inflating emissions and overstating offsetting capabilities, which casts doubt on the market’s effectiveness.<sup>21</sup> Accusations of opaque land sales in Africa further highlight the need for transparency. Disclosure standards related to information, accountability and accuracy in offsetting, verification and monitoring are perceived as inadequate.

<sup>20</sup> See: Reuters. (2023, May 23). [Zimbabwe to regulate carbon credit market to curb greenwashing.](#)

<sup>21</sup> See, for example, The Guardian (2023). [Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows.](#)



Effectively managing carbon trades requires Africa to position itself carefully in relation to both upstream and downstream opportunities, from carbon extraction sites to carbon offsets. However, it also involves acknowledging numerous contradictions, power imbalances, market distortions, equity concerns, uneven terms of trade and the tendency to treat natural resources purely as commodities, potentially undermining the emphasis on building a climate-resilient future. In essence, while markets play a role, they cannot address the fundamental emissions issues in economies that are heavily reliant on carbon-intensive industries.

It is easy to label carbon markets as “useless”, “ineffective” and exploitative. However, given the complexity of this instrument, a more nuanced approach is needed. As Karen Olsen has noted:

**“We need to focus on the good news and the bad news – there is room to tell the good and bad story”.**

Offsetting emissions on a large scale often involves expanding fossil fuel-intensive industries. This creates a cycle in which carbon emissions lead to the creation of credits, which in turn grant the right to continue polluting. Understanding this circularity is crucial for considering other complementary measures to reduce emissions. Ian Scoones highlights this contradiction:

**“There is a sort of paradox internal to the whole thing. You can’t have a solution to something that is causing the problem. It is completely circular”.**

The primary disconnect is often framed as a North/South divide, whereby wealthier Northern countries pollute and use Southern countries to offset their excess emissions. In essence, pollution becomes inherently linked to one’s ability to afford more polluting rights. Indeed, the demand for offsets is usually driven by the production of emissions. In order to achieve emission reduction objectives, industries must acquire offset credits when they emit carbon. This demand generates a market that, in turn, stimulates the production of credits, whether for projects such as tree-planting initiatives or renewable energy installations. The supposed purpose of these credits is to compensate for the emissions that have been generated. A paradoxical cycle is initiated when companies prioritize purchasing credits over their own direct reductions. The demand for credits is generated by emission-producing activities, which in turn supports an offset market that enables the continuation of emissions. This circularity is further emphasised by the economic advantages associated with carbon credits; companies may experience minimal pressure to implement significant operational changes as long as they can satisfy regulatory obligations through offset purchases. Consequently, this dependence on credits serves to maintain the carbon-intensive status quo rather than to challenge it.

Ensuring that African countries are able to attract capital in the carbon market space and effectively implement adaptation and mitigation measures is not a guaranteed outcome. There are significant power imbalances resulting from disparities in economic resources, differences in institutional capabilities, misalignments in governance, unequal geographical distribution, and gaps in capacity and technologies.

Thus, a power imbalance is deeply ingrained in the market structure, from standard setting to offsetting projects. Numerous factors contribute to the amplification of power and the creation of winner/loser dynamics. There is a perception that demand is given an unfair advantage over supply, when in fact it should be the other way around. In certain instances, markets have been primed and communities have prepared for offset installations, only to find that there is a significant lag in supply catching up with demand. The risk of over-promising and under-delivering, especially during market downturns, undermines the credibility of carbon markets.

**“One of the problems is that voluntary carbon markets are premised on inequality. They will only work if there is demand in one part of the world and supply in the other. The supply is from forests in poorer countries, and the demand is from polluting companies and countries in the in the Global North. So, there’s almost by definition an inequality embedded in the market structure.” – Ian Scoones**

This highlights the necessity for a paradigm shift whereby African countries are not merely passive price-takers but actively shape negotiations, influence trade dynamics, and utilize their political will and norm-setting authority to enable the market.

Simon Anderson suggests that, if we consider the sequestration potential as a criterion for carbon offsetting, those providing sequestration services should have more substantial leverage in the market, with equal terms of engagement.

# Political economy of carbon trade as the Achilles heel in levelling the playing field: towards justice in the transition

**'Africa is a price taker and should not be used as carbon sink.'**

An increasing view among several interviewees is that Africa serves as a net carbon sink. Many argue that the term "carbon market" is misleading. Linus Mofor points out that a market traditionally involves the exchange of goods and services for capital, but the conditions of trade are influenced by complex political economy dynamics. Questions of winners and losers, whose demands are met, whose supplies are utilized, and who ultimately benefits are deeply ingrained within the market structure. As Simon Anderson argues:

***"International markets have little incentive to behave in line with national development priorities. Their interest is based on emissions reduction and not on long-term resilience outcomes."***

The carbon value chain faces a significant challenge with the prevalent price-taking approach, as communities often lack influence in determining prices. This problem is made worse by cases of elite capture, particularly because of a lack of adequate information and understanding about project sites and offsetting procedures. Consequently, the perspective that carbon markets enable environmental stewardship and provide vehicles for building resilience is reduced to a simplistic equation of credits. In essence, the focus shifts from enabling environmental sustainability to a "follow the money" approach, whereby the true value of traded assets becomes obscured, ultimately short-changing communities in the process. This issue is compounded in countries with weak or non-existent regulation, as investors seek cheap offsets, often overlooking the displacement of communities and the loss of land, particularly in forestry-related offset projects. This culture and practice of expropriation leads to a range of additional goods, processes, and relationships that are assigned monetary values.

Significant power asymmetries persist between offsetting countries and host countries, often leading to undervaluation of African carbon credits. To level the playing field, African countries must establish unified pricing benchmarks and collaborate regionally to prevent buyers from exploiting individual projects or countries with cheaper credits. A regional platform to exchange information and coordinate pricing strategies can ensure fairer returns while increasing Africa's collective influence in carbon markets.

There is a risk that carbon market projects, particularly those focused on land-based activities, could lead to land-grabbing, the displacement of local communities, and violations of rights in land. Without adequate safeguards and benefit-sharing mechanisms in place, vulnerable populations may be adversely affected by carbon-market initiatives. Carbon projects often conflict with local agrarian and land-based livelihood systems. Despite safeguards and governance arrangements, these conflicts persist, leading to tensions over land use and ownership. While carbon projects may generate profits, the benefits often accrue to external entities, with local communities unable to pursue their traditional livelihoods. This results in the appropriation of resources, further exacerbating inequalities. Additionally, carbon market projects may exacerbate existing inequalities by benefiting elite groups or external investors at the expense of local communities and marginalized populations.

***"In practice, the bottom line is that somebody else is appropriating the resources, and local people, even if they do get a share of the carbon profits from the credits that are sold on the international markets, are not necessarily going to be able to pursue the livelihoods that they did before."*** – Ian Scoones

***"When we start talking about the commodification of nature, we are not determining the markets, we are price-takers and continuously follow. They tell us that carbon markets are the same as climate finance. The narrative does not come from us, we are just reactors."*** – Yemi Katerere



# The sum of the parts is greater than the whole: how effective are carbon credits and offsetting?

## The climate change problem cannot be solved through market systems.

There is a paradox in that the problem of climate change was created through capitalism and the industrial development that underpins it. Yet we are trying to solve this problem through market mechanisms and the capitalist system that exacerbates it. There is a need for intervention to regulate carbon emissions and for a paradigm shift in climate action and development strategies in Africa, thereby moving away from market-based approaches that have proved ineffective in addressing the continent's unique challenges.

**“You will not solve the climate crisis with a market system.” – Youba Sokona**

**“And this is, this is the contradiction of the offset system. It’s a market-based system which is supposed to be compatible with the operations of capitalism. But it is the operations of capitalism that caused the climate crisis in the first place.” – Ian Scoones**

Several individuals who were interviewed challenged the significance of carbon credits. Some argued that carbon markets are ineffective in addressing climate change and are simply a way to export emissions. Offset systems simply shift environmental harms around instead of tackling the underlying issues. Furthermore, they extend efforts to shift the focus away from the actual elimination of fossil fuels.

**“If this drive to Net Zero is only achieved through exporting the problems from petro-states, or rich countries, or rich people, or rich companies, to other places through a market-based system, then you’re not necessarily dealing with climate change, you’re just redistributing the bads. And as it has always been the case, you redistribute them to poorer countries and less powerful people.” – Ian Scoones**

Carbon markets are just one policy instrument within the Paris Agreement framework and cannot substitute for the urgent need for substantial emissions reductions in high-emitting countries. The primary focus must remain on increasing ambition in both mitigation and adaptation efforts. To ensure carbon markets contribute to global climate goals, safeguards such as limiting crediting periods and allocating a portion of emissions

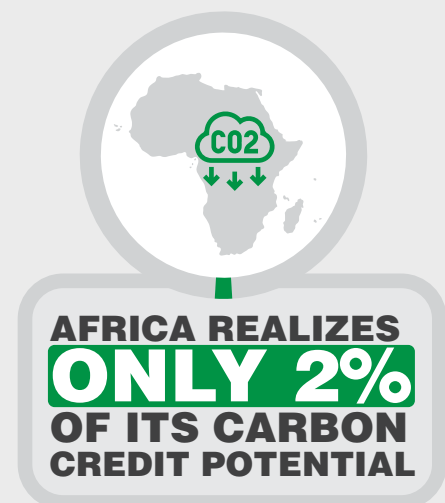
reductions for the collective benefit of the atmosphere are essential. Without robust commitments from all parties, however, carbon markets risk becoming a means of outsourcing responsibilities to others rather than driving meaningful climate action.

**“I don’t think carbon credits are the solution to the crisis. We need to look at the underlying causes of the crisis. We should never look at carbon credits as representing a right to pollute.” – Yemi Katerere**

**Carbon offsets should be a mechanism used in addition to other emissions reduction targets and not the focus of net-zero strategies.** High-emitting countries and companies should first focus on emissions reduction strategies before offsetting, which should be used as a last resort for hard to abate industries.

**“Every country and corporation should be moving towards net zero by reducing the inefficiencies in production systems. They must reduce emissions until you get to ones that are difficult to get rid of, and then those should be given the ‘right to pollute.’” – Yemi Katerere**

**“You must know what your emissions are, reduce your emissions internally, then for the portion that you cannot, then you can utilize carbon credits for the residual credits left.” – Oliver Granville**



# Leveraging and enhancing carbon markets' efficacy in Africa

**Climate change and development are linked, however African countries are prioritizing development.**

African countries are prioritizing their development goals over climate concerns as they work towards improving living conditions for their populations. There is a strong link between climate change and development, as industrial progress leads to higher carbon emissions, and climate-change impacts hinder development efforts. In order to address the negative impacts of climate change that result from development, a significant overhaul of productive systems is required. Nevertheless, African countries face various structural obstacles that limit their ability to shift towards low-carbon production systems. Therefore, it is crucial to ensure that development strategies are in line with climate objectives. Addressing development challenges inherently helps to strengthen climate resilience. In Central Africa, Cameroon, the Democratic Republic of Congo (DRC), and Equatorial Guinea are the only countries that have explicitly included commitments to exploring carbon pricing as one of their climate strategies in their NDCs. Cameroon is integrating carbon pricing into its NDC and 2018 National REDD+ Strategy. Additionally, the country is promoting environmental fiscal reforms. It has proposed introducing a carbon tax in its 2024 fiscal policy framework, signalling a proactive approach to leveraging market-based mechanisms for emissions reductions and sustainable development (UNFCCC, 2024CA). Similarly, several West African countries have committed to carbon pricing in order to reduce their emissions. Côte d'Ivoire, Ghana, Guinea-Bissau, Liberia, and Sierra Leone have mentioned carbon pricing in their NDCs, while Benin, Côte d'Ivoire, Gambia, Nigeria, Senegal, and Sierra Leone have expressed an interest in adopting carbon pricing instruments, with Nigeria's 2050 Long-Term Vision recognizing carbon taxes as a key decarbonization measure (UNFCCC, 2024WA).

***"Things get much more complex because climate is an integral part of development, and Africa is paying for climate change themselves." – Youba Sokona***

***"When there are problems of poverty, climate change is more of a luxury." – Daniel Lemptey***

***"It's about achieving a cheaper emissions reduction potential that contributes to global climate change. Achieving sustainable development in Africa is a gateway to achieving this, and we ought to be supported to achieve this while developed countries are making efforts to do their part." – Daniel Lemptey***

## Capacity and resource deficits.

Many African countries lack the institutional capacity, technical expertise, and financial resources needed to participate effectively in voluntary carbon markets. This includes challenges related to carbon accounting, project development, monitoring and verification, and regulatory compliance. To address these gaps, the Integrity Council for Voluntary Carbon Markets (ICVCM) introduced Core Carbon Principles (CCPs), aiming to enhance project integrity and build trust in the market.<sup>22</sup>

African governments must navigate power imbalances, address historical injustices, and promote inclusive governance structures to ensure that carbon market initiatives benefit all stakeholders, especially marginalized and vulnerable populations. As it stands, there is no evidence to suggest that African governments have the skills, resources, knowledge or expertise to navigate international dynamics and participate equally in carbon markets.

Civil society plays a vital role in promoting transparency and safeguarding equity in carbon markets. Local civil society organizations must be empowered through targeted capacity-building initiatives to monitor and address practices that could compromise climate goals or perpetuate inequalities. By amplifying marginalized voices and fostering accountability, civil society can challenge policies and actions that undermine the integrity of carbon markets.

Strengthening civil society engagement, in collaboration with regional networks, ensures that both developed and developing governments are held to account. Such efforts help ensure that carbon markets are aligned with principles of justice and sustainability, transforming them into tools that benefit communities and the climate alike. By bridging the gap between policy and practice, civil society drives inclusive solutions, reinforcing trust and integrity in global climate action.

<sup>22</sup> [ACMI \(2024\)](#)

**Standard-setting groups, such as Verra, should shift from a focus on the technical requirements of additionality and permanence to other social requirements.**

Many standard-setting companies are more proficient in carbon-accounting than on-the-ground social assessments and would benefit from improving their capacity in understanding the social consequences of their carbon projects. There is a need for clearer frameworks to ensure social justice, as well as community participation and sustainable development strategies, to ensure equitable participation in carbon markets. These could involve efforts to carry out detailed social assessments that analyse different minorities/groups (e.g. based on gender, ethnicity, age, wealth) in detail in order to ensure a clear understanding of the winners and losers.

***“And that’s where these new standards need to come in to make sure that genuinely any project assessment has a full social, environmental, and other form of assessment that makes sure that local communities have been involved in the design of the project.” – Ian Scoones***

***“That it isn’t just negotiated with the local chief, that there is a proper analysis of people of different genders, different ethnicities, different ages, different wealth groups and so on. So that you get a sense of who’s going to lose and who’s going to gain from these projects and a proper detailed social assessment.” – Ian Scoones***

**There is a need for greater transparency and accountability to improve carbon markets and reduce power imbalances.**

Transparency is a huge issue limiting the ability of carbon credit suppliers and local communities to make fair and just deals based on knowledge and data. Carbon-trading standard-setting companies do not make their data public, undermining integrity. In addition, the communities involved may not understand what they are getting into.<sup>23</sup>

**African countries must develop a knowledge and understanding of carbon markets to be able to influence the market and set their own agendas.** Ghana has introduced the Ghana Carbon Registry (GCR), an online platform developed by the Ghana Carbon Market Office (CMO) to verify and track greenhouse gas reductions and carbon credits. This transactional registry monitors the authorization, transfer and use of ITMOs, and may link up with other countries’ registries where feasible. Establishing a registry for tracking Article 6 transactions also prompts governments to choose between creating an independent registry for these activities and transitioning to a national accounting system that integrates multiple data-management platforms.

***“The issue of transparency is critical – it’s not there. The language used is a barrier that excludes communities with technical jargon so that they sign deals without realizing the consequences. How do we avoid these issues and become equal partners?” – Yemi Katerere***

***“Do communities really understand what they are giving away? Farmers may not actually understand how the investments work and will be in poverty later. The success of projects depends on how farmers are integrated into the project from the beginning.” – Daniel Lamptey***

***“With the VCM, governments have limited control. To enhance integrity issues, we need enhanced accounting and data.” – Daniel Lamptey***

<sup>23</sup> [The Ghana Carbon Registry](#)

### **Empowerment strategies, safeguards and protecting livelihoods.**

Governments and companies should pursue empowerment strategies by focusing on knowledge building, the adoption of technology, and capacity-building. Community engagement and regulatory frameworks are required to protect local rights and ensure equitable outcomes. Governments should prioritize integrating livelihoods into carbon projects so that nature-based solutions do not prevent communities from economic activity, and alternative livelihood activities are created. Nigeria has one of the world's highest deforestation rates, with less than 10% forest cover. Key drivers include agriculture, fuelwood demand, illegal logging, and resource exploration. Since 2010, the UN-REDD Programme has supported Nigeria's forest conservation and climate efforts, benefiting over 300 households in 21 communities. The program promotes sustainable land management, reforestation, and improved agricultural practices, such as cassava-processing and sustainable cocoa-cultivation, which have boosted household incomes by at least 10% in some areas.<sup>24</sup> This demonstrates the potential of livelihood-focused climate initiatives to drive both environmental and economic benefits.

***“How can you take advantage of something when you haven't set the agenda?” – Youba Sokona***

***“How can you make them [carbon markets] more equitable? If one made the argument that within these integrity mechanisms one also had requirements for justice for those who were subject to these projects, that there were rights, environmental and social assessments, so that people don't get negatively affected by these projects etc.” – Ian Scoones***

### **Africa stands to gain, but only if we 'dance to our own tune'.**

Participating in VCM presents economic opportunities for African countries by monetizing carbon sequestration and emissions reduction activities. Revenue generated from carbon credits can be invested in sustainable development projects, renewable energy initiatives, and poverty alleviation efforts, thereby contributing to economic growth and resilience. However, these benefits can only be gained if African countries assert themselves. The interviews have highlighted the need for Africa to have a unified voice ensuring that our participation in VCMs is on our terms and guarantees that our needs are met.

African governments must adopt a unified and strong front that enables negotiations for fair and equitable terms of engagement within the market. This may involve holding Western countries accountable for their emissions, developing strict regulations to ensure local communities are protected, and pushing the West to make good on its promises of financial support.



<sup>24</sup> UN-REDD Programme. (2019, May 28). [Community-based REDD+ Projects in Iko Esai, Nigeria.](#)

**BOX 3**

## Article 6 in Africa and Ghana's Market

Article 6 of the Paris Agreement provides a framework for international collaboration to reduce carbon emissions. It offers two mechanisms: one enabling countries and companies to trade carbon offsets, and another fostering cooperative approaches to achieve their nationally determined contributions (NDCs). These pathways support the global effort to mitigate greenhouse gas emissions while integrating market and non-market solutions into climate action strategies. The article outlines methods by which countries can engage in voluntary cooperation to achieve their climate objectives. This facilitates international collaboration to address climate change and secure financial assistance for developing countries.

As of April 2023, several African nations have been making significant progress in Article 6 preparations, focusing on developing the necessary legal frameworks, procedures, and infrastructure. A key development is the establishment of national registries and institutional frameworks. For instance, Ghana has introduced the Ghana Carbon Registry (GCR), an online platform developed by the Carbon Market Office (CMO) to verify and track greenhouse gas reductions and carbon credits. This transactional registry monitors the authorization, transfer and use of ITMOs, and may link with other countries' registries where feasible. Establishing a registry for tracking Article 6 transactions also prompts governments to choose between creating an independent registry for these activities or transitioning to a national accounting system that integrates multiple data-management platforms. The country's carbon-credit supply is projected to reach 33 million tons in 2023, potentially unlocking \$500 million. This includes 22 million tons from energy efficiency, 8.9 million from natural sources, and 2.1 million from agriculture and livestock, with strong potential for future growth.<sup>25</sup> To date, 35 project Mitigation Activity Identification Number (MIDs) have been issued on the GCR, with nine fully onboard.

Under Article 6.2, several African countries have entered into bilateral cooperation agreements. Ghana, for instance, has MOUs with Singapore for water purification, clean cookstoves and green mobility<sup>26</sup>. Additionally, Ghana and Switzerland have authorized two Article 6 projects in sustainable agriculture and waste composting, with a total investment of \$100 million and a carbon value of \$29 million.<sup>27</sup> Ghana has also partnered with Sweden to implement a green healthcare electrification project using solar PVs, financed by \$10 million from ITMOs.<sup>28</sup> The commitments from Singapore, Sweden and Switzerland to purchase ITMOs from Ghana reflect Africa's growing role in the global carbon market.

Following COP29, the operationalization of Article 6 mechanisms has potentially unlocked new opportunities for Ghana and for Africa. Article 6.2, enabling bilateral and multilateral carbon trading, is now active, with Ghana already authorizing ITMOs. While Article 6.4 approved methodologies and removals, further guidelines, particularly for "nature-based solutions" and carbon permanence, are still under development by the supervisory body. Article 6.8 emphasized strengthening collaboration among stakeholders and leveraging the Non-Market Approaches (NMA) platform to share innovative strategies. Moving forward, post-COP29 efforts will focus on capacity building, developing robust monitoring and reporting systems, and finalizing guidance to ensure the effective operationalization of Article 6 mechanisms for Ghana and the rest of the continent. Additional challenges persist, particularly regarding pricing. There is a growing recognition that African countries must adopt a unified stance on carbon pricing and embrace a regional approach. As Mbaye Diagne noted, "It is a buyer's market, but without better organization in Africa to address issues like competition and leakage, we risk perpetuating the challenge of differentiated pricing."

Opinions on the success of Article 6 remain divided related to COP 29 outcomes. Some view it as the first significant step toward operationalizing the Paris Agreement, aligning carbon markets more closely with its goals. Others argue that it still falls short of delivering its full potential. Given the contentious history of carbon markets, Mbaye Diagne (Directeur Général, Afrique Énergie Environnement) emphasized the need for more stringent mechanisms that empower host countries with greater authority over how offsets are managed, can enable equity and accountability in their implementation. He argued: "The landscape has completely transformed compared to the Kyoto Protocol era. With the new regulations, we now have a chance to prevent investors from engaging in double counting." COP29 reached a debated compromise on registries for credit trading, introducing a dual-layer system to support countries without national registries. However, critics believe the Article 6.2 agreement lacks ambition, as its limited consequences for inconsistencies undermine efforts to establish transparency and accountability. Many argue that more stringent measures are essential to strengthen trust in carbon markets.

25 USA International Trade Administration (2024). [Ghana Energy Voluntary Carbon Markets](#).

26 Singapore National Environment Agency (2024). [Singapore And Ghana Launch First Call For Project Applications Under Implementation Agreement On Carbon Credits Cooperation](#).

27 Ghana Carbon Market Office (2023). [Ghana's Report on the Implementation of Article 6 of the Paris Agreement 2023](#).

28 *ibid.*

## Conclusions

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There is a strong expectation of significant growth in the carbon-credit market in South Africa and other African countries in the coming decade.<sup>29</sup> Technological advances, increased financing and regulatory developments will fuel this growth, opening up opportunities across various sectors, such as renewable energy and green hydrogen.

Supporting the growth of the carbon market and the broader energy transition can have positive impacts on local African communities, fostering economic opportunities and promoting equal participation in the economy. It is important for governments to set the criteria for developers to showcase their dedication to local economic development when awarding licenses or funding. As one official remarked:

***“The carbon credit market’s growth in the next ten years will require a combination of technology, finance, and regulation, with all parties involved needing to participate in its development.” – Kieran Whyte***

However, progress is still being impeded, and there is a lot of untapped potential that has yet to be realized because of several obstacles such as gaps in regulatory knowledge, limitations in capacity and various structural issues. These obstacles obscure the potential benefits of carbon markets and prevent Africa from fully capitalizing on both its market opportunities and its emissions reduction achievements. A concerning situation is developing where disparities in capacity and information are creating an environment that allows for exploitation, with minimal safeguards in place, as well as a lack of regulatory oversight akin to a “Wild West” scenario, where profit-maximization takes precedence without proper rules and accountability mechanisms governing the trade.

The transition away from fossil fuels should prioritize fairness by creating new job opportunities and offering support to communities impacted by the change in order to prevent any social disruption. Working closely with major industry emitters is necessary. Strategic policy-making, capacity-building, resource value addition, and an inclusive just-transition approach are crucial for Africa to fully harness the economic and sustainable development advantages of engaging in global carbon markets.

***“By addressing Africa’s challenges and opportunities and investing in knowledge resources and capacity-building initiatives, African countries can take their rightful place in the negotiations of the carbon market and energy transition and ensure a more sustainable future.” – Kieran Whyte***

Voluntary carbon markets represent a divisive aspect of the climate discourse, one that is often influenced by one’s stance within the climate debate. However, there is a prevailing belief that markets lacking regulatory safeguards risk exploitation, casting doubt on the integrity of the market mechanism itself. Seen primarily as a financial tool, markets are criticized for enabling the wealthy to purchase cheap offsets, allowing them to continue polluting while vulnerable communities bear the brunt of climate impacts. Equity, standards and capacity-building are often overshadowed by profit motives and quick gains. While emissions reductions are applauded, there is a tendency towards short-term thinking, neglecting the transformative potential for countries in genuine need of carbon credit benefits. It is imperative for carbon markets to transition from mere possibilities (“could” and “should”) to definitive actions (“will” and “must”), integrating political will, market incentives, capacity-building and integrity into the fabric of the trading infrastructure.

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<sup>29</sup> See: Stead, K. (2019). [South Africa launches carbon market amid high hopes.](#)

## List of interviewees

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1. Abdul-Razak Saeed- Team Lead, Environment and Climate Specialist, UNDP
2. Daniel Lamptey- Senior Program Officer EPA-Ghana
3. David Lesolle- Climatologist
4. Ian Scoones- Professorial fellow at the Institute of Development Studies
5. Jewette Masinja- Department of Metallurgy and Material Processing, University of Zambia; UNU-INRA operating unit coordinator, Zambia
6. Jonathan Amable- Senior Associate Bentsi Enchill, Letsa and Ankomah
7. Karen Olsen- Senior advisor, Impact Assessment and Adaptation Analysis UNEP Copenhagen Climate Centre
8. Kieran Whyte- Partner, Baker McKenzie
9. Linus Mofor- Senior Environmental Affairs Officer, UNECA
10. Mbaye Diagne - Article 6.4 mechanism Supervisory Board member, UNFCCC; Directeur Général Afrique **Énergie** Environnement
11. Miriam Hinostroza- UNEP Focal person
12. Oliver Glanville- Head of Programmes for the Africa Carbon Markets Initiative (AMCI) Kenya
13. Simon Anderson- Senior Fellow, IIED
14. Wisdom Ahiataku-Togobo- Former Director of Renewables, Bui Power
15. Xolisa Ngwadla- Independent Consultant- Climate Change
16. Yacob Mulugetta- Professor of Energy and Development Policy Department of Science, Technology, Engineering & Public Policy (STeAPP) University College London (UCL)
17. Yemi Katerere- Coordinator African CSO Biodiversity Alliance (ACBA)
18. Youba Sokona- Vice Chair, IPCC



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**For more information contact:**

International House  
Annie Jiage Road  
University of Ghana, Legon Campus  
Accra, Ghana.

T: +233-302-500396  
F: +233-302- 500792



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**email: [inra@unu.edu](mailto:inra@unu.edu)**

