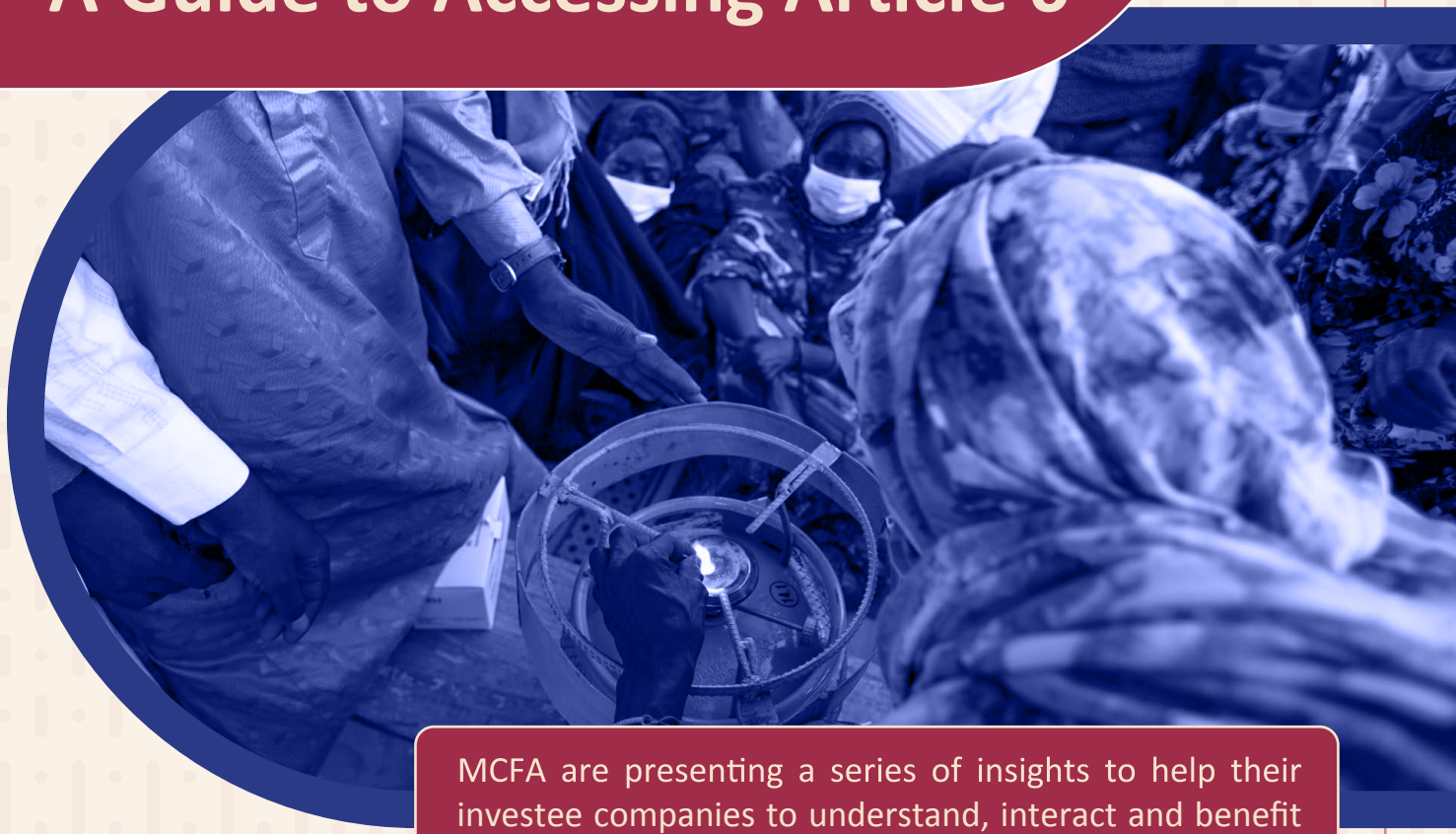
MODERN COOKING FACILITY FOR AFRICA

HAMERKOP
CLIMATE CHANGE & FINANCE

MCFA Insights:

Unlocking High-Value Carbon Credits from Clean Cooking: A Guide to Accessing Article 6

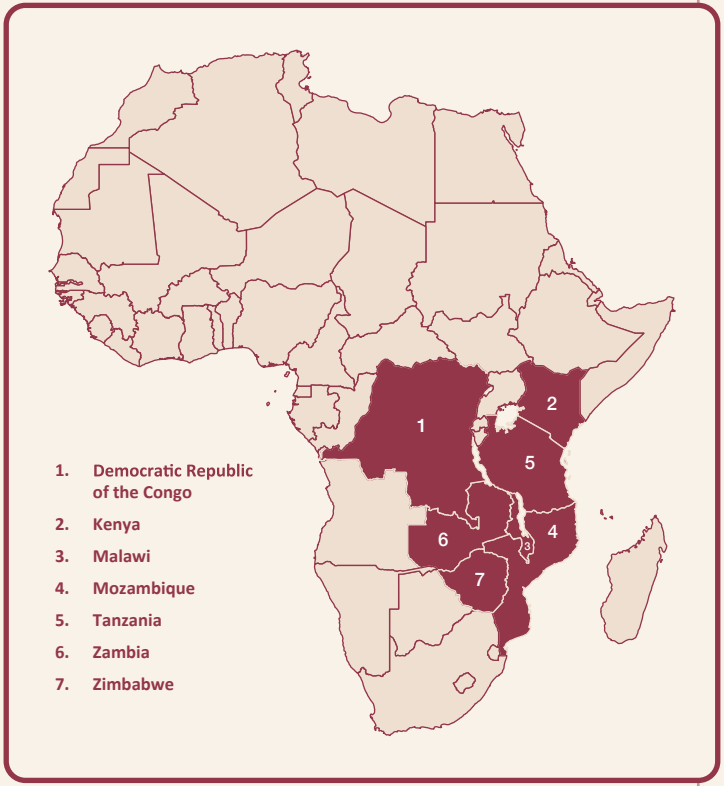


MCFA are presenting a series of insights to help their investee companies to understand, interact and benefit from carbon markets. The first of these is on the theme of Article 6. What is Article 6 and why is it important to the clean cooking sector?

Facility Manager: NEFCO

Funded by: Global Gateway; Co-funded by the European Union; Norway; Sweden Sverige

The **Modern Cooking Facility for Africa (MCFA)** is a multi-donor programme established and managed by Nefco – the Nordic Green Bank. The MCFA supports the development of new markets for the clean cooking sector and aims to accelerate access to modern and affordable cooking solutions in Sub-Saharan Africa. The programme helps companies selling higher-tier stoves in the clean cooking market to grow and scale up their businesses in the Democratic Republic of the Congo (DRC), Kenya, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe (the project countries). MCFA combines results-based financing with catalytic grant financing. The aim of MCFA funding is to function as a bridge between seed funding and carbon finance or commercial loans/equity.



MCFA supports the portfolio companies to access carbon finance, mainly through offering technical assistance services provided by Hamerkop Climate Impacts. MCFA has endorsed the Principles for Responsible Carbon Finance for Clean Cooking, which emphasise the integrity of carbon credits, transparency of information, fairness in revenue sharing throughout the value chain and the long-term sustainability of local clean cooking markets. As part of its commitment to these principles, MCFA has also endorsed the CLEAR methodology, by the Clean Cooking & Climate Consortium led by CCA.

Introduction

MCFA Insights: Unlocking High-Value Carbon Credits from Clean Cooking – A Guide to Accessing Article 6, is the first in a new series of insights developed by the MCFA to support its investee companies in navigating and benefiting from evolving carbon market opportunities. With a specific focus on Article 6 of the Paris Agreement, this guide aims to demystify the mechanisms, opportunities, and requirements that clean cooking project developers must understand to unlock high-integrity, high-value carbon credits in compliance markets.

Objectives & Contents

The objective of this report is to provide a practical, contextualised understanding of how Article 6 is reshaping the landscape of carbon finance – particularly for clean cooking initiatives. The report begins with an overview of the clean cooking sector's evolution and its increasing emphasis on credit integrity and climate impact. It then explores the emergence of Article 6, its underlying principles, and the benefits and challenges of participation. Finally, the report presents a comparative analysis of seven key African markets where MCFA operates (Kenya, Mozambique, Tanzania, Zambia, Zimbabwe, Malawi, and the Democratic Republic of the Congo), detailing each country's NDC commitments, regulatory readiness, and engagement with Article 6. This insight aims to equip stakeholders with the knowledge to engage more strategically in carbon markets and scale climate -aligned clean cooking solutions.

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SECTION 1

The current state of the clean cooking sector: a shift towards high integrity credits

1A – THE IMPORTANCE OF CLIMATE FINANCE FOR THE CLEAN COOKING SECTOR

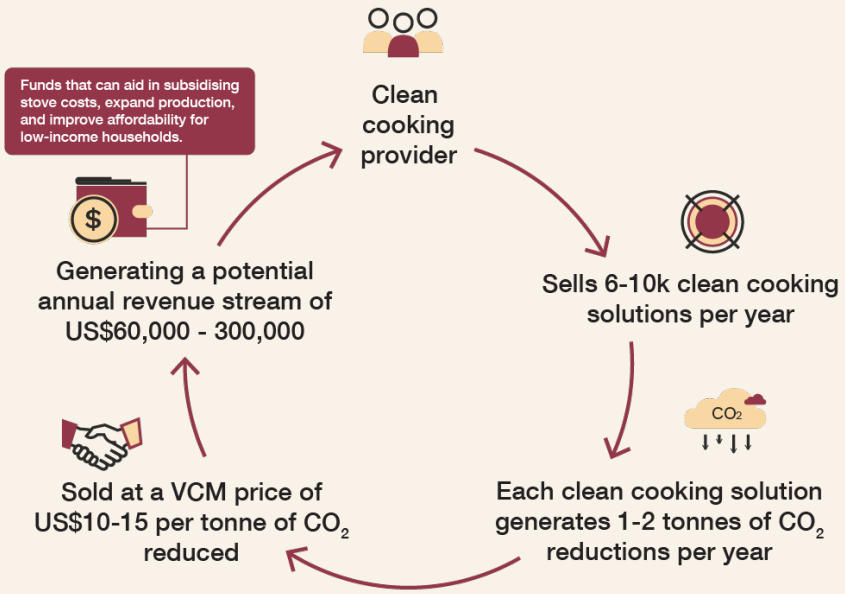
Achieving universal access to clean cooking by 2030 requires an estimated $1 billion in annual funding,[1] yet only a fraction of that currently flows into the sector. While the technology exists and policy solutions are well-known, implementation remains hampered by limited capacity, conducive enabling environments and financial barriers.

Clean cooking projects often struggle to scale due to high costs involved, making it difficult to reach the households that need these solutions most.[2] Without a significant boost in funding, millions will remain reliant on traditional cooking methods, which contribute to deforestation, air pollution, and preventable health risks such as respiratory illnesses. The burden of limited access to clean cooking falls largely on women and girls, who are most often responsible for cooking and fuel collection. This exposes them to harmful smoke and consumes time that could be spent on education, income-generating or leisure activities.

Scaling clean cooking solutions is not only critical for health and the environment, but also essential for promoting gender equality and empowering women.

The most promising mechanisms for financing clean cooking expansion is through the Voluntary Carbon Market (VCM) and rapidly emerging Paris Agreement Article 6 mechanisms.[3] Through carbon credits, cookstove project developers can monetise the emissions reductions their products generate.

Example of a clean cooking project with carbon revenues:

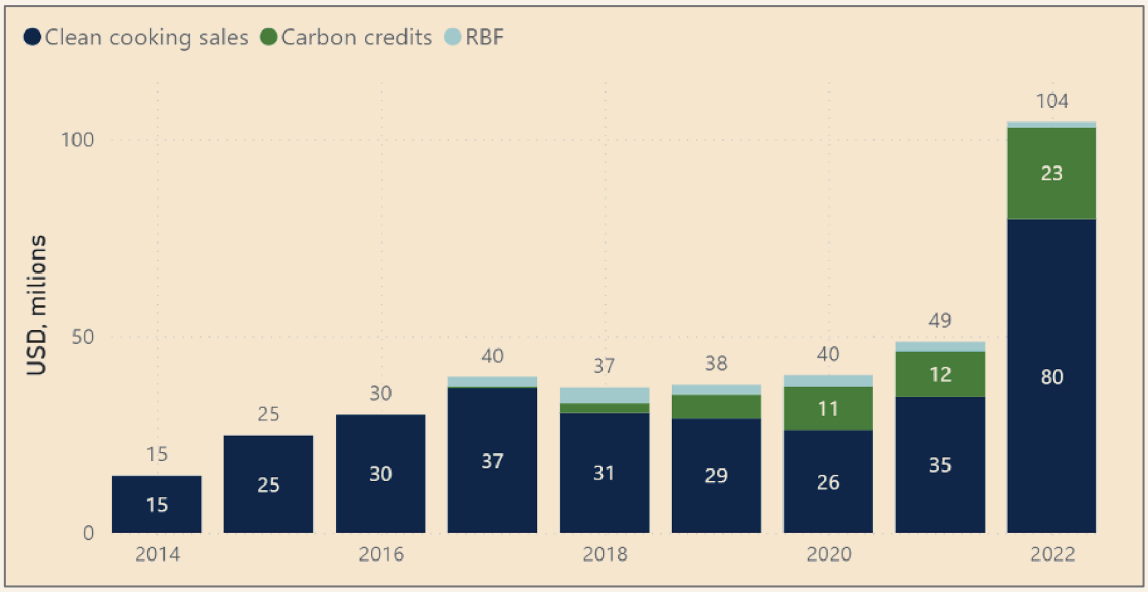


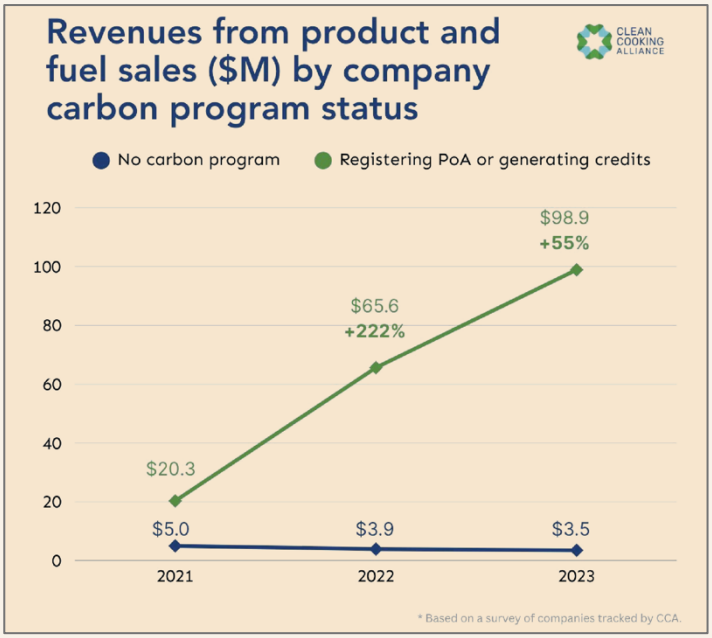
[1] Executive summary – A Vision for Clean Cooking Access for All – Analysis - IEA
[2] SustainCERT | Clean cookstoves carbon credits
[3] Can clean cookstoves ride out the carbon markets storm? | Reuters

Revenues from carbon credits among clean cooking companies are growing rapidly (Predicted 15x growth of VCM by 2030 according to Donforio et al., 2021).[4]

As of 2022 carbon revenues represented around 25% of revenue generated by clean cooking companies. With more than 50% of the market either already benefiting from or seeking carbon finance, it is becoming a key revenue for clean cooking companies.

Image source: Sector Data Archive | Clean Cooking Alliance





Carbon revenues are also unlocking new opportunities for commercial lending and other funding streams. For example, alongside revenues from the sale of stoves and/or fuels, carbon revenues significantly improve the unit economics of clean cooking enterprises (e.g., carbon finance can further drive innovation, giving companies the resources to refine technologies, improve stove durability, and enhance adoption rates). This creates

[4] Download Now: Ecosystem Marketplace's State of the Voluntary Carbon Markets 2021 - Ecosystem Marketplace

opportunities for faster growth and scale up, reaching more households currently without access to clean cooking.

However, while carbon finance has been transformational for the clean cooking sector, it is not without its challenges.

1B – CARBON MARKET AND COOKSTOVE SCRUTINY: PAVING THE WAY TO INCREASE INTEGRITY

The cookstove carbon market has faced **intense scrutiny** in recent years - with concerns from buyers and other carbon market players over **project integrity** – particularly regarding **overstated emissions reductions**, and **unreliable monitoring practices**.

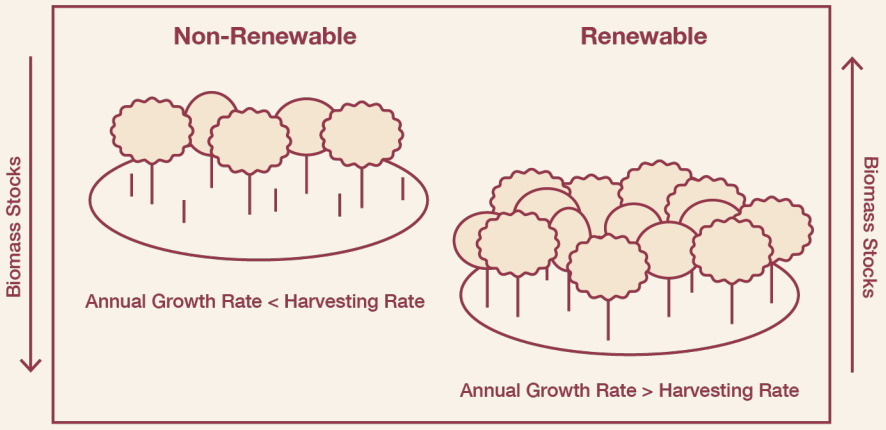
- Investigative reports and scientific studies have highlighted weaknesses in the sector, these have ranged from inflated project impact claims to challenges in verifying real-world benefits, leading to increased buyer scepticism. As a result: demand for cookstove carbon credits has declined and credit prices have been suppressed.

This scepticism includes concerns around data accuracy and the reliability of monitoring and data collection. For instance, emissions sensors can be subject to cofounding variables when monitoring short periods, inaccuracies and difficulties in verification can occur when manual data collection is commonplace, and household surveys (while easier to deploy) are not as accurate as sensor-based monitors – which can make it difficult to accurately monitor fuel usage which is crucial for understanding health and environmental impacts (co-benefits).

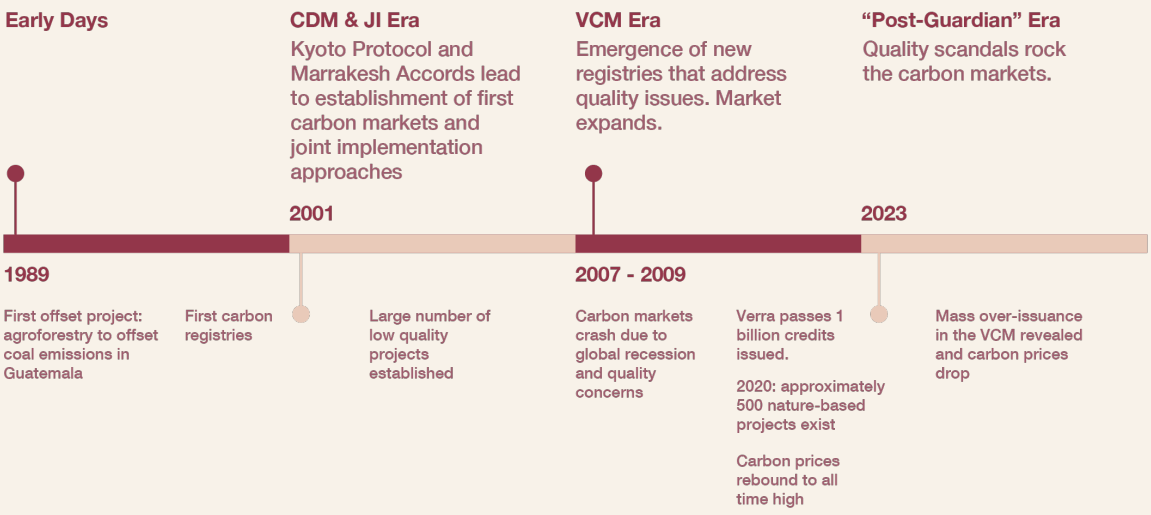
A point of particular contention has been the fraction of non-renewable biomass (**fNRB**).[5] The development of this key parameter has been a long process and is based on the fact that forest cover reduces if wood is harvested faster than the normal growth rates of trees. The fNRB metric aims to ensure carbon credits are only issued when there is a verifiable reduction in the use of non-renewable biomass such as woodfuel, thereby avoiding the overestimation of emissions reductions.

Historically, fNRB values used in clean cooking projects were based on UNFCCC-approved methodologies, such as CDM Tool 30, which were widely accepted and standardised across the sector. However, debate has grown around their accuracy. Some stakeholders argue that these earlier default values were overly generous and contributed to over-crediting,[6] while others believe recent approaches have become too conservative, undermining the financial viability of projects by significantly reducing the number of credits issued.[7]

[5] fNRB: the Critical Factor Driving Over-crediting Risk in Cookstove Projects | BeZero Carbon
[6] CCA Statement on the CDM Executive Board's Decision on fNRB.
[7] UNFCCC Public Inputs. Response to the new fNRB values by Modelling Fuelwood Savings Scenarios (MoFuSS).



A defining moment came with The Guardian's exposé, which questioned the credibility of various clean cooking carbon projects and triggered a wave of public scrutiny. This ushered in what some now call the "**Post-Guardian Era**"—a period characterised by heightened scepticism and market turbulence.[8] Further criticism followed with a Nature Sustainability study[9] that raised concerns over the accuracy of emissions reduction estimates in certain cookstove projects. Though it is worth noting that aspects of this study were contested by sector stakeholders, who questioned the assumptions and generalisations used in the analysis.[10]



While these critiques have shaken confidence; they are also catalysing much-needed reform. The clean cooking sector is now under significant pressure to rebuild trust by advancing high-integrity projects rooted in robust data, transparent methodologies, and independently verifiable outcomes. In this context, the treatment of fNRB has become a central issue.

In response, the Gold Standard for the Global Goals ("Gold Standard") recently announced major changes to how fNRB should be determined. From 2026 onwards, only the following methods will be eligible:

1. MoFuSS (Modelling Fuelwood Saving Scenario) outputs.
2. An updated CDM Tool 33, if approved by the CDM Executive Board.

[8] Renoster | LinkedIn.
[9] Pervasive over-crediting from cookstove offset methodologies | Nature Sustainability
[10] Calyx Global. The Guardian: Are they right or wrong?

3. New PACK-A6.4-approved methodologies developed under the Paris Agreement Article 6.4 mechanism.

Previously accepted tools such as CDM Tool 30 will no longer be valid for design certification or monitoring periods post-2025.

These developments mark a pivotal shift toward improved data quality and methodological consistency. As integrity becomes the new benchmark, the sector may enter a "race to the top" in which only the most credible, high-impact projects thrive – potentially commanding a pricing premium for their verifiable benefits. This transition could ultimately help to stabilise the market, to support long-term climate financing and ensure that carbon finance serves as a genuine catalyst for delivering clean cooking solutions with both environmental and social value.

The question that remains is not whether reform is necessary, but: **how the sector can ensure that carbon finance delivers measurable and equitable outcomes**, especially for the communities most in need.

1C – INTEGRITY INITIATIVES & THE FUTURE OF THE CLEAN COOKING SECTOR

The rise of integrity-focused initiatives such as the Integrity Council for the Voluntary Carbon Market **(ICVCM)**,[11] the Voluntary Carbon Markets Integrity Initiative **(VCMI)**,[12] and the International Carbon Reduction and Offset Alliance **(ICROA)**[13] marks a significant shift in the carbon market world. These bodies are setting stricter benchmarks to restore credibility and drive real climate impact. By establishing robust guidelines, they aim to weed out low-quality projects and ensure carbon credits deliver genuine, measurable benefits. This movement is redefining Carbon markets, making transparency and rigorous monitoring non-negotiable for project developers and buyers alike.

A major turning point within the clean cooking sector came with the ICVCM's decision, in February 2025, to not approve several widely used cookstove methodologies that were deemed **insufficiently rigorous**.[14] Nearly two-thirds of cookstove credits circulating on the market at the end of 2024 were linked to these outdated approaches, and therefore no longer qualified for the **Core Carbon Principles (CCP) label** unless they transition to more stringent monitoring and fuel consumption calculations. However, three cookstove methodologies – the **Gold Standard's Metered and measured methodology and TPDDTEC, and Verra's VM0050** – received approval. These will remain eligible for CCP-labelling provided they adopt science-backed standards related to biomass use, charcoal emissions, and fuel consumption verification.[15]

This evolving landscape reflects a broader sectoral push towards transparency, integrity, and accountability. The IEA Summit on Clean Cooking in Africa, held last year, underscored these values, introducing the Principles for Responsible Carbon Markets,[16] which call for real, measurable, and equitable climate benefits, especially in vulnerable communities. In parallel, the CLEAR methodology[17] – a collaborative effort by the Clean Cooking Alliance (CCA) and the CCA-led Clean Cooking and Climate Consortium (4C) to develop a science-based, field-ready standard for monitoring fuel use and emissions – is under development to address long-standing credibility challenges in the sector. A revised version of the CLEAR methodology was submitted to the UNFCCC for review and approval under the Article 6.4 mechanism in May 2025.[18]

[11] ICVCM Leading the way to a high integrity Voluntary Carbon Market
[12] VCMI - Driving real-world climate action
[13] ICROA | Accrediting Best Practice in Carbon Offsetting
[14] ICVCM hits on promising recipe for cookstoves methodologies - Carbon Market Watch
[15] Integrity Council approves three cookstove methodologies
[16] The Principles for Responsible Carbon Finance in Clean Cooking.
[17] CCA and 4C - CLEAR Methodology.
[18] Clean Cooking Alliance updates on CLEAR Methodology.

- Further momentum has come from the release of the Buyer's Guide to High-Integrity Carbon Credits,[19] which urges purchasers to favour projects with conservative assumptions, verifiable co-benefits, and rigorous MRV systems. Clean cooking projects that align with these evolving expectation are likely to become eligible for premium pricing, especially those that invest early in strong data systems and are conservative where they cannot be precise.

This decision forces the market to pivot towards higher-integrity projects – does this signal that the era of lenient carbon accounting is over?

In response to growing scrutiny, the push for higher integrity in carbon markets has intensified, bringing with it not only stronger standards but also the opening of new market opportunities. This shift has created increased potential demand for cookstove credits from high integrity projects, as buyers seek high-quality, verifiable mitigation outcomes. Interestingly, many of the institutions now leading the charge for high-integrity carbon markets – such as ICVCM, VCMI, and ICROA – are building on the foundations laid by earlier mechanisms like the Clean Development Mechanism (CDM) and Joint Implementation (JI). While these earlier frameworks were pivotal in pioneering project-based carbon finance, today's standards reflect how science, data availability, and monitoring technologies have advanced. This evolution is helping shape the next generation of both compliance and voluntary markets, with methodologies that incorporate more refined assumptions and more robust evidence—ensuring that only the most credible credits gain market confidence.

As an example of this ongoing evolution, Article 6 of the Paris Agreement is emerging within a landscape of heightened scrutiny and lessons learned from past carbon finance mechanisms such as the CDM and JI. Article 6 aims to create a more structured and accountable international carbon market, but it does so through two distinct pathways: Article 6.2, which enables bilateral cooperation between countries using internationally transferred mitigation outcomes (ITMOs), and Article 6.4, which establishes a centralised mechanism akin to a next-generation CDM under UNFCCC oversight.

While both pathways require host country authorisation and aim to support environmental integrity, their approaches to transparency and quality assurance differ. Article 6.4 is expected to incorporate standardised methodologies, third-party validation, and centralised governance, features aligned with the high-integrity expectations of both compliance and voluntary markets. However, it does not, by itself, prevent double counting; that depends on how countries apply corresponding adjustments and manage their national emissions inventories. In contrast, Article 6.2 allows for more flexible, country-driven implementation, with the robustness of outcomes depending on the integrity of national systems, the conservativeness of methodologies used, and the transparency of reporting. In this context, host country authorisation under either mechanism serves more as an administrative requirement than a guarantee of quality or environmental integrity.[20]

This flexibility means that even when a project is authorised and follows a recognised methodology, its actual integrity hinges on implementation choices – from baseline setting to data sources and emission factor selection. As seen in the voluntary market, these decisions significantly affect the quality of credits issued. This is particularly relevant for sectors like clean cooking, where permanence, leakage, and quantification accuracy remain challenging to measure and verify.

To address these risks, Article 6, as a whole, is incorporating more robust MRV systems, host country approvals, and corresponding adjustments to ensure environmental integrity and transparency. There are also efforts underway to integrate emerging tools such as real-time data capture, digital MRV, and remote sensing into new methodologies.

Ultimately, Article 6 introduces the potential for stronger international coordination in carbon finance, but whether it sets a global benchmark for integrity will depend on implementation. While Article 6.4 includes more

[19] Clean Cooking Alliance - Buyer's Guide to High-Quality Cookstove Carbon Credits.
[20] Climate Playbook. Don't Fall Into the Trap: Why Credits with Government Approval Aren't Automatically Higher Quality.

clearly defined quality and oversight requirements, Article 6.2 gives host countries significant discretion to authorise activities for transfer as ITMOs, which can lead to varying levels of environmental integrity. This variability is particularly relevant for sectors like clean cooking, where scalable and inclusive mitigation requires both flexibility and credibility. Success will depend not only on the rules themselves, but on how transparently and responsibly those rules are interpreted and applied in practice.

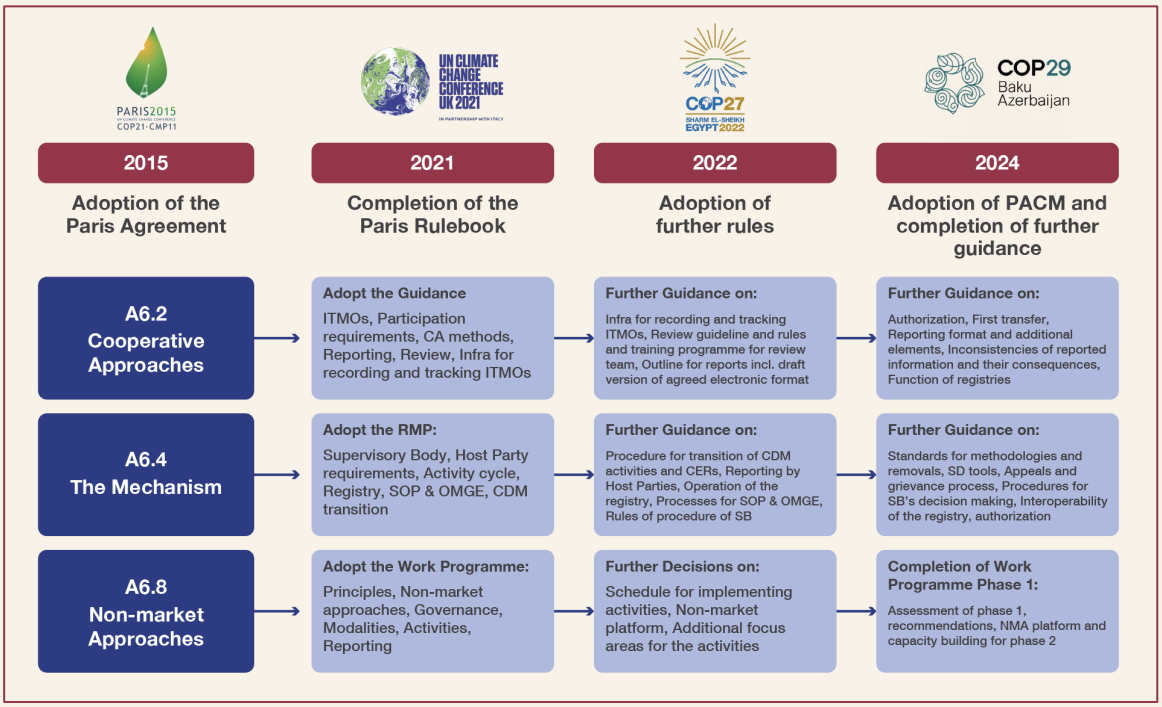
SECTION 2
Carbon market developments: the rise of Article 6

2A – ARTICLE 6 DEBRIEF

The principles of Article 6 were established in the Paris Agreement in 2015 though the specific rules and modalities for implementing it were developed through subsequent negotiations. A key milestone came at COP26 in Glasgow (2021), where countries agreed on a package of decisions that set out the operational guidelines for both Article 6.2 (cooperative approaches) and Article 6.4, the centralised crediting mechanism under UNFCCC oversight. Progress continued at COP29 in Baku (2024), which marked a breakthrough in the operationalisation of the Article 6.4 mechanism, now formally known as the **Paris Agreement Crediting Mechanism (PACM)**.

PACM will enable participating countries and authorised entities to generate high-integrity carbon credits through verified mitigation activities, with strict safeguards against double counting, and a stronger emphasis on transparency and environmental integrity. The first PACM methodologies are expected to be approved by the Article 6.4 Supervisory Body by the end of 2025,[21] paving the way for credit issuance under the Paris Agreement framework.

9-year journey towards the full operationalisation of Article 6[22]



Article 6 of the Paris Agreement is a game-changer for international carbon markets, creating new pathways for countries to collaborate in meeting their climate targets. By allowing the transfer of mitigation outcomes between nations, Article 6 makes it possible to achieve emissions reductions more efficiently while mobilising climate finance at scale.

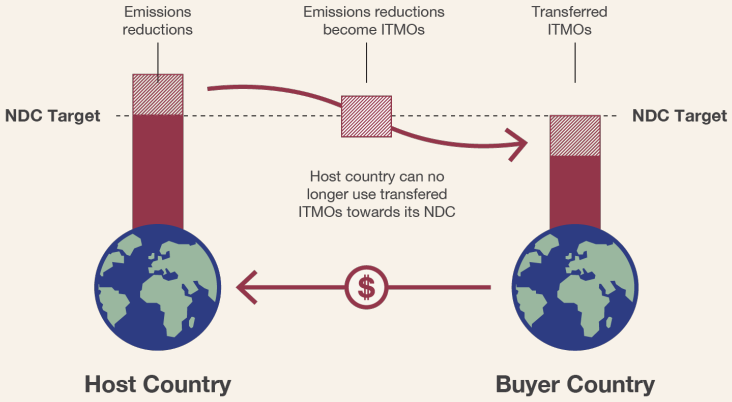
[21] Key Rules Agreed for Credible Climate Project Crediting under UN Carbon Market | UNFCCC
[22] Key Outcomes from COP29: Article 6 of the Paris Agreement

For clean cooking service providers (CSPs) and other project developers, this framework presents a potential opportunity to tap into a **higher-value carbon market**—one that is aiming to demand stricter integrity whilst offering stronger financial incentives for projects that meet the highest standards.

At its core, Article 6 is built on three guiding principles:

1. Collaboration
2. Sustainability, and
3. Environmental integrity.

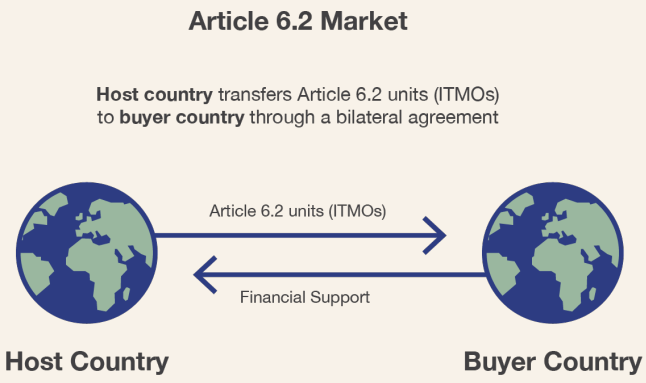
Article 6 enables countries to engage in carbon trading under clear and transparent rules while ensuring that these transactions contribute to sustainable development goals. The principle of environmental integrity is particularly crucial—**corresponding adjustments prevent double counting**, ensuring that each emission reduction is accounted for only once. This not only upholds transparency but also boosts trust in the global carbon market, making it a powerful tool for scaling up climate action.



The framework of Article 6 is divided into three key components:[23]

1. Article 6.2

Article 6.2 governs the bilateral and multilateral trading of **Internationally Transferred Mitigation Outcomes (ITMOs)**, allowing countries to structure their own agreements while adhering to strict transparency and accounting requirements.



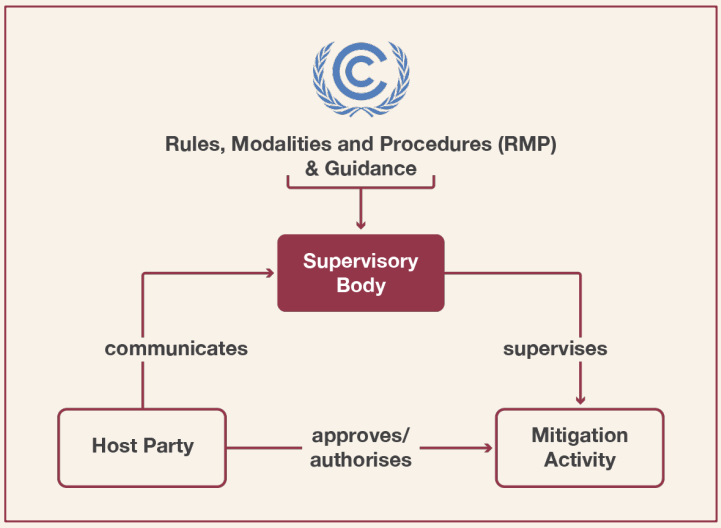
[23] Article 6 Explainer | The Nature Conservancy

While ITMOs may generally be associated with higher integrity due to host country authorisation and corresponding adjustments, whether they command a price premium in the market depends on factors such as buyer preferences, the robustness of the underlying mitigation activity, and confidence in the host country's climate governance.

2. Article 6.4

On the other hand, Article 6.4 introduces a centralised UN-supervised market mechanism, known as the **Paris Agreement Crediting Mechanism (PACM)**, which features built-in regulatory oversight, standardised methodologies, and supervisory body approval. This structure is designed to bring greater consistency, transparency, and credibility to global carbon crediting activities.

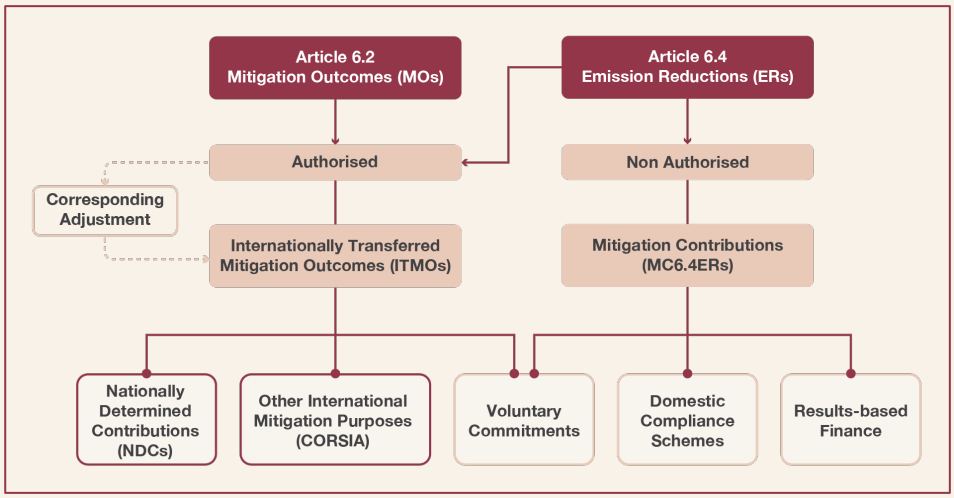
Carbon Credits		"Carbon credits" can be referred to in different ways in the Article 6 context. For simplicity, we will use Article 6 units or carbon credits as general terms, which will encompass the following concepts:
Mitigation Outcomes	1 tonne of CO_2eq	Under the Paris Agreement, the term Mitigation Outcomes replaces most forms of international carbon credits. Mitigation Outcomes generated in a country could be transferred to another country, thereby becoming Internationally Transferred Mitigation Outcomes (ITMOs).
ITMOs	1 tonne of CO_2eq	Internationally Transferred Mitigation Outcomes (Article 6.2 units)
A6.4ERs	1 tonne of CO_2eq	Article 6.4 Emission Reductions Units (Article 6.4 units)
Emissions reductions and removals	1 tonne of CO_2eq	Human interventions to mitigate climate change according to the Intergovernmental Panel on Climate Change (IPCC), which may generate Article 6 units
Mitigation contribution 6.4ER	1 tonne of CO_2eq	Credits that do not require a corresponding adjustment and are not authorized for use towards achievement of NDCs or for other internation al mitigation purposes. This new name was introduced for the first time at COP27 and applies only to Article 6.4 units.



Additionally, Article 6.4 of the Paris Agreement enables the generation of ERs that can serve different purposes depending on whether they are authorised by the host country. As illustrated in the graph below,[24] authorised 6.4 ERs can be converted into internationally transferred mitigation outcomes

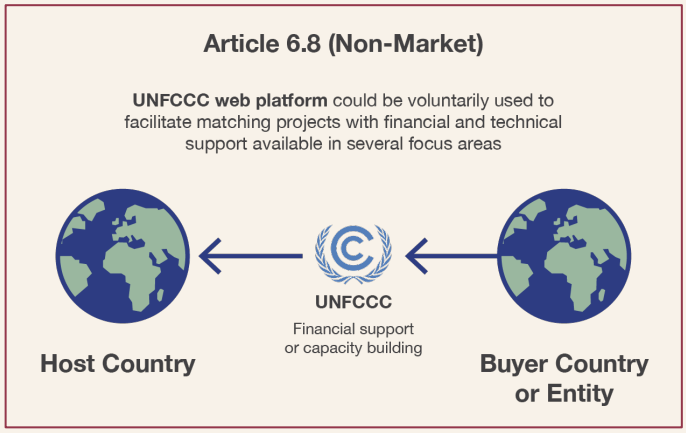
[24] Article 6: Prioritizing quality of carbon credits | Sylvera

(ITMOs), which require a corresponding adjustment and can be used toward meeting NDCs, international mitigation purposes such as CORSIA, or other compliance obligations. In contrast, non-authorised 6.4 ERs, labelled as Mitigation Contributions (MC6.4ERs) in the graph, are not subject to international transfer and do not require corresponding adjustments. These credits can still represent high-integrity mitigation and are eligible for use in voluntary climate commitments, domestic compliance schemes, or results-based finance. This dual pathway under Article 6.4 allows for the coexistence of credits with and without authorisation, offering flexibility for countries and buyers while supporting environmental integrity across both compliance and voluntary markets.



3. Article 6.8

Article 6.8 focuses on **non-market approaches**, supporting capacity building, technology transfer, and policy coordination for countries that may not engage in carbon trading but still require international cooperation to meet their climate goals.



Together, these Article 6 mechanisms reinforce the shift toward higher-integrity carbon markets, ensuring that emissions reductions are both real and additional. As countries and private sector actors align their strategies with Article 6, the demand for high-quality credits will only grow, driving investments into projects that not only cut emissions but also deliver meaningful social and environmental benefits. In this evolving landscape, adherence to transparency and integrity will be the defining factor in unlocking the full potential of international carbon trading.

2B – THE ROLE OF NDCs IN ARTICLE 6: ALIGNING CLIMATE AMBITION WITH CARBON MARKETS

Nationally Determined Contributions (NDCs) are the backbone of the Paris Agreement, representing each country's climate action plan to reduce emissions and adapt to climate change. Updated every five years, NDCs outline specific targets and measures that align with the global goal of limiting temperature rise to 1.5°C.

As the primary mechanism for tracking national climate commitments, NDCs set the stage for how countries engage in carbon markets under Article 6, determining which emissions reduction activities are likely to be eligible for international trading and how these trades affect national climate goals → a.k.a. As the foundation of international climate action, the structure of an NDC dictates whether an activity qualifies for international trading or if it must remain within national boundaries to ensure domestic climate goals are met.

A country's stance on carbon market participation often hinges on whether a mitigation activity is included in its NDC. While clean cooking is not always explicitly named in NDCs, the sector is often embedded within broader energy access, health, and deforestation mitigation goals – areas that feature prominently in many countries' commitments. As a result, clean cooking projects may still qualify for carbon trading if they can demonstrate alignment with national objectives or support conditional targets requiring international finance.

In many of the countries where the MCFA operates, the absence of specific mention of cookstoves in the NDC is not a barrier to Article 6 participation. Instead, these countries often express their intentions through related national strategies, such as energy transition plans, forest conservation initiatives, and climate resilience frameworks, which act as complementary guides to NDCs when assessing Article 6 eligibility. Importantly, some countries are now moving toward more structured approaches by creating "positive lists" or prioritised sectors that identify which mitigation activities are eligible for international cooperation. Clean cooking, particularly when tied to reduced biomass use or improved health outcomes, is increasingly seen as an area where international support can deliver measurable, high-integrity benefits that go beyond domestic baselines. Ultimately, the role of NDCs is not only to signal a country's climate ambition but also to define the rules of engagement for carbon market participation. For clean cooking project developers, understanding how national plans reflect - or indirectly support - the sector is essential for navigating

Article 6 and ensuring that projects are well-positioned for authorisation, financing, and long-term contribution to national climate goals. To help developers navigate this landscape, Section 3 of this report provides detailed, country-specific case studies, outlining how each government's NDC, regulatory framework, and Article 6 readiness influence the eligibility and viability of clean cooking projects. This context is essential for understanding where clean cooking fits into national mitigation plans and how developers can align with country priorities to unlock high-integrity carbon finance under Article 6.

2C – THE BENEFITS OF ARTICLE 6 PARTICIPATION

Unlocking Opportunity: why Article 6 matters for project developers

For clean cooking service providers (CSPs) and other project developers, Article 6 of the Paris Agreement presents an important opportunity to tap into a high-value, sovereign-backed carbon market.

- Projects authorised under Article 6.2, those aligned with a country's NDCs and approved by the host government, can qualify to generate ITMOs. While not guaranteed, these credits may be positioned for

higher market value given their alignment with national climate strategies and the additional oversight involved in the authorisation and accounting process.

- Meanwhile, Article 6.4 opens the door to a broader pool of buyers through a centralised UN-supervised carbon crediting mechanism, making it easier for developers to attract institutional investors and secure long-term demand.

By positioning themselves within these emerging frameworks, clean cooking companies can elevate the credibility and financial viability of their projects.

Beyond potential pricing advantages, Article 6 transactions are intended to signal higher integrity, a growing priority in today's carbon markets. However, integrity is not guaranteed under Article 6.2 alone, as outcomes depend heavily on how individual countries apply methodologies and enforce safeguards. In contrast, credits developed through the Article 6.4 mechanism (PACM), or those that combine 6.2 authorisation with 6.4-level rigour, are more likely to meet the stringent criteria expected by high-integrity buyers and standard-setters.

Project developers that invest in robust digital monitoring, reporting, and verification (MRV) systems, such as IoT-enabled cookstoves[25] and transparent data collection methodologies, can demonstrate **superior impact measurement**, across a range of outcomes – from reduced deforestation to gender co-benefits and customer-centric adaptation benefits. These include lower household fuel costs, reduced time spend collecting firewood, and improved health through reduced smoke exposure.

This level of accountability cannot only command a price premium but also protect projects from the volatility and reputational risks associated with the VCM. By participating in Article 6-compliant crediting mechanisms, CSPs can further **mitigate financial risks** and establish a more stable and resilient revenue stream grounded in both climate and development value.

Country-level climate finance access is another key advantage. Many developing nations have embedded clean cooking initiatives in their NDCs, making such projects well-positioned to benefit from **climate finance linked to Article 6 cooperation**. By aligning closely with host country governments, CSPs can unlock new sources of funding, tap into climate-related policy incentives, and strengthen project credibility, benefits typically unavailable under purely voluntary frameworks. This collaborative model enhances long-term viability while reinforcing alignment with national and global climate goals.

For those who act early, the benefits extend beyond immediate financial gains. The carbon market is evolving rapidly, and first-movers that align with Article 6.4-compliant crediting mechanisms now will gain a **strategic edge**. As demand for high-integrity carbon credits rises, developers who have already established Article 6-compliant projects will be best positioned to capitalise on the next phase of carbon trading – one defined by transparency, accountability, and increased ambition.

2D – ARTICLE 6 PARTICIPATION PATHWAY

Mechanism	Governance	Purpose
Article 6.2 (Paris Agreement)	UNFCCC-governed (bilateral/multilateral approaches)	Enables countries to trade ITMOs through country-to-country agreements to meet their NDCs.

[25] Internet of Things (IoT)-enabled cookstoves are improved cookstoves that are typically equipped with sensors or connectivity features that enable real-time or periodic remote monitoring of stove use and performance.

Article 6.4 (Paris Agreement)	UNFCCC-governed (via the Article 6.4 Supervisory Body)	Establishes a centralised carbon crediting mechanism (PACM) with UN oversight, designed to generate high-integrity credits aligned with host country NDCs.
Voluntary Carbon Market (VCM)	Independent standards (Verra, Gold Standard, ACR, etc.)	Allows corporations and non-state actors to purchase carbon credits to meet voluntary sustainability or climate targets.
Clean Development Mechanism (CDM)	UNFCCC-governed (Kyoto Protocol)	Allowed developed countries to invest in emission reduction projects in developing countries to meet Kyoto targets. Activities post-2020 are no longer eligible under the CDM; the mechanism is being replaced by Article 6.4.

CDM projects seeking to transition to Article 6.4 had to submit an expression of interest for transition by 31 December 2023, in accordance with CMA decision 3/CMA.3. This deadline applied to both: (i) CDM projects that wanted to continue under Article 6.4, and (ii) those intending to transfer CERs (Certified Emission Reductions) generated after 1 January 2021 into the new mechanism.

In the era of Article 6, CERs face mixed futures: CERs generated up to 2020 can still be used for specific purposes. Some countries may allow their use in NDC achievement (domestically) and voluntary buyers may still purchase them in some cases (e.g., for retirement or CSR claims), though demand is low. For CERs from 2021 onwards who opted not (or missed the deadline) to transition risk becoming stranded assets.

Aspect	**Article 6 (Paris Agreement)**	**Voluntary Carbon Market (VCM)**	**Clean Development Mechanism (CDM, Kyoto Protocol)**
Project Approval & Host Country Role	Requires host country approval and can contribute to NDCs under Article 6.2, government authorisation is mandatory.	No host country involvement needed; projects are market-driven.	Requires host country approval and oversight (NDCs did not exist under the Kyoto Protocol).
Authorisation for Trading	Credits must be authorised by the host country to become ITMOs under Article 6.2.	No government authorisation required.	Authorisations needed; fully under host country's governance/discretion.
Use of Credits	Can be used for NDC compliance or voluntary purposes.	Used mainly for corporate voluntary commitments.	Used by developed countries to meet Kyoto Protocol targets.
Corresponding Adjustments (CAs)	Mandatory for ITMOs under Article 6.2 to prevent double counting. Not required for A6.4ERs.	Not required, though some standards (e.g., VCS, GS) may allow them.	Not required, as emission reductions were accounted under Kyoto accounting rules.
Project Additionality & Baselines	Methodology-specific under Article 6.2. Under Article 6.4 (PACM) must meet stricter additionality and baseline criteria, including lock-in risk analysis.	Varies by standard. Some flexibility in additionality requirements depending on standard (e.g., Verra, GS).	Additionality required, based on UNFCCC-approved tools and validation, verification, and certification procedures.
Methodologies	Article 6.4 shall use UNFCCC-approved	Uses methodologies developed by private	Used UNFCCC-approved methodologies and tools.

	methodologies. Article 6.2 may also permit the use of approved private standards, depending on country rules.	standards (VCS, GS, ACR, etc.).	
Crediting Periods	Subject to re-evaluation against NDCs and host country climate policy.	Varies by standard (e.g., Verra allows 7-10 years with renewals).	Typically, 10 years or 3x7 years with periodic baseline revision
Transition from CDM	Some CDM projects could be transitioned into Article 6.4.	No automatic transition, though some CDM projects have migrated independently into the VCM.	Phased out post-2020. Some CDM projects seeking recognition under Article 6.4 or VCM.

For project developers looking to participate in Article 6, the first step is ensuring alignment with its core principles, starting with the establishment of a robust Monitoring, Reporting, and Verification (MRV) framework. High-integrity carbon markets demand transparency, and developers that integrate digital MRV tools, adhere to best practices from initiatives like the ICVCM, and align with Core Carbon Principles (CCPs) can position their projects for premium valuation. Beyond just compliance, these frameworks enhance credibility, making projects more attractive to sovereign buyers and institutional investors seeking reliable, high-quality mitigation outcomes.

A key step in entering the Article 6 market, particularly in Article 6.2, is obtaining a **Letter of Authorisation (LoA)** from the host country's **Designated National Authority (DNA).** A Letter of Authorisation (LoA) is the formal document issued by a host country to authorise a specific mitigation activity or ITMO transfer under Article 6. It certifies that the project aligns with the host country's NDCs and enables ITMOs to be traded internationally.

Think of the LoA as a project developer's golden ticket – certifying that a mitigation activity aligns with the host country's NDC and authorises the transfer of ITMOs.

The LoA serves as a critical tool for ensuring that all transfers meet the necessary environmental and governance standards of the host country. By providing clear terms and conditions, LoAs enhance transparency and foster confidence among market participants, governments, and private investors. Without an LoA, projects cannot participate in Article 6 transactions.

The LoA template produced by the World Bank provides a common template to be used with schedules that can be specified by each Member Country. The intention behind this template is to simplify the process of authorisation, reduce transaction costs, and allow flexibility for bilateral arrangements. It intends to be used for all authorisations under Article 6.2 and Article 6.4.

Current features of LoAs are to include:

- Project specific details: Project name, project type, proponent and its certifying program (e.g., Gold Standard Impact Registry, Verified Carbon Standard, Architecture for TREES Standard, PACM).
- Designated National Authorities (DNAs): Official body or agency within a country that oversees the approval and regulation of LoAs, manage the processes related to CAs when credits are transferred internationally, and ensure alignment with the country's NDCs.
- Authorisation uses: If credits are authorised for different purposes (e.g., international compliance, voluntary carbon market use, domestic use towards the host country's emission trading scheme).
- Authorisation period: Outlining when the authorisation begins and ends.
- NDC implications: Determining there will be a CA to the host country's inventory to avoid double counting.

LoA/Authorisation Process

The general process of obtaining an LoA/Authorisation typically involves the following steps:

1. Submission of project details to the host country's DNA, including information on alignment with NDCs and environmental integrity.
2. Comprehensive review of the project's compliance with national standards.
3. Issuance of the LoA, which triggers the application of corresponding adjustments and formalises the authorisation.

The LoA process typically involves submitting project details to the DNA, undergoing a compliance review, and, if approved, receiving formal authorization. This step is crucial not only for enabling ITMO trades but also for ensuring that corresponding adjustments (CAs) are properly applied to prevent double counting.

However, the road to authorisation is not standardised – the LoA/Authorisation process differs amongst countries. Some, like Ghana, implement a pre-authorisation phase, evaluating projects against a predefined eligibility list before granting approval. Others, like Switzerland, require an Expression of Interest (EOI) and pre-screening before engaging in bilateral agreements.

These variations mean that project developers must engage early with host country authorities, understand local requirements, and tailor their approach accordingly.

CONCLUSION

Though carbon finance has become a critical enabler for clean cooking project, unlocking essential revenue for scale-up and long-term sustainability, the sector has faced increasing scrutiny in recent years. Much of this attention stems not from deliberate misrepresentation, but from legitimate questions around whether earlier methodologies and assumptions (e.g., additionality tools, fNRB estimates, or baseline settings) were sufficiently conservative or fit-for-purpose considering evolving expectations for climate impact. As standards shift, so too has the sector, moving toward more rigorous, science-based approaches and tightening Monitoring, Reporting, and Verification (MRV) practices to enhance credibility and integrity.

In parallel, Article 6 of the Paris Agreement has introduced a new framework for international carbon trading between countries. It offers a compliance-driven alternative to the VCM, grounded in transparency and high-integrity principles. Article 6.2 enables bilateral or multilateral transfers of ITMOs, governed by national arrangements and subject to strict accounting rules, including mandatory Corresponding Adjustments to avoid double counting. Article 6.4, by contrast, establishes a UN-supervised, centralised mechanism, known as PACM, which incorporates standardised methodologies, UN-accredited verification, and governance oversight.

For CSPs, Article 6 presents both opportunity and challenge. Article 6 opens the door to a new pool of buyers – primarily governments seeking to meet their NDCs – but also introduces more rigorous eligibility criteria, host country approvals, such as Letters of Authorisation (LoAs), and potentially greater scrutiny of project assumptions. Early engagement with host country governments, alignment with national climate strategies, and preparation for country-specific processes will be essential for CSPs looking to benefit from either 6.2 cooperative approaches or participation in the 6.4 mechanism.

Ultimately, success in the Article 6 landscape will require more than technical compliance, it will require a shift toward full transparency, conservative assumptions, and credible delivery of both climate and development benefits. Clean cooking projects that embrace this new standard of integrity will be best positioned to access premium markets and long-term demand under the Paris Agreement framework.

SECTION 3
Country-level Article 6 Frameworks: A Case Study of MCFA countries

3A – COMPARATIVE SUMMARY

Category	Democratic Republic of Congo	Kenya	Malawi	Mozambique	Tanzania	Zambia	Zimbabwe
NDC Commitments (Relevant to Clean Cooking)	Targets 21% GHG reduction by 2030 (19% conditional, 2% unconditional). Promotes LPG and electricity for cooking. Increase use of ICS, reduce reliance on traditional biomass Develop alternatives to wood energy, protect forests.	Target: Reduce GHG emissions by 32% by 2030. Includes clean cooking as part of the energy sector mitigation strategies. Promotes LPG, ethanol, and improved cookstoves. Strong focus on SDG 7 (energy access).	Target 6% unconditional and 45% conditional GHG reduction by 2040. Includes unconditional promotion and adoption of efficient charcoal and wood stoves and efficient charcoal production technologies Emphasises need for alternative energy solutions and sustainable forestry management	Target: Reduce GHG emissions by 40 $MtCO_2e$ by 2030. Emphasis on renewable energy and energy efficiency improvements. Indirect references to clean cooking through forest conservation and biomass management.	Target: Reduce GHG emissions by 30-35% by 2030. Includes clean cooking technologies in mitigation strategies. Prioritises improved cookstoves, LPG expansion, and fuel efficiency.	Target: 25-47% GHG reduction by 2030 (conditional on support). Clean cooking indirectly referenced through renewable energy promotion. Policies to reduce biomass reliance.	Target: 22.08% domestic ambition in NDC2, but halted in NDC3.0. Focus on energy efficiency in agriculture, domestic and manufacturing sectors. Indirect link to clean cooking through energy efficiency goals.

Regulatory Framework / Carbon Market Participation	Carbon Market Regulatory Authority established in 2023. DNA: Ministry of Environment and Sustainable Development. Carbon tax on industrial emissions proposed for 2026. Electricity Law amended in 2025 to support renewables and rural electrification. Clean cooking roadmap launched with CAFI to promote LPG and efficient stoves	Carbon Market Framework in place. Clear LoA process with defined steps. Designated National Authority (DNA): Climate Change Directorate (CCD). Active participation in both compliance and voluntary carbon markets.	Carbon Market Framework finalised and approved in July 2025. LoAs required post-validation and Cas applied at first ITMO transfer. DNA: Ministry of Natural Resources and Climate Change (MNRCC). National Energy Policy (2018) and Renewable Energy Strategy support clean, reliable energy access. Energy Compact targets 70% electricity access and 75% clean cooking coverage by 2030–2031.	Carbon Market Framework operational since 2023. DNA: Ministry of Land and Environment. Framework defines LoA procedures and requirements for carbon project approval. Active in voluntary and compliance markets.	Carbon Trading Guidelines (2022) regulate participation. DNA: Vice President's Office – Division of Environment. Structured LoA process. Defined regulations for voluntary and compliance markets.	Carbon Market Framework in development. DNA: Ministry of Green Economy and Environment. LoA process outlined with no-objection and authorization stages. Aligns with sustainable development goals.	Carbon Trading Framework established in 2023. DNA: Climate Change Management Department, Ministry of Environment. LoA process defined with detailed application, concept note, and project document phases. Fees and timelines clearly specified.
Article 6 Participation	Article 6 regulations in development. No LoAs issued yet. Clean cooking projects (e.g., LPG, improved stoves) seen as strong candidates for future LoAs. Robust framework needed to enable participation and access international carbon finance.	Bilateral Agreements (BAs): Switzerland, Sweden, and UAE. 14 projects approved. Active LoA issuance. Corresponding adjustments included. Well-established Article 6 ecosystem.	BA signed with Switzerland in 2022. First LoA issued for clean cookstove project by EKI Energy Services Ltd. Over 25,000 improved cookstoves distributed; project targets 1.4M tCO_2e in credits. Held first carbon credit auction in 2024, offering 1.5M	BA with Switzerland. 3 projects approved. Actively issuing LoAs. Participation in Article 6.2 and 6.4.	No official BAs signed yet. Some voluntary market projects exploring Article 6 transition. DNA is building capacity for Article 6 participation.	BAs with Norway, Singapore, and Sweden. 14 PAs and 5 PoAs submitted under A6.4. Clear LoA process defined. TCC MIT involved in project authorization.	No official BAs yet. Some voluntary carbon market projects considering Article 6 transition. DNA is building capacity for A6 participation. No LoAs issued yet.

			reductions from clean cooking.				
Fees and Benefit-Sharing Plans / Mechanisms	Carbon market oversight managed by ARMCA, established in 2023. Carbon tax to be introduced in 2026. Decrees and ordinances adopted to enable Article 6 participation and regulate benefit-sharing – details pending full publication.	All projects must include a Community Development and Benefit Sharing Agreement, registered with the national Carbon Credit Trading Register. Non-land-based projects must contribute **≥25% of net revenues annually to community benefit sharing.** CA fees = USD 4 per ITMO, Issuance admin fees = USD 0.10-0.20/per credit, scaled by volume, application and PDD fees = from KES 10,000 to 200,000, depending on citizenship and project size. 50% of CA fees and 25% of non-land-based revenues remitted to Kenya's Climate Change Fund.	Administrative fees = ~USD 11,000/project , Issuance fee = USD 0.20/per MO, CA fee = USD 4/ITMO. Buffer requirements = 5% of Mos (Article 6.2) and 1% (Article 6.4) retained in the National Buffer Account. SOP = 15-25% or up to 40% of gross revenue depending on technology and land classification.	Carbon credit trading not yet formally regulated in Mozambique. Legal framework remains limited to high-level references to carbon trading; no formal benefit-sharing mechanism publicly defined to date.	For non-REDD+ projects, revenues split: 61% to Managing Authority, 31% to proponent, 8% to DNA – negotiable. Benefit shares vary if Managing Authority is under a council or not. Annual admin and project fees = 8% of gross revenue, project registration fee = 1% of projected gross carbon revenue, and application fee = USD 250-500, depending on citizenship.	Green Economy and Climate Bill (2025) to introduce formal carbon market regulation via a Statutory Instrument (SI). SI to set fixed administrative fees for project approval steps. Benefit sharing: 55%to communities and chiefs, 30% to private sector/NGOs, 15% to government. Variable CA fee per ITMO, based on issuance tiers. Additional 2% OMGE reserved in national registry, adjustable by agreement.	Minimum 20% of total project investment must go to local communities; 50% of that must improve energy/water access. Clean cookstove projects dimmed high-risk; Tier 2 stoves banned, Tier 3 allowed only until end-2026. SOP: 30% of credit volume/value for both Article 6 and VCM pathways. 1% automatic credit retirement; 2% issued to National Buffer Account. Credit issuance/recognition fees = USD 0.10-0.20/credit. Extensive fees for registration, ICS listing, and audits.
Action Points / Steps for CSPs & PDs	Monitor upcoming Article 6 regulations and LoA procedures from the MESD.	Align projects with the Climate Change (Carbon Markets) Regulations (2024) and ensure	Coordinate with the Ministry of Natural Resources and Climate Change (DNA) to understand	Monitor progress on the establishment of a Designated National Authority (DNA).	Leverage momentum from the LoA issued for UpEnergy's cookstove project as a model.	Apply under the two-stage approval process (No-Objection → Authorisation) outlined in the 2024	Engage the Climate Change Management Department (DNA) for early guidance on

	Engage early with the Carbon Market Regulatory Authority to align project design with future compliance expectations. Develop robust MRV (Monitoring, Reporting, Verification) frameworks and community benefit-sharing models. Position projects for eligibility by linking them to national clean cooking priorities (e.g., LPG and improved stove initiatives).	contributions to Kenya's NDC. Engage early with NEMA (DNA) and relevant sectoral registrars for LoA and compliance clarity. Prepare for possible delays in Article 6.2 LoA approvals; advocate for streamlined procedures. Leverage bilateral agreements (e.g., Switzerland, Japan, Singapore) for credit sales with corresponding adjustments.	LoA requirements. Align project documentation with Malawi's carbon market framework, including eligibility and benefit-sharing criteria. Leverage existing precedents (e.g., EKI project) to streamline approval and maximize Article 6 compatibility. Explore participation in future ITMO transactions and carbon credit auctions through platforms like CTX.	Position projects for future Article 6 participation by aligning with LPG expansion goals in key provinces. Leverage the Voluntary Carbon Market (VCM) as the primary channel in the interim. Engage in policy dialogue to shape the forthcoming Carbon Market Activation Plan and Article 6 eligibility.	Engage with the National Carbon Monitoring Centre and advocate for formal DNA establishment. Align new projects with the 2024–2034 National Clean Cooking Strategy to demonstrate policy relevance. Monitor Article 6.4 pipeline and prepare for more robust market entry as frameworks mature.	Article 6 Guidelines. Engage early with the Ministry of Green Economy and Environment (DNA) to ensure NDC alignment. Explore partnerships via existing bilateral agreements (Norway, Sweden, Singapore). Ensure strong sustainability, additionality, and MRV standards to meet Zambia's high-integrity criteria.	Article 6 alignment. Build projects around national clean energy goals in the Renewable Energy and Energy Efficiency Policies. Advocate for inclusion of clean cookstove interventions in national climate strategies and future NDC updates. Use the Voluntary Carbon Market while Article 6 participation and bilateral arrangements mature.

Key takeaways to consider from the table above (more detailed country profiles are available **below**)

- Kenya and Mozambique have the most advanced Article 6 participation with established Bilateral Agreements and active LoA issuance.
- Zambia has made significant progress with multiple Bilateral Agreements and a defined LoA process, despite its framework being under development.
- Tanzania and Zimbabwe are still building their Article 6 capacity, with limited or no BAs in place, but clear steps for project developers to engage.

CSPs/PDs should focus on early engagement with the DNA, aligning projects with NDC priorities, and ensuring compliance with the LoA procedures in each country.

3B – GAPS AND NEXT STEPS FOR CSPs

- Reference to the MIGA WB LoA Template.[26]
- Some countries have well-defined frameworks, while others are in the early stages of development.

[26] World Bank | Letter of Authorisation and Acknowledgment.

- CSPs should actively engage with policymakers to ensure clean cooking projects are included in national Article 6 strategies.
- Capacity building and collaboration with carbon market experts are essential.

If you want to understand how your project can interact with Article 6, MCFA can help, please get in touch.

3C – DEMOCRATIC REPUBLIC OF THE CONGO (DRC) CASE STUDY

DRC's NDC commitments

The Democratic Republic of the Congo (DRC) has committed to reducing its GHG emissions by 21% below business-as-usual (BAU) levels by 2030, with 2% being unconditional and the remaining 19% conditional upon international support. The country's updated NDC emphasises the energy sector as a key area for emissions reductions (particularly household energy use) by outlining several initiatives targeting household energy consumption.[27] Given that approximately 95% of the DRC's population relies on biomass (wood and charcoal) for cooking,[28] the NDC includes measures to promote clean cooking solutions. These measures aim to reduce deforestation and improve public health by decreasing reliance on traditional biomass fuels.

The NDC further promotes a shift to cleaner fuels, notably LPG and electricity, particularly in urban areas where the transition is more feasible. Broader energy access is prioritised through grid extension and decentralised renewable solutions like solar mini-grids. These energy-related measures are closely tied to the DRC's goals of curbing deforestation and achieving significant GHG reductions while delivering co-benefits for public health and rural development.

Regulatory Framework and Carbon Market Participation

As of 2025, the DRC is actively advancing its carbon regulatory framework to better engage with international carbon markets. In June 2023, the government established a Carbon Market Regulatory Authority (ARMCA) through Decree No. 23/22 of 14 June 2023, to oversee the production, purchase, sale, and resale of carbon credits, aiming to ensure transparency and equitable benefit-sharing among stakeholders, including local communities and investors.[29] Despite these developments, challenges persist. Instances have been reported where companies entered agreements with communities without providing adequate information or obtaining meaningful consent, leading to concerns about the legitimacy and benefits of such projects.[30] To address these issues, the DRC is considering the introduction of a carbon tax on industrial activities starting in 2026, aiming to further regulate emissions and generate revenue for climate initiatives.[31]

Additionally, the DRC has recently undertaken significant reforms to modernise its electricity sector and promote renewable energy development. A pivotal change is the enactment of Ordinance No. 25/025 in February 2025, which amends the 2014 Electricity Law to address gaps in renewable energy integration, grid expansion, and rural electrification.[32] This ordinance officially recognises renewable energy and energy efficiency as vital to achieving the country's electrification goals. Complementing these efforts, the DRC has initiated reforms in its energy sector to promote clean cooking and reduce reliance on traditional biomass fuels. In collaboration with the Central African Forest Initiative (CAFI),[33] the government launched a roadmap towards a forest-friendly

[27] Democratic Republic of Congo First NDC (Updated Submission) (2021).
[28] Enhancing Access to Clean Cooking Solutions for Household, Micro-enterprises and MSMEs of Kinshasa, Lubumbashi, Goma, and Bukavu in the Democratic Republic of the Congo | Clean Cooking Alliance
[29] DRC creates national carbon trading authority
[30] DRC carbon credit projects surge amid lack of regulation
[31] DRC to consider introduction of carbon tax from 2026
[32] Ordinance-Law No. 25/025 of February 05, 2025 amending and supplementing Law No. 14/011 of June 17, 2014 on the Electricity Sector, as amended and supplemented by Law No. 018/031 of December 13, 2018 | Leganews Pro
[33] Democratic Republic of the Congo | Central African Forest Initiative (CAFI)

national energy and cooking policy. This initiative aims to diversify the country's energy mix by promoting alternatives such as LPG and energy-efficient cookstoves.[34]

Article 6 Participation

The Ministry of Environment and Sustainable Development serves as the Designated National Authority (DNA) for Article 6 mechanisms. While the DRC has not yet publicly issued Letters of Authorisation (LoAs) for specific projects, the government has expressed intentions to publish regulations aligning with Article 6 to facilitate engagement in global carbon trading mechanisms.[35] These regulations are anticipated to provide clarity on authorization arrangements, tracking, and reporting procedures necessary for the operationalization of Article 6 mechanisms.

The DRC's focus on sustainable energy initiatives, particularly in promoting clean cooking solutions, positions it well for future participation in Article 6 activities. Given the country's efforts to reduce reliance on traditional biomass fuels through the distribution of improved cookstoves and the promotion of LPG, there is potential for clean cooking projects to be considered for Article 6 authorisation in the future. However, as of now, no specific clean cooking projects have been officially authorised under Article 6 by the DRC. The establishment of a robust regulatory framework and the issuance of LoAs will be critical steps in enabling such projects to contribute to the country's NDCs and to access international carbon finance

Fees and Benefit-Sharing Plans

The DRC is actively laying the groundwork for a national regulatory framework to oversee carbon market participation, particularly under Article 6 of the Paris Agreement.[36] The Carbon Market Regulatory Authority (ARMCA) is tasked with regulating and managing the country’s carbon credit sector, ensuring that environmental integrity and national interests are protected as the DRC positions itself more prominently in global carbon markets. The appointment of Jacques Célestin Moliba Bakanza as Chairman of the Board reflects the political momentum behind this institutional effort.[36]

Complementing these institutional developments, the DRC has adopted a suite of legal instruments to govern market participation, as mentioned above. Although detailed provisions remain forthcoming, these texts indicate that the government seeks a structured and transparent approach to allocating carbon revenues, likely to include a carbon tax from 2026 onwards[37] and clearer rules on how benefits are to be returned to the state and potentially to local communities.

In the interim, while Article 6-specific regulations are yet to be published, project developers are operating in a transitional environment, with early signals pointing to a centralised approval system, state oversight on international transfers, and mandatory revenue sharing mechanisms. While full operational guidance is still in development, the establishment of ARMCA and the upcoming tax and potential benefit-sharing policies reflect a clear intent to both capitalise on and responsibly manage the country’s growing pipeline of carbon credit projects.

How Project Developers Can Get Involved

For CSPs in the DRC, involvement in Article 6 carbon projects begins with close engagement in the evolving regulatory landscape. The Ministry of Environment and Sustainable Development (MESD) is in the process of finalising regulations and procedures for Letters of Authorisation (LoAs), which are required for any project seeking recognition under Article 6. Developers will need to actively monitor these developments and engage early with the Carbon Market Regulatory Authority to ensure their projects are designed in line with emerging

[34] Sustainable Consumption and Partial Substitution of Wood Energy - DRCongo | Central African Forest Initiative (CAFI)
[35] COP29: DRC to publish new Article 6 regulation next year
[36] DRC Establishes Carbon Market Regulatory Authority to Boost Oversight and Investment - Copperbelt Katanga Mining
[37] DRC confirms carbon tax to apply from 2026

compliance requirements. Early alignment not only reduces the risk of delays but also positions projects to be among the first to secure approval once the framework is fully operational.

At the project level, developers must invest in strong monitoring, reporting, and verification (MRV) systems to demonstrate emissions reductions credibly, while also embedding transparent benefit-sharing arrangements with local communities. In the DRC, clean cooking is a national priority given the health, environmental, and gender-related burdens of traditional biomass use. Developers can strengthen their case for Article 6 participation by directly linking projects to these priorities, particularly through the promotion of LPG adoption and the distribution of improved cookstoves. By framing interventions as both a climate mitigation tool and a development solution, project developers can align with government priorities and secure the political and institutional backing needed to operate under Article 6 mechanisms.

3D – KENYA CASE STUDY

Kenya's NDC commitments

Kenya's updated NDC, submitted in **2020**,[38] commits to a 32% reduction in greenhouse gas emissions below business-as-usual (BAU) levels by 2030.[39]

While the NDC does not explicitly reference clean cooking, Kenya has since launched strategic initiatives such as the Kenya National Cooking Transition Strategy (KNCTS) and the Kenya National eCooking Strategy (KNeCS), both of which prioritise expanding access to cleaner cooking technologies. These efforts align with the broader national goal of **reducing reliance on biomass fuels, increasing energy efficiency, and mitigating emissions from household cooking**—a sector that holds significant potential for carbon finance under Article 6 mechanisms.

Regulatory Framework and Carbon Market Participation

Kenya has established a comprehensive regulatory framework for carbon markets with the introduction of the **Climate Change (Carbon Markets) Regulations, in May 2024**. These regulations, published under the Climate Change Act, provide a structured approach to implementing carbon projects, ensuring environmental integrity, and supporting the country's NDC.

Participation in Carbon Markets

Part 4 of the Regulations prescribes rules and procedures that project proponents and carbon market projects must adhere to.[40] In summary, these include:

- Compliance Requirements: Carbon projects must follow the Climate Change Act and Regulations, meet specific standards, and undergo independent certification and validation.
- Alignment with National Goals: Projects must align with Kenya's laws, policies, and strategies while demonstrating contributions to the country's NDC.
- Project Ownership & Community Involvement: Developers must clearly outline project ownership and engage local communities if working on public or community land.
- Sustainable Development Impact: Projects should show expected employment benefits and describe how they will support environmental integrity, poverty alleviation, and sustainability.
- Eligibility Criteria for Developers: Project proponents must be legal entities with financial capacity, expertise in carbon projects, and compliance with all legal requirements.
- Transparency & Reporting: Developers must disclose project costs, expected emission reductions/removals, and other key financial and environmental details to the Designated National Authority (DNA).

The clean cooking sector, particularly projects involving energy-efficient stoves and eCooking solutions, stands to benefit from Kenya's carbon market framework by leveraging international financing for scaled adoption.

[38] Kenya's First NDC (updated version).pdf
[39] Kenya | Climate Action Tracker
[40] The Climate Change (Carbon Markets) Regulations, 2024 - Oraro & Company Advocates

Article 6 Participation

The **National Environment Management Authority (NEMA)** serves as Kenya's Designated National Authority (DNA), responsible for ensuring compliance and preventing double counting through corresponding adjustments. Additionally, **sector-specific registrars** have been appointed to oversee projects in key industries, including energy, transport, agriculture, and forestry, reinforcing Kenya's commitment to maintaining a transparent and robust carbon market.

Kenya is **actively engaging** in Article 6.2 cooperation, having signed bilateral agreements (BAs) with Switzerland, Singapore, and Japan. Additionally, Kenya has also submitted 21 projects and 7 programs of activities (PoAs) for prior consideration under Article 6.4. Notably, Kenya is part of Japan's Joint Crediting Mechanism (JCM) with two approved projects, showcasing its readiness to engage in international carbon transactions.[41]

However, despite progress in regulatory development, project developers have reported delays in obtaining Article 6.2 approvals (LoAs),[42] underscoring the need for streamlined processes and continued engagement with stakeholders.

For cookstove project developers in Kenya, participation under Article 6 presents both opportunities and challenges. Given Kenya's active engagement in bilateral agreements and prior consideration under Article 6.4, cookstove projects could benefit from access to international buyers seeking high-integrity credits with corresponding adjustments. However, delays in obtaining Letters of Authorization (LoAs) under Article 6.2 may pose challenges for project financing and implementation, requiring developers to navigate regulatory uncertainties while advocating for more efficient approval processes.

Fees and Benefit-Sharing Plans

Kenya has recently established a clear fee structure and benefit-sharing framework for carbon market participation under the Carbon Credit Trading and Benefit Sharing Bill, 2023,[43] and the Climate Change (Carbon Markets) Regulations, 2024.[44] The Carbon Credit Trading and Benefit Sharing Authority is mandated to ensure equitable sharing of benefits among stakeholders, with all projects required to operate under a community development and benefit-sharing agreement. These agreements, formally registered in the Carbon Credit Trading Register, are central to guaranteeing that local communities directly benefit from carbon trading activities. Importantly, land-based and non-land-based projects are subject to mandatory annual social contributions, integrated into the community development and benefit-sharing agreement, **with non-land-based projects contributing at least 25% of aggregate earnings** and land-based projects at least 40%. Private projects on private land are exempt from this requirement, reflecting an effort to balance private ownership rights with community benefit obligations.

Fees for project registration and ongoing administration are tiered to reflect project size and type. Application and Project Design Document (PDD) fees range from KES 10,000 to 200,000 depending on citizenship, while administrative fees scale according to projected issuance volumes. Specifically, projects issuing up to 15,000 credits annually pay KES 150,000 upon PDD approval, while larger projects pay KES 300,000. Issuance fees are levied per credit, at **USD 0.10 for the first 15,000 tonnes and USD 0.20 thereafter**, ensuring proportional contributions from larger-scale initiatives. In addition, the regulations stipulate **corresponding adjustment fees of USD 4 per unit of ITMOs**, aligning Kenya's system with Article 6 requirements and creating a direct revenue stream tied to international carbon trade.

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[41] JCM Kenya - Japan
[42] Kenya project developers face further delays in Art. 6 approvals
[43] The Carbon Credit Trading and Benefit Sharing Bill, 2023.
[44] The Climate Change (Carbon Markets) Regulations, 2024.

These financial mechanisms are complemented by provisions directing funds into the national Climate Change Fund. For **non-land-based projects, 25% of aggregate earnings are payable into this fund, alongside 50% of the Designated National Authority (DNA) fees**, thereby ensuring that carbon revenues not only benefit participating communities but also contribute to broader national climate priorities. Together, these rules create a dual benefit-sharing structure, community-level development agreements reinforced by national-level revenue allocation, that positions Kenya as one of the more proactive African countries in embedding equity and transparency into its carbon market governance.

How Project Developers Can Get Involved

For **Kenyan-based** project developers seeking to participate in Article 6, securing a Letter of Authorisation (LoA) from Kenya's DNA is a critical step.

The process involves submitting detailed project documentation, undergoing assessment by the **Multi-Sectoral Technical Committee (MSTC)**,[45,46] and demonstrating adherence to Kenya's carbon market regulations.

Given the evolving nature of Kenya's Article 6 framework, **early engagement** with regulatory authorities, meticulous compliance with **MRV standards**, and **alignment with national policies** – such as the KNCTS – will be key for project developers aiming to capitalise on the growing carbon market and drive impactful clean energy transitions.

[45] Kenya formally announces selection committee for carbon projects
[46] DGB Group prepares for Article 6 approval in Kenya

3E – MALAWI CASE STUDY

Malawi's NDC commitments

Malawi's updated NDC submitted in July 2021 commits to an overall reduction in GHG emissions of up to 51% below business-as-usual (BAU) levels by 2040.[47] This target includes an unconditional reduction of 6%, achievable through domestic efforts, and an additional 45% reduction conditional on international support. Key emitting sectors addressed include agriculture, energy, waste, and industry, with further indicative reductions from forestry and land use changes.

Regarding clean cooking and fuelwood consumption, the NDC recognises heavy reliance on biomass (wood and charcoal) as a major contributor to deforestation and emissions. It includes measures to reduce biomass dependency through increased access to clean and sustainable energy solutions, such as improved cookstoves, alternative fuels (e.g. LPG, biogas), and rural electrification.[48] These actions aim to improve energy access, reduce health risks, and support both climate and development goals.

Regulatory Framework and Carbon Market Participation

As of August 2025, Malawi has consolidated its position in international carbon markets with the release of its Carbon Market Framework (July 2025),[49] which provides a structured basis for engagement under Article 6.2 cooperative approaches, the UNFCCC's Article 6.4 mechanism, and voluntary carbon market (VCM) activities.[50] This framework builds on earlier efforts, including the 2024 regulatory package that enabled the registration of 11 projects,[51] and integrates institutional arrangements, authorisation processes, and compliance rules into a transparent cycle aligned with international best practice. It sets out clear timelines for project registration, validation, and issuance of mitigation outcomes, while ensuring that corresponding adjustments (CAs) are applied at the point of first transfer to prevent double counting. The framework further links market activity to Malawi's national energy and climate policies, particularly the National Energy Policy (2018), [52] the Renewable Energy Strategy,[53] and the National Energy Compact,[54] all of which stress renewable energy expansion, energy efficiency, and access to clean cooking. Together, these measures underscore Malawi's commitment to using carbon markets as a tool for both climate mitigation and sustainable development.

Article 6 Participation

As of 2025, Malawi has actively engaged in implementing Article 6 of the Paris Agreement, particularly focusing on clean cooking initiatives. The Ministry of Natural Resources and Climate Change (MNRCC) serves as the DNA, overseeing the authorisation and regulation of carbon credit projects. In 2022, Malawi signed a bilateral cooperation agreement with Switzerland to facilitate the transaction of Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6.2. This agreement mandates the establishment of a publicly accessible

[47] Republic of Malawi's Updated NDC (2021).
[48] Malawi's revised NDC to the Paris Agreement 2015-2040 (2021).
[49] Malawi launches National Carbon Market Framework.
[50] Samarth Barve - LinkedIn.
[51] Malawi finalises carbon trading regulatory framework, registers 11 projects.
[52] Energy-Policy-Brief-DoE-CISONECC-and-Christian-Aid-2018.pdf
[53] Malawi Renewable Energy Strategy 2017-2030.
[54] National Energy Compact for Malawi.

registry to track authorizations and transfers, ensuring transparency and compliance with international standards.[55]

Malawi has demonstrated a strong commitment to clean cooking projects within its carbon market framework. Notably, EKI Energy Services Limited received a Letter of Authorisation (LOA) from the MNRCC for its Improved Cookstove Distribution project. This authorisation permits the issuance of up to 1.4 million tonnes of carbon dioxide equivalent (tCO_2e) in carbon credits over the project's crediting period from January 12, 2023, to January 11, 2030. The project has already distributed 25,000 improved cookstoves, aiming to reach 50,000 households and benefit approximately 250,000 individuals.[56] Additionally, in July 2024, Malawi conducted its first carbon credit auction on the Digital Carbon Exchange (CTX), offering 1.5 million emission reductions generated from cleaner cooking technologies benefiting approximately 550,000 households.[57] These developments underscore Malawi's proactive approach to leveraging Article 6 mechanisms to advance its climate goals and promote sustainable development.

Fees and Benefit-Sharing Plans

The fee and benefit-sharing provisions of the Carbon Market Framework are designed to generate national revenues while ensuring fair distribution of proceeds at the local level.[58] Developers are required to pay **administrative fees of roughly USD 11,000 per project**, **issuance fees of USD 0.20 per mitigation outcome**, and **corresponding adjustment fees of USD 4 per unit of ITMO transferred**. In addition, mitigation outcomes are subject to buffer retention requirements, with **5% of credits withheld under Article 6.2 and 1% under Article 6.4**, placed into a **National Buffer Account** to safeguard environmental integrity. Share of Proceeds (SOPs) provisions apply directly to project revenues, ranging from 15–25% or as high as 40% depending on the technology type and whether projects are land-based or non-land-based. These funds are channelled into Malawi's Climate Change Fund to support adaptation and national climate priorities.

From a benefit-sharing perspective, the framework reinforces the principle that carbon market activities must generate tangible socio-economic gains for Malawians. **Revenue allocations are linked to community development and broader national objectives**, such as expanding electricity access, strengthening sustainable bioenergy, and scaling up cleaner cooking solutions. This ensures that while project developers and investors benefit from market access and certainty, host communities and the state also receive equitable returns. By embedding these provisions within the Article 6 architecture, Malawi is seeking to balance investment attractiveness with environmental integrity and distributive justice, positioning itself as one of the more forward-leaning African countries in the governance of carbon finance.

How Project Developers Can Get Involved

For cookstove project developers in Malawi, the pathway into Article 6 carbon projects begins with close coordination with the Ministry of Natural Resources and Climate Change, which acts as the Designated National Authority (DNA). Developers must understand and prepare for the requirements tied to Letters of Authorisation (LoAs), which are essential for projects to be recognised under cooperative approaches. This involves ensuring that project documentation fully aligns with the Carbon Market Framework released in July 2025, particularly regarding eligibility rules, benefit-sharing obligations, and corresponding adjustment provisions. By structuring project design in line with Malawi's national priorities, such as the expansion of cleaner cooking solutions under the National Energy Compact, developers can secure both government backing and Article 6 compliance, creating a strong case for long-term participation.

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[55] Why the Article 6.2 purchase agreement between Malawi, Switzerland and ATEC is exciting - Modern Energy Cooking Services
[56] Intimation_Malawi-LoA.pdf
[57] ITMO Auction – Malawi Government Press Release. - Carbon Trade Exchange
[58] Malawi Makes Strides in Carbon Trading

Practical engagement is further supported by looking to existing precedents such as the EKI cookstove project, which has already navigated the approval process and can serve as a model for design, MRV, and benefit-sharing arrangements. Developers who follow these examples will be well-positioned to access international markets through ITMO transactions and emerging carbon credit auction platforms like the Carbon Trade Exchange (CTX). In doing so, they can unlock higher-value opportunities linked to Article 6 transfers while ensuring that projects remain rooted in Malawi's development priorities and contribute to equitable community-level benefits.

3F – MOZAMBIQUE CASE STUDY

Mozambique's NDC commitments

Mozambique's Nationally Determined Contribution (NDC) underscores the country's commitment to emissions reductions while recognising the challenges posed by high reliance on biomass fuels for household energy consumption.[59]

With an ambitious mitigation target of reducing approximately 1.2 tCO_2eq per capita by 2025, Mozambique's NDC highlights the importance of promoting low-carbon urbanisation. A key focus is expanding access to **LPG** in key provinces (Cabo Delgado, Zambezia and Nampula e Tete), which aligns with broader clean cooking objectives.

Although the NDC does not explicitly mention "clean cookstoves", its emphasis on reducing biomass dependency suggests a strong opportunity for clean cooking initiatives to contribute to the country's carbon mitigation efforts under Article 6 mechanisms.

Regulatory Framework and Carbon Market Participation

Mozambique's regulatory framework for carbon markets remains in a formative stage, though notable progress has been made since 2024. The country's mitigation governance was initially structured under the 2018 REDD+ Decree,[60] which provided rules for REDD+ projects and established state ownership of emission reductions.[61] Since then, Mozambique has expanded its scope by approving an Energy Transition Strategy in 2024, updating its Long-Term Low Emissions Development Strategy (LT-LEDS), and preparing its third Nationally Determined Contribution (NDC 3.0), due in September 2025.[62] Parallel to these planning processes, work on a dedicated carbon market regulation has been ongoing since 2024, intended to provide clearer rules for participation in Article 6 mechanisms and voluntary markets. While Mozambique has joined the African Carbon Markets Initiative and continues to promote its Carbon Market Activation Plan,[63] the absence of a formal Designated National Authority (DNA) remains a critical gap, limiting immediate engagement in international cooperative approaches. In parallel, policy discussions on introducing a carbon tax, linked to compliance with the EU's Carbon Border Adjustment Mechanism (CBAM),[62] highlight the country's intent to diversify its climate policy instruments while embedding carbon pricing into the national economy.

Article 6 Participation

Mozambique has shown early interest in Article 6.4 of the Paris Agreement, with seven Project Activities (PAs) and five Programmes of Activities (PoAs) submitted for prior consideration.[64]

However, the absence of a DNA means that formalising bilateral agreements (BAs) or issuing Letters of Authorisation (LoAs) remains a work in progress.

[59] NDC_EN_Final.pdf
[60] Mozambiques-Carbon-Credits.pdf
[61] Mozambique puts newly approved national REDD+ strategy into action | Forest Carbon Partnership Facility
[62] FSV18_Presentation_Mozambique.pdf
[63] Carbon Credits in Mozambique.).
[64] Article 6 Pipeline - UNEP-CCC

Without a fully operational regulatory framework, Mozambique's participation in Article 6 remains largely exploratory, with VCM projects currently filling the gap.

For cookstove project developers in Mozambique, the lack of a Designated National Authority (DNA) and formalised bilateral agreements under Article 6 creates uncertainty around securing corresponding adjustments and accessing compliance markets. While Mozambique's engagement with Article 6.4 signals future opportunities, the current regulatory gaps mean that voluntary carbon markets (VCM) remain the most viable pathway for cookstove projects in the short term. Developers should closely monitor policy developments while leveraging the VCM to sustain project financing and implementation.

Fees and Benefit-Sharing Plan

With respect to fees and benefit-sharing arrangements, Mozambique has yet to establish a comprehensive framework that sets out project-level obligations in the way seen in countries such as Kenya or Malawi. Current rules are still largely anchored in the REDD+ Decree, which asserts state ownership of emission reductions but does not provide a transparent formula for revenue allocation, administrative fees, or corresponding adjustment levies under Article 6. Emerging carbon market regulations under development since 2024 are expected to clarify these aspects, including the structure of government fees, conditions for Letters of Authorisation, and potential contributions to a national climate fund. In the meantime, benefit-sharing remains negotiated largely on a project-by-project basis, often through community development agreements in the forestry sector, without a uniform national standard.

How Project Developers Can Get Involved

For project developers and cookstove providers (CSPs) looking to engage with Article 6 in Mozambique, a **proactive approach** is essential.

Given the absence of a DNA, developers should monitor regulatory updates closely and engage with relevant national government stakeholders to navigate the evolving landscape. Preparing for eventual authorisation processes, such as securing clear project ownership documentation, ensuring alignment with national mitigation priorities, and demonstrating measurable emissions reductions -will be key to securing LoAs once the process is established. Additionally, leveraging existing voluntary carbon market experiences can position projects favourably when Mozambique fully operationalises its Article 6 framework.

3G – TANZANIA CASE STUDY

Tanzania's NDC commitments

Tanzania's updated Nationally Determined Contribution (NDC)[65] outlines ambitious emission reduction targets of 30-35% relative to a Business-As-Usual (BAU) scenario by 2030. While the NDC does not explicitly reference clean cooking or cookstove initiatives, it does emphasise reducing charcoal consumption and expanding natural gas use for cooking, power generation, and thermal services. Given the dominance of traditional biomass in Tanzania's energy mix – accounting for 82% of total supply[66] – the government's push for cleaner cooking fuels aligns well with Article 6 opportunities. The recently launched National Clean Cooking Strategy (2024-2034), [67] which aims for 80% of the population to transition to clean cooking by 2034, further strengthens the case for clean cooking sector participation in carbon markets under Article 6 mechanisms.

Regulatory Framework and Carbon Market Participation

Tanzania has taken significant steps to formalise its carbon market framework, with the Environmental Management (Control and Management of Carbon Trading) Amendment[68] published in October 2023. This regulatory update provides a legal framework for the control and management of carbon trading projects, ensuring a structured approach to carbon trading.

While Tanzania does not yet have a formally Designated National Authority (DNA) for Article 6, the Tanzania National Carbon Monitoring Centre (NCMC)[69] plays a pivotal role in overseeing carbon market activities. The government has also joined the African Carbon Markets Initiative, signalling its intent to leverage international carbon finance to support decarbonisation efforts.

Article 6 Participation

Despite the absence of a DNA, Tanzania has demonstrated its commitment to Article 6 through recent project authorisations.

The country has already issued a Letter of Authorisation (LoA) for UpEnergy's clean cookstove initiative under Article 6.[70] This milestone underscores Tanzania's willingness to engage with international carbon markets and harness carbon finance for clean cooking solutions.[71] Additionally, two project activities (PAs) and four programs of activities (PoAs) have been submitted for Prior Consideration under Article 6.4, reflecting growing interest from developers in leveraging the mechanism.

For cookstove project developers in Tanzania, the recent issuance of a Letter of Authorisation (LoA) for UpEnergy's clean cookstove initiative under Article 6 is a promising signal of government support for carbon

[65] NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)
[66] United Republic of Tanzania
[67] en-1717680135-NATIONAL CLEAN COOKING STRATEGY (2024-2034) FINAL.pdf
[68] The Environmental Management (Control and Management of Carbon Trading) Regulations, 2022 - Climate Change Laws of the World
[69] Tanzania National Carbon Monitoring Centre (NCMC) | Carbon Tanzania | Sokoine University of Agriculture |
[70] UpEnergy Group
[71] UpEnergy achieves historic milestone - Tanzania National Carbon Monitoring Centre (NCMC) | Carbon Tanzania | Sokoine University of Agriculture |

finance in the sector. While the absence of a Designated National Authority (DNA) creates some regulatory uncertainty, Tanzania's willingness to approve projects suggests a growing openness to international carbon transactions. Developers should leverage this momentum by engaging with policymakers and stakeholders to streamline future authorisations and expand market opportunities.

Fees and Benefit-Sharing Plan

Tanzania has established one of the more detailed regulatory regimes, under the Environmental Act (2022)[72] in the region for fees and benefit-sharing in relation to carbon market participation, including Article 6 projects. The framework emphasises that cost and benefit-sharing arrangements must reflect both the capital invested and the roles and responsibilities of project stakeholders. For land-based projects, the Managing Authority receives the majority share, **61% of gross revenues from the sale of Certified Emission Reductions (CERs)**. Where the Managing Authority operates under a council, **10% of this allocation is redirected to the council, while the remaining 51% is retained for use by the village government or MTAA to fund local development and conservation.** If the Managing Authority is outside the council structure, **10% of the 61% must still flow back to community activities, divided between adjacent villages and the local government council**. The **remaining 39% of revenues is then split, with 9% directed to the Designated National Authority (DNA) or National Focal Point, underscoring the government's role in overseeing market integrity and ensuring national-level benefits.**

For projects with higher capital intensity, such as non-REDD+ activities, benefit-sharing arrangements are more flexible and may be negotiated directly between the Managing Authority and the project proponent. The amended rules for non-REDD+ projects provide a **baseline of 61% of revenues to the Managing Authority and 31% to the proponent, with 8% reserved for the DNA.** This structure balances incentives for investors with the government's priority of securing benefits for local authorities and national institutions. Importantly, the model also reinforces the principle that carbon finance must provide tangible development outcomes at the community level, particularly in rural areas where many land-based projects are implemented.

Fee requirements further ensure a steady flow of resources to government institutions and administrative structures managing carbon market participation. **Application fees are set at USD 250 for citizens and USD 500 for non-citizens**, while **registration fees equal 1% of expected average annual gross revenue from carbon credits**, payable once for the lifetime of the project. In addition, project proponents must pay an annual **administrative fee of 5% of gross revenue and an annual project fee of 3% of gross revenue**. These relatively high recurring costs are intended both to fund regulatory oversight and to anchor benefit redistribution mechanisms, though they also raise questions about long-term financial viability for smaller developers. Overall, Tanzania's approach prioritizes government and community benefit-sharing, embedding equity and state oversight directly into the financial architecture of its carbon market framework.

How Project Developers Can Get Involved

For project developers and clean cooking service providers (CSPs) looking to engage in Article 6 activities, securing an LoA from the Tanzanian government is essential. The process involves close coordination with the NCMC, demonstrating alignment with national priorities, and ensuring compliance with Tanzania's carbon trading regulations. For instance, carbon projects in Tanzania shall meet two requirements in order to operate:[73]

1. A person shall not operate a carbon trading project that has not been registered with the Registrar; and
2. For the project to be registered with the Registrar, it needs to have the following elements:
    a. obtain a letter of consent and participation of partners engaged in the project,

[72] Environmental management control and management of carbon trading regulations, 2022.
[73] Requirement to register a carbon trading project - Tanzania National Carbon Monitoring Centre (NCMC) | Carbon Tanzania | Sokoine University of Agriculture |

b. have clearance of ownership of the property involved in the project,
c. involve the local communities in the implementation of the project,
d. disclose relevant project information including costs incurred, verified emission reductions and estimated revenues,
e. indicate expected employment creation to the national experts and local communities,
f. indicate commitment to corporate social responsibility,
g. adhere to national priority carbon trading sectors,
h. be in line with national policies laws and strategies,
i. show how the project will contribute to the Nationally Determined Contributions,
j. adhere to transparency and fairness in business, and
k. adhere to national investment priorities, ecological, social, cultural and economic safeguards.

Summary of Procedures to Establish and Operate Carbon Trading Projects (For Project Developers)[74]

1. Apply for Project Idea Approval
    a. Submit an application to the Designated National Authority (DNA) or National Focal Point.
    b. Pay a non-refundable application fee (USD 250 for citizens, USD 500 for non-citizens).
2. Approval of Project Idea
    a. DNA/National Focal Point reviews and responds within 30 days.
    b. If approved, the project proponent is directed to develop a Project Concept Note (PCN).
3. Develop and Submit Project Concept Note (PCN)
    a. 90 days to develop the PCN after project idea registration.
    b. Submit PCN along with (i) Project registration fee (1% of expected CERs) and (ii) Consent from Managing Authority (extract minutes as proof of approval)
    c. DNA/National Focal Point reviews and responds within 30 days.
    d. If approved, a Letter of No Objection is issued. If not, feedback is given for improvements.
4. Develop and Submit Project Document (akin to PDD under carbon trading standards)
    a. 12 months to develop a full Project Document after receiving the Letter of No Objection.
    b. Possible extension of up to 6 months upon request.
    c. Must comply with international carbon trading standards (including validation if required).
5. Final Approval and Implementation
    a. DNA/National Focal Point reviews and submits to the Minister for Environment for endorsement.
    b. Minister issues a Letter of Endorsement.
    c. Project must start within 2 years after receiving endorsement.
6. Given the government's push for clean cooking solutions, projects that contribute to reducing reliance on charcoal and traditional biomass are well-positioned for approval. Developers should also engage early with relevant authorities to streamline the approval process and maximise opportunities for international investment under Article 6 mechanisms.

[74] Procedures to establish and operate carbon trading projects - Tanzania National Carbon Monitoring Centre (NCMC) | Carbon Tanzania | Sokoine University of Agriculture |

3H – ZAMBIA CASE STUDY

Zambia's NDC commitments

Zambia has positioned itself as an active participant in global carbon markets, with its Nationally Determined Contribution (NDC) outlining ambitious climate commitments. The country aims to reduce greenhouse gas emissions by 25% against a 2010 baseline with limited international support, or by 47% with substantial international backing.[75] Zambia's NDC emphasises clean energy transitions, including sustainable charcoal production and broader energy efficiency strategies. While the document does not explicitly prioritise clean cooking solutions, the sector remains well-aligned with the broader mitigation efforts, particularly given Zambia's heavy reliance on biomass for household energy.

The country's Results-Based Financing (RBF) programs and active cookstove initiatives indicate strong government and private sector support for expanding clean cooking solutions under Article 6 mechanisms.

Regulatory Framework and Carbon Market Participation

Zambia's regulatory framework for carbon markets took a significant step forward in October 2024 with the publication of the "**Guidelines for the Submission and Evaluation of Proposed Mitigation Activities under Article 6 of the Paris Agreement**" by the Ministry of Green Economy and Environment.[76] These guidelines establish the foundation for carbon credit generation and transactions, ensuring transparency, environmental integrity, and compliance with Zambia's NDC.

As Zambia is in the process of finalising its Carbon Market Framework, which outlines key decision-making processes for carbon market participation, the framework defines the assessment criteria for mitigation activities – with projects evaluated at two stages:

1. No-Objection Stage – Initial approval based on compliance with national requirements.
2. Authorisation Stage – Final approval (or rejection) by the Technical Climate Change Committee for Mitigation (TCC-MIT,) ensuring alignment with Zambia's climate and development goals.

The framework ensures projects meet strict requirements for additionality, emission accuracy, and conservative reductions while contributing to Zambia's green growth and sustainability goals. The same guidelines may also apply to voluntary carbon market projects seeking government authorisation for corresponding adjustments.

Zambia has further strengthened its carbon market participation by joining the Norwegian Global Emission Reduction (NOGER) Initiative and signing bilateral agreements (BAs) with Sweden, Singapore, and Norway, positioning itself as a regional leader in structured carbon finance engagement.

Article 6 Participation

Zambia has made tangible progress in operationalising Article 6, with three bilateral agreements in place:

1. Zambia and Norway: The Norwegian Global Emission Reduction (NOGER) Initiative.[77]

[75] Provisional NDC Submission_Zambia_Revised and Updated_NDC_100325
[76] Carbon Market Framework_Zambia.pdf
[77] Norway Launches Initiative to Cut Emissions in Developing Countries - regjeringen.no

2. Zambia and Singapore: Singapore and Zambia signed a Memorandum of Understanding (MOU) to collaborate on carbon credits aligned with Article 6 of the Paris Agreement.[78]
3. Zambia and Sweden: Bilateral Framework Agreement for Engagement in Cooperative Approaches Involving Internationally Transferred Mitigation Outcomes.[79]

Additionally, 4 project activities (PAs) and five programs of activities (PoAs) from Zambia have been submitted for prior consideration under Article 6.4.

Zambia has also established a Designated National Authority (DNA) within the Ministry of Green Economy and Environment to oversee carbon market transactions and ensure alignment with national priorities.

Zambia's bilateral agreements emphasise rigorous sustainability assessments, double counting avoidance, and the prioritisation of high-cost mitigation activities for international credit transfers, ensuring that domestic emissions reduction targets remain achievable.

For cookstove project developers in Zambia, the establishment of a Designated National Authority (DNA) and multiple bilateral agreements under Article 6 create a structured pathway for accessing international carbon finance. The emphasis on rigorous sustainability assessments and double counting avoidance ensures that only high-integrity projects will qualify, making it essential for developers to align with national priorities and stringent verification standards. While these regulatory frameworks enhance credibility, developers may face additional scrutiny and procedural requirements, necessitating proactive engagement with the DNA and bilateral partners to streamline approvals.

Fees and Benefit-Sharing Plan

Zambia is in the process of operationalising its carbon market through the Ministry of Green Economy and Environment (MGEE),[80] with the forthcoming Statutory Instrument (SI) on Carbon Markets set to formalise fee structures, benefit-sharing rules, and participation under Article 6.[81] The government has already outlined that administrative fees will be levied for the assessment of Mitigation Activity Idea Notes (MAINs) and Mitigation Activity Design Documents (MADDs), with the exact schedule to be established under the Green Economy and Climate Bill once enacted.[82] In addition, a share of proceeds (SOP) structure is planned, including corresponding adjustment (CA) fees charged in tiers depending on the volume of internationally transferred mitigation outcomes (ITMOs) generated, ranging from smaller fees for the first 50,000 ITMOs per year, to progressively higher fees for larger volumes.[82] To safeguard environmental integrity, Zambia will also impose an Overall Mitigation in Global Emissions (OMGE) requirement, under which **at least 2% of mitigation outcomes must be placed in a dedicated account in the national carbon registry**, with the option to negotiate higher ratios on a case-by-case basis with buyers.

On benefit-sharing, Zambia has developed one of the more detailed allocation systems in the region, reflecting both national and community-level priorities. Under current frameworks,[83] **15% of revenues are allocated to the government and the Project Implementation Unit**, **30% to private sector or service-providing entities** depending on whether projects are nested or non-nested, and **55% to local communities and traditional authorities**. Within the community share, chiefs receive small but symbolic portions both as individuals and as institutions, while the bulk is earmarked for community construction, conservation activities, livelihood support, traditional practices, and community resource boards or farmer groups. This allocation system is reinforced by the use of a **performance buffer, typically around 5% of payments**, which ensures financial stability in the event

[78] Singapore and Zambia sign Memorandum of Understanding to collaborate on Article 6 to accelerate climate action
[79] Bilateral Framework agreement article 6.2 ZAMBIA and SWEDEN
[80] Zambia consults stakeholders as govt moves to finalise carbon market regulations.
[81] Ministry of Green Economy and Environment - Zambia | Facebook.
[82] Zambia's Carbon Market Framework.
[83] Eastern Province – Jurisdictional Sustainable Landscape Program, Zambia: Benefit Sharing Plan.

of underperformance. The combination of tiered government fees, mandatory CA contributions, and a structured benefit-sharing framework positions Zambia to align with Article 6 requirements while embedding equity and transparency in carbon revenue distribution.

How Project Developers Can Get Involved

For project developers and clean cookstove providers (CSPs) looking to engage in Zambia's carbon markets, securing a Letter of Authorisation (LoA) is a crucial step.

The LoA process involves submitting a mitigation activity proposal in line with Zambia's carbon market framework, undergoing validation, and ensuring compliance with sustainable development criteria. The host country retains the right to authorise Mitigation Outcomes (MOs) only if they do not jeopardise Zambia's NDC fulfilment.

Project developers are encouraged to align their projects with Zambia's priority sectors, such as sustainable biomass use and energy efficiency, to enhance approval chances. As the country refines its carbon market mechanisms, early engagement with the Ministry of Green Economy and Environment and the Zambia DNA can provide valuable insights into evolving requirements and best practices for successful project integration into Article 6 frameworks.

3I – ZIMBABWE CASE STUDY

Zimbabwe's NDC commitments

Zimbabwe's climate commitments under its updated NDC emphasise energy efficiency, renewable energy expansion, and universal access to cleaner energy by 2030.[84]

While the document does not explicitly reference clean cooking initiatives, Zimbabwe's reliance on biomass for household energy - accounting for over 65% of energy use - suggests significant potential for integrating improved cookstove and electrification projects into its decarbonisation strategy.[85] The government's goal to increase electricity access from 44% to 54% by 2025, alongside mini-grid development and biodiesel investments, aligns with the broader objectives of Article 6 participation, offering an entry point for clean cooking interventions.

Regulatory Framework and Carbon Market Participation

Zimbabwe significantly strengthened its regulatory landscape for carbon markets with the introduction of the Carbon Trading (General) Regulations, 2025,[86] which created a more comprehensive and enforceable system for participation under both voluntary markets and Article 6 mechanisms. Central to this framework is the establishment of the **Zimbabwe Carbon Markets Authority (ZiCMA),** which oversees market governance, a **National Grievance and Redress Mechanism (NGRM),** and the **Zimbabwe Carbon Registry (ZCR)** to track credits and transactions. The regulations mandate that at least 20% of total project investment must flow directly into local communities, with half of this allocation earmarked for expanding access to sustainable energy and potable water. **Cookstove projects have been categorised as high-risk**, with low-tier technologies phased out and only Tier 3 stoves permitted until the end of 2026. Restrictions also limit approval to one cookstove project per ward, with strict requirements for GPS tracking of deployed units, underscoring Zimbabwe's emphasis on environmental integrity and oversight. In addition, the framework stipulates that 1% of authorised mitigation outcomes (MOs) be retired towards Zimbabwe's own NDC, ensuring that international carbon trade also contributes to national climate goals.

Article 6 Participation

Zimbabwe's engagement with Article 6 is still in its early stages, with its Designated National Authority (DNA) housed within the Climate Change Management Department of the Ministry of Environment, Climate, Tourism, and Hospitality Industry.

While no bilateral agreements have been publicly confirmed, as per the UNFCCC Article 6 Pipeline, the establishment of a national framework for carbon trading suggests that Zimbabwe is laying the groundwork for more structured participation in international carbon markets.

However, the lack of explicit reference to clean cookstoves in its NDC may require additional policy engagement to facilitate the inclusion of such projects.

For cookstove project developers in Zimbabwe, the early-stage development of Article 6 participation presents both challenges and opportunities. While the establishment of a Designated National Authority (DNA) signals

[84] Zimbabwe NDC3.0 Country Statement_2025_35.pdf
[85] Current Situation
[86] Carbon Trading (General) Regulations, 2025. SI 48/2025.

progress toward structured carbon trading, the absence of bilateral agreements and specific recognition of clean cookstoves in Zimbabwe's NDC may create hurdles for project eligibility under compliance markets. Developers will need to engage with policymakers to advocate for the inclusion of clean cooking solutions in national climate strategies while leveraging the Voluntary Carbon Market (VCM) as a primary funding avenue in the near term.

Fees and Benefit-Sharing Plan

Zimbabwe's fee and benefit-sharing structure is among the most stringent in the region[86]. Fees include **registry account creation charges ranging from USD 500 for individuals to USD 5,000** for developers, annual maintenance fees, project design submissions, and **registration costs of USD 10,000–20,000** depending on project size. Credit-level charges are layered, with **recognition fees of USD 0.10–0.20 per credit, issuance fees of USD 0.20 per credit**, and retirement fees that vary depending on whether corresponding adjustments are applied. A key feature is the **Share of Proceeds (SOPs)**. For authorised mitigation outcomes, 30% of all issued credits are channelled directly to the state, while in the VCM, 30% of transaction value is deducted. Additional deductions include **2% of all credits issued to the National Buffer Account and 1% mandatory retirement towards Zimbabwe's NDC.**

From a benefit-sharing perspective, the **mandatory 20% reinvestment requirement** ensures that communities directly receive financial and developmental benefits, with explicit prioritisation of energy access and water supply. This, combined with SOP deductions and strict project eligibility rules, demonstrates Zimbabwe's effort to centralise carbon market revenues for national climate and development priorities while mandating that a substantial share of investments flow into tangible community outcomes. However, the high transaction costs and stringent SOPs may pose challenges for smaller project developers, potentially concentrating market participation among larger, better-capitalised actors.

How Project Developers Can Get Involved

For project developers and clean cooking solution providers looking to engage in Article 6 activities in Zimbabwe, direct coordination with national authorities is essential.

Given the regulatory emphasis on high-integrity credits, project developers should ensure alignment with national mitigation priorities and sustainability objectives. Feasibility studies, stakeholder consultations, and a clear demonstration of additionality and environmental integrity will be key to securing Letters of Authorisation (LoAs) for projects under Article 6 mechanisms.

As Zimbabwe continues to refine its carbon market policies, proactive engagement with the Climate Change Management Department will be crucial for navigating the authorisation process and unlocking climate finance opportunities for clean cooking initiatives.