

EVALUATING THE FEASIBILITY OF A CARBON CREDIT MARKET IN NIGERIA

By

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Abstract

In search of mechanisms to mitigate the negative impacts of carbon emissions in the environment, humanity brought about the idea of carbon markets. The concept of evaluating the feasibility of a carbon credit market in Nigeria came from the newly inaugurated committee on carbon credit in Nigeria by the Vice President. The carbon credit market is a novel area under environmental law; it stems from one of the mechanisms for mitigating emissions from industrial activities that lead to greenhouse gases (GHGs), climate change, and global warming. This article aims to evaluate the feasibility of the carbon credit market in Nigeria, issues associated with carbon credits and the need for Nigerian legislatures to enact laws that will make the carbon credit market in Nigeria viable and not remain an idea that may never be materialised. The article identified jurisdictions with remarkable carbon credit markets. The research method adopted is doctrinal. It was discovered that the carbon credit market in Nigeria is still in its infancy; there is currently no carbon credit legislative enactment in Nigeria. It is hoped that the inaugurated committee and the Legislature will come up with laudable carbon credit market in Nigeria.

Keywords: *Evaluating, Feasibility, Carbon Credit Market, Nigeria.*

1.0 Introduction

The carbon credit market allows states and private sectors to reduce carbon footprints. The consciousness of emissions mitigation across all industries by about 50% by 2030 is essential to reduce the rapid growth of global temperature to 1.5°C. Recently, there has been deliberate, voluntary use of carbon credits by organisations based on the need to curb the increased emissions from almost all sectors polluting the environment. The legal origin of carbon credit can be traced to the 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC), which created three primary mechanisms that allow nations or operators in industrialised states to acquire offset credits to implement emission reduction projects in developing countries and receive credit in the form of “certified emission reductions,” which they may count against their national reduction targets.¹

Some jurisdictions² worldwide have relatively active carbon credit markets due to their high pollution level. Irrespective of Nigeria’s relatively modest pollution, Nigeria has a swiftly expanding economy, daring growth ambitions, and a thriving population set to increase energy demand in the following decades. Establishing a practicable, robust Nigerian carbon credit market is indispensable for bringing Nigeria’s development footprint into line with a sustainable and objective energy transition.

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¹ Kyoto Protocol 1997, Art. 12. These three mechanisms include: Clean development mechanism (CDM) Joint implementation (JI) and Emissions trading (ET).

² such as United Kingdom, the European Union, America some Asian countries and in Africa Ghana, South Africa has observed notable growth in their carbon market recently, laced with laudable developments.

Nevertheless, the proper guidelines, procedures, and policies must be strategically implemented to accomplish these ideas.

2.0 Carbon Credit

Carbon credits are best explained or described as permits, giving the procurer either the right to emit or claim that an emission has been ‘neutralised’ or compensated for.³ In regulated (or ‘compliance’) carbon markets, a limited quantity of credits (also called permits) might be freely issued by governments or auctioned to regulated companies.⁴ Another meaning ascribed to carbon credit is that it is a token representing the avoidance or removal of greenhouse gas emissions, measured in tonnes of carbon dioxide equivalent (tCO₂e).⁵ It is important to note that these carbon credits are produced through schemes designed at mitigating or eradicating greenhouse gas emissions in the form of renewable energy initiatives, afforestation projects, energy efficiency developments, use of biofuel in place of fossil fuel, dedicated carbon sinks in the ocean and carbon capture technology.⁶ When government or private organisations invest in these projects, they can earn carbon credits, which can be used to offset their emissions, or the carbon credit can be sold on the carbon market.

Carbon credits assisted by emissions reductions or removals can also be generated and traded in ‘voluntary carbon markets, where companies or other actors can purchase them for reasons other than to comply with legal requirements.’⁷ Theoretically, ‘trading of credits between companies ensures economic efficiency in emissions reductions’; sectors that reduce ‘emissions more than the average required can generate additional credits to sell to others (these constitute ‘compliance offsets’).⁸

In Nigeria, the carbon credit market is still an idea that is being nursed; if this materialises, the use of credits will allow those polluting organisations that have emissions reductions that are more cost-effective to sell their reductions to those sectors that have reductions are expensive, decreasing the overall cost of emissions mitigations.

3.0 Carbon Offset

A carbon offset is a type of carbon credit which is referred to as a unit created from a scheme that either stores or prevents/avoids the emission of a certain quantity of greenhouse gases (GHG). ‘Typically, a carbon credit or offset is one tonne of carbon dioxide equivalent either stored or avoided.’⁹ This can be seen in Australia, where the ‘primary carbon credit unit is the Australian Carbon Credit Unit (ACCU), which is a regulated, tradeable financial instrument.’¹⁰

³ W Carton and Others, ‘CSSN Position Paper 2022:1 Net Zero, Carbon Removal and the Limitations of Carbon Offsetting’. Available at <<https://cssn.org/wp-content/uploads/2022/06/Net-Zero-and-Carbon-Offsetting-Position-Paper.pdf>> accessed 17/10/2024.

⁴ *Ibid.*

⁵ Grantham Research Institute on Climate Change and the Environment, London School of Economics, ‘What are carbon offsets?’ Available at- <What are carbon offsets? - Grantham Research Institute on climate change and the environment (lse.ac.uk)> accessed on 18/10/ 2024.

⁶ *Ibid.*

⁷ *Ibid.*

⁸ *Ibid.*

⁹ Carbon Market Institute, ‘Carbon Market: An Overview’, available at <CMI_Fact_Sheet_2_Carbon-Markets-101.pdf (carbonmarketinstitute.org)> accessed 18/10/2024.

¹⁰ *Ibid.*

Put differently, carbon offset is buying carbon credits on the voluntary or regulated carbon market 'as a way to compensate for continued emissions; in a net zero emissions framework, carbon offsetting, per definition, works as a substitute for direct emission reductions.'¹¹ Worth noting is the difference between diverse forms of carbon offsetting. There is avoidance offsetting, which operates so that 'emissions are 'offset' by reductions achieved or anticipated in another source (calculated against a hypothetical baseline scenario unrelated to the absolute emissions involved).¹² The other offsetting is in the form of 'removal offsets'; under here, 'continued emissions are balanced against carbon removal.'¹³ Removal offsets mainly involve afforestation or other means of artificially improving ecosystems' carbon sequestration potential, although technological approaches are also being developed.

4.0 Carbon Allowance

Another type of carbon credit 'typically used in carbon pricing mechanisms around the world, such as the European Union (EU) Emissions Trading Scheme (ETS), is the carbon allowance'. A carbon allowance symbolises the right to emit a quantity of greenhouse gas. This can be exemplified under the EU ETS, where emitting sectors must attain the European Union Allowance (EUA) for the right to emit greenhouse gases; the carbon allowance unit, therefore, permits business sectors to emit a quantity of GHG emissions equivalent to the number of European Union Allowance they have purchased.¹⁴

5.0 Carbon Credit Market

According to the United Nations Environmental Programme, the 'carbon credit market is, in reality, a diverse set of systems regulated in different jurisdictions for trading greenhouse gas pollution rights.'¹⁵ These rights, referred to as allowances or permits, are articles of trade or commodities that are internationally traded, giving the bearer the right to emit a particular amount or an equivalent amount of CO₂ emissions. In other markets, these carbon credits can be used in 'lieu of allowances for compliance to targets placed on industrial facilities or sovereign countries.'¹⁶

The carbon market is an arrangement where carbon units in place of emission reductions are traded within a well-defined structure.¹⁷ States generate the carbon market for strategic compliance in response to climate actions by allowing private sectors to voluntarily reduce their greenhouse gas emissions. The marketplace limits emissions by enabling the purchase or trading of emission units or their equivalents. A regulated carbon market places the responsibility on the sector to mitigate 'emissions (demand side) and allows for the purchase or trading of carbon emissions through the creation of carbon credits (supply

¹¹ F Ascui and H Lovell, "As frames collide: making sense of carbon accounting", *Accounting, Auditing & Accountability Journal*, (2011) [Vol.24] [8] 978 – 999. Available at

<<https://www.emerald.com/insight/content/doi/10.1108/09513571111184724/full/html?fullSc=>> accessed 18/10/2024.

¹² *Ibid.*

¹³ University of Oxford, 'The Oxford Principles for Net Zero Aligned Carbon Offsetting 2020,' available at

<<https://www.smithschool.ox.ac.uk/sites/default/files/2022-01/Oxford-Offsetting-Principles-2020.pdf>>

¹⁴ *Ibid.*

¹⁵ UNEP African Carbon Asset Development, 'Carbon Markets and Africa: A Quick Fact Sheet for Journalists', available at <<https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Carbon%20Market%20Quick%20Facts%20%20ACF%202012.pdf>> accessed 18/10/2024.

¹⁶ *Ibid.*

¹⁷ Carbon Market Institute, (n 10).

side).¹⁸ The active regulated carbon offset scheme is the United Nations Clean Development Mechanism¹⁹, the basis of offsets for States that are signatories to the Kyoto Protocol and purchasers in the European Union Emissions Trading Scheme.

Where carbon markets are not regulated with an obligation to organisations to reduce their carbon emissions, these organisations may decide to reduce their emissions directly, either by installing low-emissions technology or by purchasing carbon credits that may allow for or offset their GHG emissions.²⁰ Sectors that ‘sell carbon credits may do so, for example, by running projects or implementing new technology that reduces, stores or avoids GHGs.’ Carbon credits may also be bought by the States or monitoring sector and sold to ‘emitting industry and retired or sold by industry seeking to manage emission reductions efficiently’.²¹ The trading of carbon credits amongst the demand and supply²² side of the market sets a carbon price and forms the source of a carbon market. The obligation to reduce emissions is premised mainly on emissions reduction targets.²³

The Nigerian carbon market is still in paper form, more or less like an idea outlined on a template, waiting to materialise, although, the 2021 Climate Change Act made underpinning transitioning to a low-carbon and climate-resilient economy²⁴. Existing innovations, such as renewable energy projects, large-scale tree-planting efforts, and methane abatement, strongly indicate that the carbon market in Nigeria is very practicable.²⁵ This was aptly shown by Nigeria's inauguration of the Carbon Market Initiative, representing its commitment to COP28.²⁶

6.0 The Role of Carbon Credits in Achieving Net-Zero Emissions

Carbon credits can play a significant role, specifically in attracting private capital and accelerating technology adoption. Realising net zero involves rapidly developing technologies such as low-emission hydrogen, sustainable aviation fuels (SAF), and direct air capture and storage (DACS).²⁷ Organisations cannot purchase carbon credits as a replacement for reducing value chain emissions in line with their near and long-term targets, commonly known as “offsetting”. Nevertheless, obtaining ‘high-quality carbon credits and reducing emissions along a science-based trajectory can be critical in accelerating the transition to net-zero emissions at the global level.’²⁸ Essentially, carbon credits can play two roles in science-based net-zero policies:

¹⁸ *Ibid.*

¹⁹ Kyoto Protocol 1997, art. 12.

²⁰ Carbon Market Institute, (n 10).

²¹ *Ibid.*

²² The demand side is those needing to reduce emissions and the supply side is those providing carbon credits, these two sides set carbon prices, thereby constituting the very essence/foundation of the carbon market.

²³ *Ibid* (n10).

²⁴ Climate Change Act, 2021 s

²⁵ B A Tinubu, ‘Nigeria could become world-leading green manufactures’, available at <statehouse.gov.ng> accessed 18/10/2024.

²⁶ COP28 is the Conference of Parties to the United Nations Framework Convention on Climate Change, held in Dubai, November to December, 2023.

²⁷ International Energy Agency, ‘The Role of Carbon Credits in Scaling Up Innovative Clean Energy Technologies’, available at <<https://iea.blob.core.windows.net/assets/56184317-b6a8-4e68-8201-f7ad27beafd/TheRoleofCarbonCreditsinScalingUpInnovativeCleanEnergyTechnologies.pdf>> accessed 18/10/2024.

²⁸ Science based target, ‘Beyond Value Chain Target FAQ’, available at <[Beyond-Value-Chain-Mitigation-FAQ.pdf](https://sciencebasedtargets.org/Beyond-Value-Chain-Mitigation-FAQ.pdf)> accessed 18/10/2024.

a. In the transition to net-zero, organisations could decide to purchase carbon credits and transit towards a state of net-zero emissions (in addition to science-based mitigation of value chain emissions) to ‘support society to achieve net-zero emissions by 2050.’²⁹

b. At net-zero: Organisations with ‘residual emissions within their value chain are expected to neutralise those emissions with an equivalent amount of carbon dioxide removals at their net-zero target date, and these removals can be sourced from carbon credits.’³⁰

7.0 Legal Background for the Nigerian Carbon Market

Under this subhead, the position paper provided the legal background of relevant statutory enactments that will serve as a framework for a viable carbon market in Nigeria.

a. The Paris Agreement of 2015

The Paris Agreement³¹ is a Conference of Parties among the leaders of more than 180 countries to reduce greenhouse gas emissions and limit the global temperature increase to less than 2° Celsius or 35.6° Fahrenheit above preindustrial levels by the year 2100.³² The agreement set emission standards and allowed for emissions trading. Nigeria endorsed the Paris Agreement in September 2016 and ratified it in March 2017, committing to curtailing its greenhouse gas emissions. Parties under the Paris Agreement are expected to take action to conserve and ‘enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1 (d), of the Convention, including forests.’³³ Parties are to engage voluntarily in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions (NDCs)³⁴, further to this provision, parties to the Paris Agreement are required to promote ‘sustainable development and ensure environmental integrity and transparency in governance while applying robust accounting mechanisms to ensure, the avoidance of double counting in line with guidance approved by the Conference of the Parties serving as the meeting of the parties’³⁵.

b. The Climate Change Act of 2021

The Climate Change Act 2024 (CCA) offers an all-inclusive regulatory and legal framework for attaining the long-term climate change goals in Nigeria, which encompasses a net-zero carbon emission target, adequate climate financing, environmental and economic accountability, and prioritising climate change actions into national development priorities. The CCA is structured into eight parts, thirty-six sections, and a schedule. It applies to institutions and agencies of government as well as private and public entities,³⁶ the CAA compulsory mandates them to adhere to all governmental regulations on climate

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ The Paris Agreement 2015 is an international agreement on climate change, legally binding on parties thereto. It was adopted by about 196 countries (including Nigeria) at the United Nations Climate Change Conference (COP21) in Paris, France, on December 12, 2015, but entered force on November 4, 2016.

³² United Nations Climate Change, available at <<https://unfccc.int/process-and-meetings/the-paris-agreement>> accessed 19/10/2024.

³³ Paris Agreement 2015, art. 5 (1).

³⁴ *Ibid.*, art. 6 (2).

³⁵ *Ibid.*

³⁶ Climate Change Act 2021, s 1 (1).

change.³⁷ It sets the years 2050-2070 as the target period to achieve net zero carbon emissions. To achieve this aim, the prioritisation of climate change adaptation, finance, national climate resilience and focus on other climate change combating policies.³⁸

The Act provides an agenda for climate change governance for the first time in Nigeria with a scheme of carbon budgeting, and it established the National Council on Climate Change (the “NCCC”). The NCCC is required to organise and coordinate climate action necessary for achieving long-term climate action purposes.³⁹ It is correct that the Climate Change Act 2021 failed to expressly make provision for the creation of a carbon market in Nigeria; it is not out of place to assert that the intendment of the drafters of the law includes all possible actions geared towards achieving sustainable climate actions, (including the establishment of carbon market). This can be inferred from its all-embracing objectives of coordinating climate actions to achieve long-term climate objectives, a robust underpinning for establishing a viable carbon market in Nigeria.

c. The Regulatory Guidance on Nigeria’s Carbon Market Approach

The Federal Government, through the National Council on Climate Change, reaffirmed its commitment to Articles 6 (2) (4) (8) of the Paris Agreement 2015; it is an indication of embarking on a mission to translate ground-breaking ideas from conference papers into tangible actions. This is intended to be achieved through the Regulatory Guidance on Nigeria’s Carbon Market Approach issued by the NCCC (the “Guidance Note”). The NCCC has previously conducted an introductory investigation to establish a suitable regulatory framework and procedures for executing cooperation mechanisms as enshrined under Article 6 of the Paris Agreement. The NCCC further affirms that it will leverage its network of institutional partners like the Government MDA’s⁴⁰, ‘Central Bank of Nigeria, the Ministry of Petroleum Resources, UNFCCC, UNDP, the World Bank, etc. and the private sector, to prioritise carbon market access through the cooperative approach as outlined in the Paris Agreement’⁴¹. The NCCC recognises the status of national private sector operators with the success and attractiveness of Nigeria’s carbon market and intends to ensure private sector contribution by ramping up the decarbonisation of their respective value chains⁴². The NCCC Guidance Note provides that the Council will pay close attention to industry-specific methane abatement efforts under its mandate. It also pointed out the embryonic nature of voluntary carbon markets and the Country’s commitment to participate, steered by government guidelines and development priorities for credibility and predictability, to encourage and protect participants.

Consequently, a “No-Objection” by the NCCC will be required by regulation to approve the issuance and transfer of certified credits generated across all sectors, in line with Article 6.2 of the Paris Agreement. In line with the Paris Agreement, the NCCC will make available periodic updates and

³⁷ *Ibid* s 2.

³⁸ *Ibid* s 1 (a-i)

³⁹ Climate Change Act, 2021 s 1 (b)

⁴⁰ Section 35 of the Climate Change Act defined MDAs as Ministries, Departments, Agencies of the Federal Government of Nigeria,

⁴¹ NCCC, ‘Regulatory Guidance on Nigeria’s Carbon Market Approach,’ available at <<https://natccc.gov.ng/publications/NCCC%20Regulatory%20Guidance%20on%20Nigeria%E2%80%99s%20Carbon%20Market%20Approach.pdf>> accessed 18/10/2024.

⁴² *Ibid*.

briefings on all carbon market-associated actions and equally welcome participants' contributions, comments, and suggestions. One essential element of this regulatory guide is the "No-Objection", which is somewhat unclear; regardless of the ambiguity, this paper hopes that the drafters of the regulation will give lucidity to the precise meaning and how it will be operated.

This paper, however, suggests that "No-objection" should be a procedure where intending carbon credit project developers will bring proposals, and such proposals will go through the NCCC scrutiny; and a situation where the NCCC considers the proposal necessary for approval a "No-objection" should be conveyed to such project developers. This way, the carbon market in Nigeria will be strongly viable as this procedure will boost the veracity of carbon credits.

8.0 Emerging Trends in the Carbon Market in Nigeria

The Federal Ministry of Environment, through its Department of Climate Change, created the "2050 Long-Term Vision for Nigeria" ("LTV-2050"). The LTV-2050 provided quite a few tactical steps to guide Nigeria's path towards a long-term decarbonisation of its carbon footprint. Amongst these tactical steps was promoting the decarbonisation goal via the carbon market. It accentuated the need for subsidy reform, carbon tax, eco-labelling, and a robust carbon market to signal long-term policy.⁴³

Since the creation of the LTV-2050, Nigeria has taken somewhat wishful steps to establish a sustainable carbon market. These steps include the Nigerian Sovereign Investment Authority ("the NSIA") and the NCCC reaching a Memorandum of Understanding (MOU) to address climate risks urgently.⁴⁴ The MOU highlighted possible partnership areas, such as establishing a climate change framework, implementing a carbon emissions trading mechanism, and managing a national carbon registry and Climate Change Fund.

Another step worth mentioning is the Memorandum of Understanding (MoU) with Carbon Vista, a joint venture between the Nigeria Sovereign Investment Authority and the Regional Voluntary Carbon Market Company (RVCMC), a subsidiary of the Public Investment Fund (PIF) of the Kingdom of Saudi Arabia (KSA).⁴⁵ The MOU aims to supply Nigerian carbon credits to KSA and co-invest in projects that create high-integrity carbon credits. The partnership between Carbon Vista and RVCMC is planned to raise the implementation of voluntary carbon credits and encourage low-carbon fiscal development. It further emphasises Nigeria's and KSA's pledge to tackle the hostile impact of climate change and promote sustainable development.

⁴³ Department of Climate Change, Federal Ministry of Environment, Nigeria, 'Towards the Development of Nigeria's Long-Term Low Emissions Development Strategy (LT-LEDS)' available at <FINAL NIGERIA LT VISION_2050_Nov2021.pdf (unfccc.int)> accessed 20/10/2024.

⁴⁴ Nigerian Sovereign Investment Authority, NSIA Signs MoU With NCCC & Publishes Maiden Edition of its Development Impact Report <NSIA Signs MoU With NCCC & Publishes Maiden Edition of its Development Impact Report - NSIA> accessed 20/10/2024.

⁴⁵ *Ibid*, 'Carbon Vista Signs an MoU with Regional Voluntary Carbon Market Company (RVCMC) for the offtake of its High Integrity Carbon Credits', available at <Carbon Vista Signs an MoU with Regional Voluntary Carbon Market Company (RVCMC) for the offtake of its High Integrity Carbon Credits - NSIA> accessed 20/10/2024.

Still an emerging trend in the carbon market in Nigeria, the NCCC, in January 2024⁴⁶, introduced training on implementing Article 6 of the Paris Agreement, responding to COP28's call for tangible action. The training aims to reassure Nigeria's climate commitments and establish its carbon market development. Most recently, the Intergovernmental Committee on Carbon Market Activation Plan was inaugurated by the Vice President.⁴⁷ of Nigeria to develop a well-organized and sustainable carbon market.

9.0 Advantages of a Carbon Credits Market for Nigeria

This article outlines the advantages of the carbon credit market in Nigeria from two basic perspectives: environmental and economic benefits.

9.1 Environmental benefits:

- a.) Mitigating Carbon Footprint: Considering Nigeria's level of carbon emissions as a result of constant use of fossil fuel, developing a carbon credit market will greatly encourage cleaner technologies and sustainable practices, which will momentarily result in greenhouse gas reductions.
- b.) Satisfying International Environmental Commitments: Creating a carbon credits market bring into line Nigeria's commitments under the Paris Agreement, offering an organised mechanism to realising its National Determined Contributions (NDCs) while boosting its integrity in international climate consultations.
- c.) Biodiversity Protection: Carbon credit projects such as reforestation can protect Nigeria's biodiversity and ecosystems while boosting carbon sequestration.

9.2 Economic benefits:

- a.) Foreign Investment: Nigeria's carbon credit market can increase foreign direct investment. The country's rich natural resources and large economy can draw international investors to contemplate emissions reduction through sustainable projects on carbon offsets with Nigeria. A substantial carbon credits market will enable foreign investment and fund renewable energy and infrastructural growth.
- b.) Promote Green Energy Schemes: The Nigerian carbon credits market can fast-track green energy schemes, like solar and wind power, by making available pecuniary incentives that increase their feasibility.
- c.) Jobs Creation: The Nigerian carbon credits market can create jobs across several sectors. Project management and environmental jobs will be in high demand. Developing robust renewable energy enterprises will produce employment in the energy and construction sector.

⁴⁶ Nigeria's Article 6 Framework Paving the path for significant participation in cooperative mechanisms under the Paris Agreement, available at <<https://sciencenigeria.com/nigeria-gears-up-for-carbon-trading-nccc-hosts-training-on-article-6-implementation/>> accessed 20/10/2024.

⁴⁷ J Chibundu, 'Repositioning Economy for Investments' — Shettima Inaugurates Carbon Market Committee'. Available at <<https://www.thecable.ng/repositioning-nigeria-for-investments-shettima-inaugurates-carbon-market-committee/>>

10.0 Carbon Credit Market in other Jurisdictions

a. The European Union

The European Union (EU) Emissions Trading Scheme (ETS) is the cornerstone and foundation of the EU's climate policy and its pivotal tool for cost-effectively reducing greenhouse gas emissions. It was launched in 2005 as the world's first carbon market and remains among the largest globally. It requires polluters to pay for their greenhouse gas (GHG) emissions, helps bring overall EU emissions down while generating revenues to finance the green transition; it covers emissions from the electricity and heat generation, industrial manufacturing, and aviation sectors - which account for roughly 40% of total GHG emissions in the EU; operates in all EU countries plus Iceland, Liechtenstein and Norway, and is linked to the Swiss ETS since 2020.

The EU has a Climate Ambition for 2030 that requires all EU Member States to become climate-neutral by 2050. As a 'first milestone, the EU aims to reduce its net emissions by at least 55% by 2030 compared to 1990 levels'. The EU ETS plays a central role in accomplishing this goal cost-effectively, and the 2023 revision of the ETS Directive aligned the system with this target.

Fundamental changes agreed in the 2023 revision of the ETS Directive include tightening the cap to reduce emissions by 62% by 2030 compared to 2005 levels. This covers emissions from marine transportation, which have been included in the EU ETS from 2024; free allowance allocation to companies has been scaled down, in line with the tighter cap, and made conditional on the companies' decarbonisation efforts. For the aviation sector, free allocation will be removed as of 2026.

EU has enacted a fresh emissions trading system called ETS2, which involves emissions from buildings, road transport, and other sectors. The new system will be operational in 2027 and complement other EU Green Deal policies. The EU also created the Social Climate Fund (SCF) to tackle the social impact of carbon pricing in the sectors covered by ETS2, ensuring vulnerable citizens are not left behind in the green transition. The SCF will mobilise EUR 86.7 billion from the ETS2 revenue in the 2026-2032 period. EU has set the pace, and Nigeria has many lessons to learn and adopt the procedures engaged while setting up the country's carbon market. It is hoped that Nigeria's carbon credit market will reach this point once it is fully operational.

b. The Kingdom of Cambodia

The kingdom of Cambodia in Southeast Asia appears to be one of the leading players in the Carbon credit market. It has all-embracing practices in the voluntary carbon market in the forest sector. In December 2020, it updated its NDC and Long-Term Strategy for Carbon Neutrality.⁴⁸ Through its second phase of the climate promise, Cambodia increased its mitigation ambition with an emissions reduction target of 41.7% by 2030 compared to business as usual. The revised NDC includes new mitigation targets in the agricultural and waste sectors and more detailed actions in key subsectors, such as energy efficiency.⁴⁹

⁴⁸ UNDP, Cambodia Updated NDC, <available at <https://climatepromise.undp.org/news-and-stories/what-are-carbon-markets-and-why-are-they-important>> accessed 22/10/2024.

⁴⁹ *Ibid.*

Cambodia has set an ambitious target to halve deforestation by 2030, which aligns with the REDD+ strategy. The NDC highlights that adaptation remains a top priority for Cambodia and that adaptation measures have been strengthened. The revised NDC has been fashioned with a wide-ranging consultation process to consider gender equality issues and vulnerable groups.

Intentionally, Cambodia is looking at how the structured, regulated, and voluntary international carbon markets can provide prospects for activating investments in priority sectors such as energy, forest, and land use.

c. The Republic of Ghana

Ghana's carbon credit market has recorded notable development; its framework on the international carbon market and non-market methods was made known after a resolution to implement voluntary cooperation under Article 6 of the Paris Agreement.⁵⁰ The framework highlighted functioning guidelines for Article 6 of the Paris Agreement, embracing cooperative approaches, the sustainable development Mechanism, and voluntary carbon markets. It provided institutional arrangements, eligibility criteria, methodology and standards, authorisation procedures, project development steps, digital infrastructure, fees, and reporting.⁵¹

In keeping with its commitment to reduce its emissions level via the carbon credit market, the government of Ghana has established a Carbon Market Office (the "CMO") under the Climate Change Unit of the Environmental Protection Agency (EPA). This office has actively enabled voluntary initiatives under Article 6 of the Paris Agreement in Ghana.⁵² It is important to note that the Carbon Market Office recorded about thirty-five (35) project proposals in 2023, and nine of those proposals have been successfully incorporated into the Ghana Carbon Registry (GCR) and assigned mitigation activity participation identification numbers (MID).⁵³ Most recently, Ghana and Singapore entered a carbon credit implementation agreement on carbon credits under Article 6 of the Paris Agreement on the 24th day of May 2024. The core objective of this contract is to promote climate ambitions, direct financing in the direction of mitigation efforts, and enable sustainable development.⁵⁴

d. The Republic of Rwanda

The government of Rwanda, on the 2nd of December 2023, inaugurated its National Carbon Market Framework.⁵⁵ It created guidelines for carbon credit trading and urged businesses and industries to embrace cleaner practices and sustainable technologies.⁵⁶ It was designed to encourage Rwanda's participation in international cooperation under the Paris Agreement, leveraging opportunities under

⁵⁰ UNDP, 'Putting markets to work: How Ghana will fund development projects through carbon finance' available at <<https://www.undp.org/africa/blog/putting-markets-work>> accessed 22/10/2024.

⁵¹ Carbon Market Office, 'Ghana's Report on the Implementation of Article 6 of the Paris Agreement,' available at <https://cmo.epa.gov.gh/wp-content/uploads/2024/02/Article-6-Annual-Progress-Report-2023_final.pdf> accessed 21/10/2024.

⁵² *Ibid.*

⁵³ Singapore Ministry of Sustainability and the Environment, 'Singapore Sings Implementation Agreement with Ghana to Collaborate on Carbon Credits under Article 6 of the Paris Agreement', available at <https://cmo.epa.gov.gh/wp-content/uploads/2024/02/Article-6-Annual-Progress-Report-2023_final.pdf> accessed 20/10/2024.

⁵⁴ *Ibid.*

⁵⁵ Republic of Rwanda, 'Rwanda Launches Carbon Market Framework to Advance Climate Action For A Sustainable Future' available at <Rwanda Environment Management Authority (REMA): Rwanda launches Carbon Market Framework to advance Climate Action for a Sustainable Future> accessed 20/10/2024.

⁵⁶ *Ibid.*

Article 6, which include utilising internationally transferred mitigation outcomes (ITMOs) towards NDCs.⁵⁷

One of the fundamental objectives of the Rwanda Carbon market framework is to aid in increasing transparency and trust among carbon traders, and the Clean Development Mechanism (CDM) and the Voluntary Carbon Market (VCM) are the two critical operational mechanisms under the Framework. Rwanda's carbon credits are mainly produced from improved cookstove projects, which are responsible for 87% of the total Certified Emission Reductions (CERs) issued⁵⁸. Interestingly, in the latter part of 2023, Singapore and Rwanda signed an MOU to collaborate on carbon credits and related market initiatives. This agreement includes but is not limited to exchanging best practices on carbon market mechanisms and recognising jointly advantageous to both parties.

This paper strongly advocates that Nigeria's carbon market is feasible, owing to the country's endowment with natural resources, these natural resources can be harnessed technologically.

11.0 Conclusion

Nigeria's carbon market covers several sectors, as well as renewable energy and agricultural sector. These sectors suggest considerable potential for societal impact and emission reduction, and supporting global climate goals. Establishing Nigeria's carbon market requires creating robust regulatory frameworks, and nurturing partnerships with international organizations such as VERRA, (regarded as the world's largest certifier of voluntary carbon offsets), and Africa Carbon Markets Initiative (ACMI) for viable carbon market participation across the continent.

The carbon credits generated through this partnership will contribute to both countries' climate targets and support the global transition to a carbon-neutral economy, ultimately promoting a sustainable future for all.

12.0 Recommendations

Knowing the attitude of Nigeria toward the implementation and regulation of a new parastatal, the following recommendation has become necessary.

1. Enacting an all-encompassing Legal Framework: To have a robust and viable carbon credit market, the Legislatures should enact unambiguous regulations for the carbon credits market, which would fundamentally outline the procedures for generating, verifying, and trading credits geared towards international best practices,
2. Create Awareness: The National Orientation Agency saddled with the responsibility of creating orientation for the general public on government new policies, should launch a campaign to educate businesses, communities, and policymakers on the advantages of carbon credits and trading and reduction of carbon emissions. An amplified understanding of the carbon credit market will enhance participation rates amongst the general public.

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*



3. Technical Capacity and Infrastructure Design: For a viable carbon credit market in Nigeria, periodic technical and capacity-designed training programs and workshops should be introduced for stakeholders, project developers, and government officials to advance their knowledge of the carbon credit market, accounting, and reporting, partnership with the government and private sector is indispensable to boost the structure needed for renewable energy schemes and carbon credit initiatives.