

THE POTENTIAL OF CARBON FINANCE IN THE SUSTAINABLE DEVELOPMENT OF NIGERIA

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ABSTRACT

Carbon finance provides a significant and unique opening for Nigeria to promote sustainable development initiatives, such as forestry, clean technology and renewable energy projects and as well, while reaping financial benefits it can significantly meet its international obligations of responding appropriately the challenges of climate change. Nigeria, is a uniquely placed to reap the investment window in carbon finance as it has been projected to have the fourth largest population on earth by 2050; currently has the highest rate of deforestation in the world and ranked third among countries with highest number of blackouts per month; acknowledged to have abundant natural resources suitable for climate change related projects such sustainable energy production, clean technology productions, afforestation etc. Despite these advantages, Nigeria has enjoyed very little access to the ever-expanding carbon finance window for its development. This paper overviews carbon finance as a sustainable development mechanism; the available carbon finance instruments, the potential for Nigeria (specifically) in the area of 'Clean Coal Technology Development' and highlights how a combination of factors such as low awareness of its existence, low awareness on climate change issues generally, lack of human resource with appropriate financial and technical competence and weak institutional arrangement as major barriers that prevented Nigeria from accessing this important window. The paper recommends vigorous enlightenment at all levels to climate change issues and the opportunities, establishing and strengthening of all climate change institutions; identifying opportunities for technology transfer and strengthening risk mitigation instruments to enhance carbon finance inflow.

Key words: climate change; renewable energy, emission reduction, deforestation, mitigation, adaptation

JEL Classification: E31, I32, H53



1.0 Introduction

Discussions around carbon finance has been attracting the attention of academics, policy makers and commentators as the world faces rising temperature, extreme weather events and increasing impacts of climate change. This situates climate change at the heart of economic growth and development, particularly in the developing countries like Nigeria. If not taken seriously as a development challenge could lead to a very serious impacts on Nigeria's growth (World Bank, 2014). It further concluded that only a sustainable response will provide long lasting answers to millions of Nigerians challenged by unemployment, desertification, sea level rise, migration and conflict. The report also indicated that climate change can compromise the achievement of the Millennium Development Goals.

One of the most significant efforts to address the challenge to date is the Kyoto protocol which required the industrialized nations referred to as annex 1 countries to reduce their GHG emissions by 5.2% of the levels in 1990 during the first phase of the Protocol from 2008 to 2012, which was extended January 2013 to 31st December 2020 (UNFCCC, 2013). To enable annex 1 countries, meet their targets, the Kyoto Protocol provides flexibility mechanisms through the carbon finance namely: the Clean Development Mechanism (CDM) and the Joint Implementation (JI), which involves setting up Emission Reduction projects in developing countries in exchange for Emission Reduction Units (ERUs) and Emissions Trading involving the trading of carbon.

Although, the Kyoto Protocol never prescribed how carbon finance should be distributed among countries, interest in regional distribution patterns have been high ever since with largest concentration in Asia with (45%) of the total trade; Latin America is second with (35 %) and, Africa as a whole accounted for only (3.2%) (Peskett et al, 2010).

Nigeria's potential in carbon markets is acknowledged based on its ability to produce a wide range of carbon mitigation projects as well as its possibilities for sustainable development (IPCC, 2016). The country has the potential to generate 87.2 to 124.7 MtCO₂e of greenhouse gases emissions reduction through carbon market activities, which are estimated to have a cumulative carbon market potential value of between US\$736m and US\$2.5bn by 2030 (Nigeria Carbon Market Activation Policy, 2025).

Furthermore, an impetus for carbon finance in Nigeria is that until recently, economic growth had been above the global average and generates consumer demands. Also, high renewable energy sources offer good potential for carbon mitigation and reduction of emissions in Nigeria all key issues for sustainability (World Bank, 2014). Therefore, the small percentage of carbon finance in Nigeria demands attention. This paper overviews the carbon finance mechanism, the potentials of carbon finance in Nigeria specifically in the area of Clean Coal Technology and the constraints to access to this important resource.

2.0 What is Carbon Finance?

Carbon finance is a set of financial mechanisms put in place to finance projects and activities that aim at reducing and/or avoiding greenhouse gas emissions into the atmosphere. The carbon comes from the fact that carbon dioxide (CO₂) is the reference for measuring global warming potential. Global-warming potential (GWP) measures how much energy the emissions of one ton of a gas

will absorb over a period of time, relative to the emissions of one ton of carbon dioxide. The measure was developed to allow comparisons of the global warming impacts of different gases. Carbon dioxide has a GWP of one and all other greenhouse gases are converted into CO₂. For example, methane, which is another GHG, has a global warming potential of 21 GWP compared to carbon dioxide, i.e., one ton of methane pollute 21 times more than one ton of carbon dioxide, and Nitrous oxide (N₂O) also has a GWP of 320. (UNFCCC, 2005).

Carbon finance is aimed at reducing the economic burden of mitigating climate change resulting from anthropogenic emissions of greenhouse gases (GHG). It comprises diverse set of international and national public and private mechanisms, four of which have been well established by the Kyoto Protocol as enunciated in the list of mechanisms and options for carbon finance under Kyoto treaty (see Annex 1., UNFCCC; 2005).

i) Emissions trading scheme: A market-based instrument that fosters the transition to a more sustainable economy through financial incentives for further emission reduction. It allows Annex B countries with unused emissions (as allocated under the Kyoto Protocol) to sell this excess capacity to countries that have surpassed their allocated targets.

ii) Joint Implementation (JI) Mechanism: A project-based mechanism, the JI is intended for use between Annex I countries. It is the equivalent mechanism of the CDM for industrial countries and allows them to carry out cooperative projects.

iii) Clean Development Mechanism (CDM): Under the UNFCCC (2005) treaty, developed countries, or the industries that they regulate, can purchase carbon credits from developing countries to meet legally binding emissions reduction targets. Instead of undertaking more expensive emission reduction measures on their own soil, industrialized countries can achieve the same outcome through offsetting in developing countries. The CDM is managed and overseen by the United Nations (UN), which sets the rules. Project needs to be in a developing country that has signed the Kyoto Protocol (almost all countries have), and there must be an UN-accredited third-party organization to check that assumptions and calculations about the project are correct. These firms are known as Designated Operational Entities (DOEs). The UN CDM Executive Board also has a final say. If it approves a project, it will be registered and eventually receive Certified Emission Reductions (CERs).

Several types of carbon offset activities can be undertaken in order to generate carbon credits for sale in carbon markets. These may include large industrial scale projects such as hydroelectric energy, energy efficiency improvements in industry, landfill gas reductions. The types of carbon offset projects most relevant to the forest sector and in which substantial participation of rural communities is feasible concern: Afforestation and reforestation activities, Avoided deforestation (or Reduced emissions from deforestation and forest degradation; REDD); UN-REDD: a joint FAO, UNDP and UNEP programme to assist developing countries to prepare and implement national REDD strategies and mechanisms; Forest Carbon Partnership Facility (World Bank): a facility to assist developing countries in their efforts to reduce emissions from deforestation and degradation and to build capacity for REDD activities; Forest Investment Programme (World Bank): support developing countries with their REDD efforts by providing bridge financing for

readiness reforms and investments identified through national REDD (Gondo, 2010); Bio-carbon Fund (World Bank): set up in 2003 to demonstrate projects that sequester or conserve carbon in forest and agro-ecosystems; Community Development Carbon Fund (World Bank): created in March 2003 to extend the benefits of carbon finance to the poorest countries and poor communities (Peskett et al, 2010). REDD was only recently recognized as a mechanism for reducing carbon emissions following the 2009 Copenhagen Climate Conference

iv) Unregulated or voluntary carbon market: Many smaller firms and ordinary citizens are interested in voluntarily reducing their carbon emissions outside of any legal obligations and having reduced their emissions may wish to offset their remaining emissions by purchasing an equivalent number of carbon credits, thereby becoming ‘carbon neutral’ often as part of corporate social responsibility or to reduce individual carbon footprint. This market exists outside of international rules. They have come about mainly because companies and individuals that are not regulated under international agreements have become interested in taking voluntary action to tackle climate change. There is a multitude of different standards and systems in operation within the voluntary markets, i.e., There exist a set of separate trading systems. However, as with the CDM, there are project-based systems where carbon offset credits are purchased from projects in developing countries. (Peskett et al, 2010).

This is especially important for companies in the United States who cannot participate in the carbon finance because their country is not a signatory to the treaty, or for environmentally conscious airline passengers who want to offset their emissions. Many such firms and individuals also look to buy carbon credits from projects that also have positive community and biodiversity benefits in addition to their carbon reductions. This represents a special opportunity for pro-poor energy projects.

2.1 What is carbon trading?

Carbon trading comes in two main varieties: ‘cap and trade’ and ‘off setting’. Under cap-and-trade schemes, governments or intergovernmental bodies set an overall legal limit on greenhouse gas (GHG) emissions in a certain time period (‘a cap’) and then grant industries licenses to pollute (‘carbon permits’ or ‘emissions allowances’). Companies that do not meet their cap can buy permits from others that have a surplus (‘a trade’) (IGES, 2010).

In addition, off sets are created when a company supposedly removes or reduces carbon. It receives credits for this activity, which can be sold to polluters that want permission to emit more carbon. One activity is supposed to ‘compensate’ for the other (Lewis, 2010). The CDM, created as part of the Kyoto Protocol, is the largest off setting scheme with almost 3 400 registered projects in the global South as of September 2011. Based on current prices and predictions, the credits generated by approved schemes will be worth between \$20 billion and \$33 billion by 2012(IPCC, 2013).

2.1.1 The mechanisms of carbon finance

A credit can be an emissions allowance which was originally allocated or auctioned by the national administrators of a cap-and-trade program, or it can be an offset of emissions. Such offsetting and mitigating activities can occur in any developing country which has ratified the Kyoto Protocol, and has a national agreement in place to validate its carbon project through one of the UNFCCC's

approved mechanisms. Once approved, these units are termed Certified Emission Reductions (CERs). The Protocol allows these projects to be constructed and credited in advance of the Kyoto trading period.

The Kyoto Protocol provides for three mechanisms that enables countries or operators in developed countries to acquire greenhouse gas reduction:

- i) Under Joint Implementation (JI) a developed country with relatively high costs of domestic greenhouse reduction would set up a project in another developed country.
- ii) Under the Clean Development Mechanism (CDM); a developed country can 'sponsor' a greenhouse gas reduction and avoidance projects in a developing country where the cost of greenhouse gas reduction project activities is usually much lower, but the atmospheric effect is globally equivalent. The developed country would be given credits for meeting its emission reduction targets, while the developing country would receive the capital investment and clean technology or beneficial change in land use.
- iii) Under International Emissions Trading (IET) countries can trade in the international carbon credit market to cover their shortfall in allowances. Countries with surplus credits can sell them to countries with capped emission commitments under the Kyoto Protocol

2.2 The Global Carbon Market

Carbon markets support climate commitments, lower cost of new technology, and finance nature-based solutions like forest restoration and deliver development dividends in terms of more affordable energy access, cleaner cooking fuel, and healthier forests (World Bank Group, 2025). The active creation of carbon finance funds and facilities by the international community has been an important factor in the expansion of carbon finance. These funds operate by either directly investing in projects and companies or by buying carbon credits outright, while the facilities help to fund initial project costs such as registration fees and impact assessment studies (State & Trends, 2008). In 2007, a global carbon finance pool of US\$9.5 billion was under the management of about 58 public and private funds. A year later, this amount had grown to US\$13.8 billion spread over 67 funds. In 2009, the World Bank Group alone is managing over US\$ 2.2 billion in funds (pledged by 19 governments and 66 firms) for its carbon funds and facilities (World Bank Group Database, 2009). In addition, numerous Annex 1 countries have created or plan to create their own instruments while a number of non-Annex 1 countries are examining options such as carbon taxes and cap and trade systems. By March 2024, Nigeria inaugurated Intergovernmental Committee on Carbon Market Activation, developed national carbon market policy, a carbon pricing system including a tax effective January, 2026, and emissions trading scheme and mechanisms to ensure market integrity, transparency, and fraud prevention (KPMG, 2025).

Further, UNFCCC negotiations have led to pledges for the establishment of more robust financial mechanisms to drive low-carbon development; Fast Start Finance, a commitment by developed countries to provide new and additional resources to the value of approximately \$30 billion between 2010 and 2012, Green Climate Fund, which will be in operating entity of the financial mechanism of the Convention to support projects, programmes, policies and other activities in



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developing countries related to mitigation including Reducing Emissions from Deforestation and Forest Degradation (REDD+), adaptation, capacity-building, technology development and transfer (EU, 2012). In addition, regional governments and international donor agencies in developed countries have established a number of funds and incentives aimed at low-carbon development in developing countries. These include the Clean Technology Fund and the Global Energy Efficiency and Renewable Energy Fund of the European Union.

Carbon offset projects continue to increase in capital intensity as the offset markets develop, the capital flows will grow exponentially. There are three different approaches to estimating the potential capital investment flows: the World Bank's Development Report assumes each dollar of carbon market flow results in \$4-9 of capital investment; the McKinsey Abatement Cost Curve, allows calculation of the expected investment based on a micro-economic assessment of potential offset supply; and The UNFCCC CDM database allows for observations of ex-ante expected investment in CDM projects. Overall, potential capital investment might be in the \$30-144 billion range for the low-price scenario, and this could rise to \$130-200 billion in the medium price scenario. Clearly based on this huge projection there must an opportunity for Nigeria, hence great potential for the future.

For trading purposes, one allowance or CER is considered equivalent to one metric tonne of CO₂ emissions. These allowances can be sold privately or in the international market at the prevailing market price. These trade and settle internationally and hence allow allowances to be transferred between countries. Each international transfer is validated by the UNFCCC. Each transfer of ownership within the European Union is additionally validated by the European Commission. In October 2022, the Africa carbon markets initiative (ACMI) estimated that Nigeria can generate up to 30 million carbon credits annually by 2030, with potential earnings of over US\$500m per year, estimated at US\$20 per credit (KPMG, 2025).

3.0 Nigeria's Access to Carbon Financing

As at 2011, five projects in Nigeria were registered with the CDM Executive Board, three in the recovery and conversion of associated gas, the fourth on efficient household fuel wood stoves and the fifth on electricity generation from landfill gas in Lagos. These projects have the potential to generate about \$80 million worth of revenue annually. In addition to CDM projects, Nigeria had been admitted as a member country of the UN-REDD. A REDD project worth \$4 million was approved for Cross River State in 2011 (Henrich Boll Stiftung, 2012).

Since the beginning of 2010, there is growing interest in investments in low-carbon development in Nigeria. A good example includes the United States Trade and Development Agency (USTDA) project with the Nigerian Electricity Regulatory Commission (NERC) to develop a regulatory framework designed to provide investment incentives to independent power producers (IPPs) utilizing renewable energy resources in Nigeria (USTDA, 2010). There is also the European Union Micro Projects Programme in the Nine Niger Delta States (MPP9), where a number of innovative projects including solar powered school internet laboratories and waste management and recycling are being implemented (mpp9.org 2012).



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Apart from government-owned large hydropower installations, some organizations and institutions have initiated small hydropower projects. Nigerian Electricity Supply Organization Ltd (NESCO) owns a group of small hydropower plants with a combined capacity of 25MW (NESCO 2009). The United Nations Industrial Development Organization (UNIDO) Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers completed two of four planned pilot projects intended to build awareness and create capacity for micro hydropower development in Nigeria. Projects in Enugu State (30KW) and Bauchi State (150KW) were undertaken through a public-private partnership.

According to (OXFAM 2024), a total of 828 climate-related projects were committed to Nigeria between 2015 and 2021, amounting to US\$4.928bn in climate finance. The top sectors funded by the climate finance provided to Nigeria were Agriculture, Forestry and other Land Uses (AFOLU), Water and Sanitation, Education and Financial Services. The top five providers of green finance to Nigeria within the same period were World Bank (US\$3.17bn), France (US\$616m), EU (US\$321m), European Investment Bank (EIB, US\$214m), and Africa Development Bank (AfDB, US\$155m). Early 2026, Green Climate Fund had approved 19 projects for Nigeria, totaling US\$257m (Green Climate Fund, 2026).

3.1 Potentials for Carbon Finance in the Sustainable Development of Nigeria

Apart from greenhouse gas emission reductions associated with carbon finance instruments, Nigeria is a region where any ton of carbon dioxide reduced contributes directly to sustainable development. Like in other African countries, emission reductions are based on projects like improved cooking stoves to replace three stones stoves, renewable energy for alternative electricity and people using kerosene and diesel generators, or modern landfill sites. All of these projects are directly associated with economic development and social wellbeing of the disadvantage populations and sustainable use of environmental resources.

Reducing Emissions from Deforestation and Forest Degradation (REDD+); a set of policies are put in place to protect the destruction of forest and hence increase the sinking of the carbon can address one pillar or a combination of many pillars, with the complexity increasing when many pillars are included in a single programme. All these mechanisms imply that emission reductions can be monitored, reported and verified by any party that wishes to do so.

Sustainable development benefits can also be achieved by reductions in air and water pollution through reduced fossil fuel use, fuel-wood and charcoal, and in extension improve water availability, reduced soil erosion and protected biodiversity. For social benefits, many projects would create employment opportunities in target regions or income groups and promote local energy self-sufficiency. Therefore, carbon abatement and sustainable development goals can be simultaneously pursued. Many options under the CDM could create significant co-benefits in Nigeria by addressing local and regional environmental problems and advancing social goals.

Overall, offset finance has the potential to create a number of broader economic, environmental and social benefits that will ultimately lead to sustainable resource use in Nigeria. First, economic growth created by the direct and indirect effects of investment projects may alleviate other blockages to growth by providing essential infrastructure e.g., renewable power generation.

Secondly, economic growth can be associated with broader social benefits, for example, where chronically high unemployment rates are reduced, or where access to electricity becomes available in some areas. Thirdly, Carbon finance can help place the growth trajectory of Nigeria onto a lower carbon intensity footing and avoid lock-in of emissions intensive investments making it easier for Nigeria to achieve lower emissions outcomes in future. Fourth, environmental co-benefits might be created: for example, there are likely to be significant environmental co-benefits associated with habitat preservation, water quality and erosion prevention associated with many REDD activities. Fifth, Improvement of the overall investment climate as the result of private sector investment and involvement in carbon emission reductions. Lessons learned in developing institutional capacity to underpin carbon market financing is likely to be valuable in supporting other types of investment. Finally, knowledge transfer from developed country (project developers) to Nigeria will manifest itself in the transfer of knowledge of carbon abatement as well as the installation of advanced equipment to reduce emissions.

3.2 Clean Coal Technology through low carbon development funds in Nigeria

Emerging clean coal technologies (CCTs) can be used effectively to reduce the environmental impact of the continued use of coal throughout the world. Although carbon emissions (CO₂) cannot be reduced significantly by these technologies, emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and particulates can be reduced by 50 to 99 percent. Many of the CCTs that have been developed and commercialized in industrialized countries warrant consideration for use in developing countries (World Bank, 1995).

To meet the increasing energy demand (specifically electricity) Nigeria realized the fact that it needs to diversify its fuel mix in electricity generation. Consequently, the government declared, in August 2014, that 30 percent of its electricity should come from coal (Coal Atlas, 2015). The same source indicated that the country has estimated high quality lignite coal reserves of 2.8 billion tones deposited around Enugu, Kogi, and Benue and Gombe states and by implication it stands a chance to either establish conventional pulverized coal-based power plants or establish clean-coal, high-efficiency and environmentally-friendly power generation technology through low carbon development funds. The conventional pulverized coal-fired power plant has been associated with inefficiency, rigidity and above all high emissions of Sox, Nox and dust per generated power unit. However, if the country can access fund and technology through carbon finance it can establish environmentally friendly coal power plants using any of the two major clean-coal technology options available, thus, the Carbon Capture and Storage (CCS) or Integrated Coal Gasification Combined Cycle (IGCC) technology.

i) Carbon Capture and Storage (CCS): Carbon capture involves the separation of CO₂ from combustion gases and compressing it so that it is suitable for safe transport (through pipelines) and storage in geological reservoirs; including depleted oil fields, deep saline aquifers and deep un-mined coal seam. A power plant equip with CCS technology emits almost no CO₂ making the concept to zero emission fossil fuel power plant a reality European Commission Community Research (2015). The technology is being developed and is comprise of three distinct phases;



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capture, transport and storage. There are three capture options; post-combustion capture, pre-combustion capture and Oxy-fuel firing.

ii) Integrated Coal Gasification Combined Cycle (IGCC): is a high-efficiency coal-fired power generation technology which gasifies coal to be used as fuel for gas turbines International Energy Agency (IEA, 2013). The IGCC has many advantages if compared to the conventional pulverized coal-fired power plants. Firstly, it improves power generation efficiency of approximately 20percent for commercial plants. Secondly, it lowers emissions of Sox, NOx and dust. Thirdly, carbon emissions are reduced to the level of heavy-oil-fired power generation process. Fourthly, it discharges coal ash in the form of glassy molten slag which is used as component for civil engineering work.

The IGCC has been pursued using technologies of MITSUBISHI HITACHI POWER SYSTEMS, LTD. It started in 1983 with experiments conducted at the Central Research Institute of Electric Power Industry using-ton/day basic experiment equipment. JOBAN JOINT POWER CO. LTD., started operating a commercial plant in June 30, 2013 and by December 2013, the plant demonstrated its high reliability by achieving 3,917-hour continuous operation.

If Nigeria is able to source the finance and any of these technologies, the country will not end-up establishing the traditional pulverized coal-fired power plants which have been observed to be very dirty; containing large amount of environmentally hazardous substances such as sulfur and ashes. As such, the core of the Nigeria's national policy on coal should be the promotion of clean coal technology for electricity production (Denloye & Akinola, 2017).

4.0 Constraint to Carbon finance in Nigeria

Despite the prospects, it is difficult to envisage any major flow in Carbon finance projects in Nigeria due to several factors:

- a) Attractiveness to investments in Carbon projects particularly depend upon the nature of economy, type of finance availability, impact of carbon finance on project cost recovery, etc. Studies quote that Nigeria's potential primarily lie in projects with 'low carbon credit contribution to the total project cost recovery' (such as landfill gas, renewable energy sector, LULUCF, etc.), which dis-incentivize CDM investors from investing in Nigerian projects
- b) There is lack of awareness of the Carbon finance mechanisms in the financial sector, specifically across regional banks, smaller financial intermediaries, and local market professionals, often lag behind in practical execution, data-tracking, and accounting standards.
- c) Lack of local CDM consulting capacity which severely limits carbon finance uptake in Nigeria (Afeonkhai and Vandu, 2025).
- d) High cost of start - up and poor Investment climate in Nigeria, despite improvements in the general investment climate in Nigeria since 2005, its 'Global Competitiveness Index' has not improved substantially and its 'business extent of disclosure index' also features way below that of China and India. The country dropped slightly in the overall competitiveness ranking from 67th in 2025 to 68th in 2026 overall, dragged down by structural bottlenecks. Hence, in high capital investment ventures (riskier projects) like that of Carbon finance, attracting investors would



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require a strong policy push within the system concurrent to the improvements in general investment climate in Nigeria.

e) In Nigeria, SMEs make up the bulk of private sector economy and hence are extremely averse to risks and vulnerable to incremental costs. In the upper middle-income countries in such as China and India where markets are sufficiently developed and banking system is reliable, capital is always available for all kinds of investments including carbon finance projects.

f) Unclear Carbon Rights; Nigerian law does not clearly define who owns carbon credits tied to land, forests, or energy projects. This causes disputes between federal agencies, state governments, and local communities.

g) Nigeria lacks standardized digital registries and local baselines to track, issue, or retire carbon credits reliably. However, the country is currently rolling out a National Carbon Registry under the National Carbon Market Framework (NCMF) overseen by the National Council on Climate Change (NCCC)

5.0 Recommendations

One of the priorities for Nigeria to increase its access to international funds should be to manage its shared resources and to expand its domestic markets via regional integration in order to attain global competitiveness.

The banking sector in Nigeria should play an important role in assessing the soundness of project proposals. This is because foreign lenders/ international investors find it easy and acceptable to lend to entities which are appraised by local FIs/banks/ local agencies. For Instance, in India, IREDA and few other banks have set appraisal procedure for the carbon projects.

In order to facilitate the carbon projects, expeditiously in Nigeria, the financial intermediaries, such as energy service companies, mutual funds, etc., which are involved conventionally in project financing, that can orient resources and approval mechanism towards Carbon project as well, in their sector of operations. For example, the appraisal mechanism is already in place in India as an arrangement between World Bank PCF and IDFC (India). After a due diligence of IDFC's appraisal mechanism, PCF decided to fast track the project PINs proposed through it.

The guarantees such as the Partial Risk Guarantees (PRGs), Multilateral Investment Guarantee (MIGA), and Export Credit Guarantees (ECG) are important in mitigating country risks in Nigeria. Therefore, Nigeria should strengthen the Guarantee Scheme.

Institutions such as International Finance Corporation (IFC) have introduced some value-added financial products to help mitigate risks in emerging markets, carbon delivery guarantee products, and provision for upfront finances/ loans to carbon projects with a prerequisite of having a mature market in place. The role of public institutions and other support instruments is therefore crucial in mobilizing funds for private sector activities for market maturity and newer market developments necessary for exploiting these opportunities.

5.1 Conclusion

This paper has shown that the different finance mechanisms in the UNFCCs carbon trade stimulate financial flows for developing nations, such as Nigeria e.g. in the context of the Copenhagen



Accord commitments. An important aspect of carbon finance is the fact that offset finance does not only stimulate additional abatement, but moves the abatement from the developed to developing world. However, access to carbon markets may also stimulate developed countries to take on more stringent targets than they otherwise would have. Offset projects have the ability to create significant value or profits. Offset credits serve as an income stream for carbon abatement projects, often among a range of income streams. Despite surge of support instruments in Nigeria to leverage finances and upscale CDM activities in the continent, a strong policy push is needed in the continent to catalyze the private sector activities in carbon markets.

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