

FINANCING OPTIONS FOR CLIMATE CHANGE INTERVENTIONS



CENTRE FOR SOCIAL JUSTICE (CSJ)

(Mainstreaming Social Justice In Public Life)

First Published in 2017

By

Centre for Social Justice (CSJ)

No.17, Yaounde Street, Wuse Zone 6, P.O. Box 11418, Garki Abuja

Tel: 08055070909, 08127235995

Website: www.csj-ng.org

Email: censoj@gmail.com

Twitter: @censoj

Facebook: Centre for Social Justice, Nigeria

Blog: csj-blog.org

Centre for Social Justice (CSJ)

Table of Contents

Table of Content	iii
List of Tables and Charts	v
Acronyms	vi
Acknowledgement.....	viii
Executive Summary.....	ix
1. Introduction	1
2. Broad Funding Categories For Climate Change Adaptation	2
2.1 Municipal And National Finance	3
2.1.1 The Nigerian Ecological Fund	4
2.1.2 The Environmental Protection And Rehabilitation Fund	5
2.2 Multilateral And Bilateral Finance	5
2.3 Market Based Financing	6
2.3.1 Carbon Finance	6
2.3.2 Insurance	6
2.3.3 Guarantees	7
2.3.4 Public Private Partnerships (PPPs)	7
2.3.5 Green Bonds	7
3. International Funding Sources For Financing Climate Change	
Adaptation And Mitigation	8
3.1 Carbon Credits And Emissions Trading	8
3.2 Global Environment Facility (GEF)	11
3.2.1 The GEF Funding, Contributions And Eligibility Criteria	12
3.2.2 GEF Small Grants Programme (SGP)	13
3.3 Climate Investment Funds (CIFs)	13
3.3.1 Clean Technology Fund (CTF)	14
3.3.2 Pilot Programme For Climate Resilience (PPCR)	16
3.3.3 Scaling Up Renewable Energy In Low Income Countries Programme (SREP)	17
3.3.4 Forest Investment Programme (FIP)	17
3.4 Least Developed Countries Fund (LDCF)	17
3.5 Special Climate Change Fund (SCCF)	18
3.5.1 Eligibility For SCCF And Key Distinctions Between GEF	

Trust Fund And SCCF	18
3.6 Adaptation Fund (AF)	19
3.6.1 Clean Development Mechanism (CDM)	20
3.7 Global Facility For Disaster Reduction And Recovery (GFDRR)	20
3.7.1 GFDRR Thematic Initiatives And Criteria For Funding Country Programme	21
3.8 Green Climate Fund (GCF)	22
4. Where Is Nigeria In Climate Change Financing And Climate Change Mitigation?	23
5. Conclusions And Recommendations	23
References	26

LIST OF TABLES AND CHART

Table 1: Monthly FAAC Disbursement into Ecological Fund Account from 2007 to 2010

Table 2: Monthly FAAC Disbursement into Ecological Fund Account from 2011 to 2015

Table 3: Clean Technology Fund Projects in Africa

Table 4: Key Distinctions between GEF Trust Fund and SCCF

ACRONYMS

ADB	Asian Development Bank
AF	Adaptation Fund
AfDB	African Development Bank
BNRCC	Building Nigeria's Response to Climate Change
CBOs	Community Based Organizations
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
CIFs	Climate Investment Funds
CO ₂	Carbon Dioxide
CSOs	Civil Society Organisations
CTF	Clean Technology Fund
DRFI	Disaster Risk Financing and Insurance
EBRD	European Bank for Reconstruction and Development
FAAC	Federal Account Allocation Committee
FGN	Federal Government of Nigeria
FIP	Forest Investment Programme
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFDRR	Global Facility for Disaster Reduction and Recovery
GHGs	Green House Gases
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contributions
IP	Investment Plan
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
LDCF	Least Developed Countries Fund
LDCs	Least Developed Country Parties
LUPT2	Rapid Transit Lagos
MDAs	Ministries, Departments and Agencies of Government
MDBs	Multilateral Development Banks
MTEF	Medium-Term Expenditure Framework
NASA	National Aeronautics and Space Administration
NGOs	Non-governmental groups
NOAA	National Oceanic and Atmospheric Administration
NREEE	National Renewable Energy and Energy Efficiency Policy
NUTP	Nigeria Urban Transport Project
POPs	Persistent Organic Pollutants
PPCR	Pilot Programme for Climate Resilience
PPIAF	Public-Private Infrastructure Advisory Facility

PPPs	Public Private Partnerships
R&D	Research and Development
RDBs	Regional Development Banks
SCCF	Special Climate Change Fund
SCF	Strategic Climate Fund
SDGs	Sustainable Development Goals
SGP	Small Grants Programme
SISRI	Small Island States Resilience Initiative
SREP	Scaling Up Renewable Energy in Low Income Countries Programme
TFC	Trust Fund Committee
UNCBD	United Nations Convention on Biological Diversity
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VERS	Voluntary Emission Reductions

ACKNOWLEDGEMENT

Centre for Social Justice acknowledges the support of the Embassy of the Federal Republic of Germany towards the research and publication of this Study. We acknowledge the research of our key facilitators and resource persons – Bright Maduagwu, Fidelis T. Onyejegbu and Eze Onyekpere. We further appreciate the contributions of Huzi Ishaku Mshelia and Uzochukwu M. Eke.

EXECUTIVE SUMMARY

Limiting the Earth's temperature to below 2°C above pre-industrial levels requires a major shift in investment patterns towards low-carbon, climate resilient options. Achieving this goal will require policies that involve unprecedented economic, social and technological transformation, as economies shift towards low-carbon and climate-resilient infrastructure investments. This also will require funding and accessing this funding is critical for any nation's adaptation and mitigation actions success.

In addition to putting a cap to the global temperature rise in this century to the above stated level, the Paris Climate Change Agreement's central aim is to strengthen the ability of countries to deal with the impacts of climate change. To achieve this objective, some developed nations and global institutions like the World Bank, European Bank, International Monetary Fund (IMF) etc through their agencies have set up various climate change funding sources to enable countries carry out their adaptation and mitigation actions. As treated in this study, there are several funding options for climate change adaption and mitigation actions. There is also the question of eligibility as countries may have to scale through certain criteria to qualify to access climate change facilities.

Chapter one is the introduction and laid a background to the research topic. Chapter two dealt with the broad funding categories for climate change adaptation, explaining the broad climate change funding categories and their sub divisions. Chapter three treated the international funding sources for financing climate change adaptation and mitigation. Here, Carbon Credits and Emissions Trading; Global Environment Facility (GEF); Climate Investment Funds (CIFs); Least Developed Countries Fund (LDCF); Special Climate Change Fund (SCCF); Adaptation Fund (AF); Global Facility for Disaster Reduction and Recovery (GFDRR) and the Green Climate Fund (GCF) are the climate change funding options discussed. Chapter four gave an analysis of how Nigeria is faring in accessing climate change funding and also in climate change mitigation. It submitted that there is room for improvement with respect to climate change financing and stressed on the need for the country to mean business as it regards mitigation and adaptation. Chapter five which is the conclusion and recommendations ended the research work.

Following the research work, the following recommendations are crucial:

i. Greater Accountability and Transparency in the use of Ecological Funds: Ecological Funds at the federal and state levels should be managed with greater transparency and accountability so as to generate greater value for money. The proposal is for an evidence led approach to project identification and design, open contracting in the use of the funds and more detailed and timely reporting to the public and legislative bodies. Civil society organisations should show greater interest in exercising oversight over the management of this Fund.

ii. Establish a Climate Rehabilitation and Remediation Fund: This should be funded on the basis of polluter pays principle and used as a basis (through levies, surcharges and taxes on designated products) to change lifestyles, discourage production, service delivery and distribution systems that emit high levels of carbon. Further, individuals and corporations should be encouraged to make voluntary donations to the Fund through making such donations tax deductible.

iii. Establish a Special Public Fund for Climate Change Initiatives: Nigeria should seriously consider the establishment of a special fund to finance climate change initiatives. This should be done by the Central Bank of Nigeria through a special window that attracts single digit interest rates and this will be available to the private sector, civil society and communities under flexible conditions of access that guarantees repayment and achievement of Fund objectives.

iv. Appropriate Import Duties for Renewable Energy Products: FGN needs to properly classify all materials required for the installation of renewable energy as import duty free materials. The current half- hearted categorization is not facilitating the lowering of costs of access to renewable energy.

v. Plans Should Be Based on National Strategies and Should Be Followed Strictly: Nations in general find it easier to come up with high quality funding proposals to submit to climate funds when they already have national plans to address climate change which they are committed to. Effective national plans are generally products of high quality data collection and cross sectoral collaboration, which also includes thinking strategically on how best to get access to finance and leverage it to support nation-wide change.

vi. Build Strong Institutions/Make the Existing Ones Stronger: The presence of strong institutions which can oversee high-impact initiatives is a prerequisite for effective use of climate finance. For developing countries such as Nigeria to get direct access to finance, they must show that they have strong institutions that can effectively deploy funds and oversee the implementation of funded initiatives. This ought to be one of the priorities of the government especially the Federal Ministry of Environment (the focal point with the responsibility of sourcing for climate funds for the country).

vii. Coordination and Stakeholders Engagement is Crucial: For there to be effective action against climate change, there needs to be solutions that cut across multiple sectors and also with the buy-in of the affected stakeholders. Nations able to coordinate inter-ministerial and inter-agency activities and also between non-governmental actors, are more easily able to arrange for and implement effective climate initiatives. It should be noted that climate funds are more inclined to fund requests that reflect support from the affected people, and so future funding requests should be made bearing this in mind.

viii. Getting Better Access to Finance and Capacity Building: Countries have found that to be successful in getting financing from the climate funds via the UNFCCC requires putting the right persons and plans in place. Nigeria should always take part in experience sharing events with other nations who have been successful in getting direct access to climate finance. This lesson sharing could cover how to apply, deployment and management of climate finance in such a way that it would lead to more access to finance and more effective use of funds. Specific targeted capacity building events need to be organized to acquire new capacities and competencies in areas where the country has deficiencies.

1. INTRODUCTION

Global warming refers to the recent and ongoing rise in global average temperature of the earth's surface. Mainly caused by increasing concentrations of greenhouse gases (GHGs) in the atmosphere, global warming facilitates changing climate patterns. The United States National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) declared that the year 2016 was the hottest year on record, stating that it was the third consecutive record breaking warming that the planet has experienced in the 137 years of record keeping¹. Tackling climate change entails adaptation and mitigation measures which involves costs that need financing. It also involves building resilience and reducing vulnerabilities. Although there is widespread agreement on the need for adaptation measures to limit the risks posed by climate change, there is no clear consensus on how much adaptation will cost or how it will be paid for. At the current stage, different financing options to tackle climate change in developing countries exist. The UK Guardian newspaper² while citing a World Bank Report reported that the estimate of adaptation in developing countries alone will be about \$70 - \$100 billion annually between 2010 and 2050.

Both developed and developing nations need funds to finance their adaption measures. Developed countries will need to fund their own climate change adaptation measures from government funds or private investments. Companies will have to adapt their activities, whilst governments will have a role in protecting national infrastructure, setting guidelines and providing social protection. Some costs will also be borne by individuals and households, such as purchasing flood insurance or adjusting heating or cooling in the home depending on the season of the year. Developing countries' adaptation measures will be funded via a variety of means.

The United Nations Framework Convention on Climate Change (UNFCCC) through her principle of "common but differentiated responsibility" enshrined in article 4.4 of the Convention has made provisions for developed nations to transfer resources to the developing countries to support adaptation³. Thus, the UNFCCC institutions have set up some funding mechanisms in this regard – 'the Adaptation Fund', 'the Least Developed Countries Fund' and other funds through multilateral agencies like the World Bank. One question that emanates from the foregoing is: how well has Nigeria tapped into these funding mechanisms to fund her adaptation measures?

¹ Scientific American; 2016 was the Hottest Year on Record. Available from <https://www.scientificamerican.com/article/2016-was-the-hottest-year-on-record/>

² The UK Guardian of 28th Feb., 2012. Available from <https://www.theguardian.com/environment/2012/feb/28/financing-climate-change-adaptation>

³ This is in recognition of the historical fact that the developed countries played a greater role in causing climate change.

Adaptive capacity has been defined as⁴:

...the ability of communities and individuals to adjust to climate change, to moderate potential changes, to take advantage of opportunities or to cope with the consequences. The adaptive capacity of individuals or social groups varies, and is dependent upon their access to and control over resources. The poor have particularly limited access to such resources, and as such are most vulnerable to climate change and least able to develop viable adaptation strategies.

Adaptation to climate change is stated to⁵:

...refer to longer-term strategies, which deal with climate change (in contrast to short term coping strategies). Adaptation is adjustment in natural or human systems, which moderates the harm or exploits beneficial opportunities associated with climate change. Adaptation is usually a longer-term livelihood activity and is a continuous process where results are sustained. It uses resources efficiently and sustainably, involves planning, combining new and old strategies and knowledge, and is focused on finding alternatives.

Adaptation has more often been described as climate resilient development or development under a hostile climate. This growing awareness about the strong connection between adaptation and development is evidenced both in literature and among development practitioners. A World Bank Development Report⁶ made a case for a more climate-resilient development. The use of the term 'adaptation deficit' has also been employed to explain the fact that societies that are less well-off are mostly less prepared to deal with climate shocks. Treating adaptation and development in such an integrated way helps to better understand financing requirements analytically and, more importantly, to implement the requisite measures more effectively as part of an integrated development programme.

This Study will look into the various sources of financing climate change adaptation and mitigation; how well Nigeria has tapped into these funding sources and make recommendations on the way forward, so as to increase resources available for funding climate change interventions.

2. BROAD FUNDING CATEGORIES FOR CLIMATE CHANGE ADAPTATION

Adaptation entails anticipating the adverse effects of climate change and taking appropriate actions to prevent or minimize the damage they can cause, or taking advantage of opportunities that may arise. It has been found that well planned and early adaptation actions can save money and lives later on. The most expensive

⁴ The National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN).

⁵ NASPA-CCN, supra.

⁶ World Bank (2009). *World Development Report 2010. Development and Climate Change*. World Bank, Washington DC.

adaptation measures involve modifying infrastructure and improving coastal and flood protection for example, so that costs will be highest, not necessarily where vulnerability is greatest but in regions with a lot of infrastructure that needs to be climate-proofed. Lower-cost measures that can be used as part of an adaptation response include changing behaviours, shifting farming practices and making regulatory reforms.

Below is an overview of the three broad categories of funding that cities or communities could key into for adaptation.

2.1 MUNICIPAL AND NATIONAL FINANCE

As limited financial resources often make the choices among competing priorities difficult for cities and communities, climate change adaptation may not initially rise to the top of the list of priorities. Cities can however build resilience to climate change impacts by investing in already needed basic services and infrastructure. Seen in this light, adaptation actions would be strong candidates for financing from municipal budgets and other sources.

Own source revenues generated by government agencies like taxes, fees, charges, service payments and other receipts can be used to fund adaptation investments such as improving the state of infrastructure. However, this depends on a number of factors specific to a given city or community, including its legal and institutional authority to raise revenues, the function those agencies perform and the public sentiment about taxation.

Kamal-Chaoui and Robert (2009) argued that property taxes can provide incentives for compact and resilient cities for example, promote dwelling settlement types that are denser and away from vulnerable areas. They also submitted that a special area tax could be applied on vulnerable areas, or a set of cascading taxes could be implemented that gradually increases with proximity to vulnerable areas such as a floodplain. Regarding fees and charges, they argued that development charges could be used to counter urban sprawl. In general, area-specific charges could give developers incentives to develop compactly and in less vulnerable areas.

National financing for cities varies and are country specific. Transfers to local governments may include funds that flow from national agencies of transportation, environment, health, and disaster for adaptation activities and investments. In many countries, these are most likely to be general sources of funding (for example, disaster risk reduction or water resource planning) that a city can opt to use in support of adaptation goals.

2.1.1 The Nigerian Ecological Fund

The Ecological Fund was established in 1981 through the Federation Account Act of 1981, which was later modified by Decrees 36 of 1984, and 106 of 1992; as well as the Allocation of Revenue/ Federation Account Act (Modification) Order of 2002. The Ecological Fund originally received 1% of the Federation Account but was reviewed upwards to 2% of the Federation Account in 1992. From its inception in 1981, it has been a first line charge which provides handy resources for amelioration of ecological problems such as soil erosion, flood, drought, desertification, oil spillage, pollution, general environmental pollution, storm, tornadoes, bush fire, crop pest, landslide, earthquakes, etc⁷.

The mission of the Fund is to serve as a strategic instrument for ameliorating ecological problems nationwide through effective management, co-ordination, monitoring and implementation of government ecological policies, programmes and projects whilst its vision is to ensure effective implementation of government policies and programmes on environmental and ecological problems as well as provide sustained and substantial financial resources for the mitigation of such problems and their impact⁸.

Ecological Fund resources are shared between the Federal Government and the states of the Federation. A total of N454,315,118,435 has been shared between the Federal Government and the States in the years 2007 to 2015. Tables 1 and 2 show the accruals and shared resources between the years 2007 to 2015.

Monthly FAAC Disbursement into Ecological Fund Account from 2007 to 2010

	2007	2008	2009	2010
January	1,806,065,191.64	2,369,735,198.99	3,482,741,913.58	5,073,629,346.84
February	2,032,105,613.28	2,142,102,473.44	2,121,456,416.37	3,865,563,041.25
March	3,952,410,416.21	4,235,368,207.61	3,004,137,915.86	2,642,788,100.37
April	2,591,628,886.01	3,526,531,602.86	3,546,829,091.27	2,071,269,993.01
May	2,592,440,984.83	6,219,528,011.22	2,524,218,250.47	6,074,537,088.43
June	2,596,418,754.94	3,512,440,390.91	2,529,312,431.48	3,167,310,299.43
July	3,473,972,356.65	3,648,863,665.45	2,547,473,237.87	3,194,789,358.22
August	3,749,214,997.48	3,526,681,575.87	5,450,371,485.78	5,293,468,135.89
September	2,603,910,766.76	3,529,751,860.23	2,726,273,462.68	3,434,242,153.25
October	2,611,620,707.31	3,516,602,444.21	5,338,853,448.71	3,222,229,520.15
November	2,604,417,545.85	3,524,960,693.94	2,788,205,839.03	3,214,652,559.41
December	2,780,497,900.18	3,531,228,678.44	2,963,484,178.65	4,506,541,035.25
Total	33,394,706,128	43,283,796,811	39,023,359,681	45,761,022,642

Source: <https://i1.wp.com/icirigeria.org/wp-content/uploads/2016/05/Table-Showing-Monthly-FAAC-Disbursements-into-Ecological-Fund-Account-from-2007-to-2015.png>

⁷The paragraph is copied verbatim from <http://ecologicalfund.gov.ng/contact-us/>

⁸ Copied verbatim from <http://ecologicalfund.gov.ng/contact-us/>

Monthly FAAC Disbursement into Ecological Fund Account from 2011 to 2015

	2011	2012	2013	2014	2015
January	3,212,968,167.77	5,542,369,402.21	5,704,318,647.60	4,507,467,600.94	4,418,546,830.51
February	3,203,313,043.59	4,855,077,172.29	4,450,069,631.28	4,770,602,986.35	3,929,196,368.14
March	3,195,025,708.47	6,194,844,244.82	7,166,196,844.11	5,008,085,726.25	4,547,567,446.64
April	3,202,912,523.66	4,791,931,906.67	5,796,040,864.50	5,037,527,249.69	3,275,102,349.57
May	3,632,836,857.48	4,361,823,647.30	6,338,402,423.48	5,037,064,777.28	2,843,742,135.24
June	4,853,700,948.90	4,378,030,164.33	5,839,497,578.83	7,056,886,811.40	3,273,614,341.30
July	9,082,408,045.46	4,133,442,825.78	6,695,061,731.20	6,147,772,395.35	7,782,214,871.94
August	4,897,226,053.86	5,700,428,545.68	4,628,108,395.60	5,193,932,545.45	4,014,751,675.21
September	4,913,341,293.04	4,137,178,642.02	5,674,658,849.76	-	3,364,662,185.45
October	5,486,728,765.40	4,117,504,158.88	4,792,080,563.85	4,848,394,169.95	3,039,213,922.68
November	8,260,186,131.65	5,626,169,943.66	5,714,112,250.09	4,686,553,275.31	3,830,334,055.05
December	4,870,062,416.19	7,867,311,478.12	5,097,424,175.46	5,014,400,891.58	2,811,794,453.58
Total	58,810,711,966	61,706,114,144	67,895,973,969	57,308,690,444	47,130,742,650

Source: <https://i1.wp.com/icirnigeria.org/wp-content/uploads/2016/05/Table-Showing-Monthly-FAAC-Disbursements-into-Ecological-Fund-Account-from-2007-to-2015.png>

The management of the Fund, especially at the state level has in the past been beset by corruption and misapplication of funds. The management should be strengthened to avoid leakages.

2.1.2 The Environmental Protection and Rehabilitation Fund

The Fund is set up under section 121 of the Nigerian Minerals and Mining Act for the purpose of rehabilitating mining related ecological damage. Mining companies are required to contribute to the Fund as a means of enforcing their environmental obligations in accordance with the amounts specified in the approved Environmental Protection and Rehabilitation Programme not later than one year from such approval. Miners are required to contribute in accordance with the projected and assessed harm or damage they may cause to the environment through their operations. But access to the Fund is limited to rehabilitation and remedying of the damage done by contributing companies who hold mining titles.

2.2 MULTILATERAL AND BILATERAL FINANCE

These sources are designed for implementation of national strategies and programmes. Access to these funds may be channeled through national governments and requires that there be coordination and consultation between national and subnational authorities. These sources can be used to fund activities ranging from capacity building and technical assistance to municipal infrastructure. Examples of these funding sources (to be treated in details in the next chapter) include:

- Global Environment Facility (GEF) and the GEF Small Grants Programme (SGP)
- Climate Investment Funds (CIFs), including the Strategic Climate Fund (SCF), which supports the Pilot Program for Climate Resilience (PPCR)

- Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF)
- Adaptation Fund (AF)
- Global Facility for Disaster Reduction and Recovery (GFDRR)
- Multilateral Development Banks (MDBs)

2.3 MARKET BASED FINANCING

Market-based financing holds significant opportunities for investments in cities, including for adaptation. Under this category, adaptation funding involves using some instruments which brings in the private sector as the private sector is an important source of adaptation funding for both private assets and public infrastructure.

Government engagement with the private sector on adaptation could involve privately-held infrastructure which provides public services like transportation, electric power networks, water systems and solid waste. It could also involve private properties that can be leveraged to improve adaptive capacity for example, downtown buildings that could be renovated with green roofs to minimize the urban heat island effect. It could also involve leveraging of private finance to fund a range of dedicated adaptation investments, whether or not a private company has a direct interest in the project.

The following are the instruments that could be employed in bringing in the private sector into adaptation funding for both private assets and public infrastructure: Carbon Finance; Insurance; Guarantees and Public Private Partnerships (PPPs).

2.3.1 Carbon Finance

Governments and cities that deal with waste management, energy efficiency and access to energy can be beneficiaries of the carbon market. In South Africa for example, the South African City Network developed a programme of energy projects in different cities in the country based on establishing a framework for carbon finance. In the city of Sao Paulo Brazil, the revenues from carbon finance have been used to support community development thereby contributing to building resilience.

2.3.2 Insurance

Risk management instruments like insurance serve the important function of cushioning the impacts of losses from unforeseen events. Cities and countries have been protected when disasters strike, covering the risks of high-severity, low-frequency events for individuals, public institutions and private entities. It is noteworthy however, that private sector insurance is not always robust in developing countries and may not be accessible to the poorest communities.

Dedicated insurance can help to ensure access to immediate liquidity to finance emergency relief and reconstruction operations. For example, the World Bank in

2009 set up the “MultiCat Programme”, a catastrophe bond issuance platform which allows governments and other public entities access to international capital markets to insure themselves against the risk of natural disasters on favourable terms⁹. A pool of cities or individual governments could use a similar instrument to reduce the average risk for investors and considerably reduce insurance costs through diversification.

2.3.3 Guarantees

These are used to improve investor confidence in cases of risk which is exemplified by the lack of track record of bond issuance. Credit enhancements provided by Multilateral Development Banks (MDBs) can help governments’ access credit at more affordable terms than would otherwise be available. Through a partial credit guarantee, the guarantor shares the risk of debt service default with lenders on some predetermined basis. This tool can be used to protect private lenders and investors against the risk of a government failing to perform its contractual obligations. This has been employed in Columbia for example, where in executing a project, a company sought a partial credit guarantee from the International Finance Corporation (IFC) in order to issue a longer-term bond.

2.3.4 Public Private Partnerships (PPPs)

Many governments are turning to the private sector to design, build, finance and operate public infrastructural facilities while receiving a financial return through fees charged to users or payment from the public sector. PPP contracts can vary broadly from a concession to a service contract, but the public sector retains ultimate accountability to the user for providing the service. The main benefit of a PPP is to mobilize private capital, while also improving service quality and the management of the facility. PPPs are now broadly used for public services, such as public transport or water supply, as well as for infrastructure management, such as highways. Organizations such as the Public-Private Infrastructure Advisory Facility (PPIAF) can facilitate these arrangements. For example, a PPP in Kuala Lumpur, Malaysia, has improved traffic flow, while increasing the city’s resilience to heavy rainfall events.

2.3.5 Green Bonds

Green bonds are just like every other bond; the only difference is that funds raised via this medium is specifically reserved for financing ‘green’ projects which could be in areas of renewable energy – solar, wind and hydro projects; clean transportation or sustainable water management. Other areas where Green Bonds funds could be invested include: climate change adaptation; energy efficiency; sustainable waste management; land use and biodiversity conservation. Green bonds were first launched in 2007 by a few development banks such as the European Investment

⁹ More from <http://www.worldbank.org/en/news/press-release/2009/10/19/world-bank-launches-multicat-program>

Bank and the World Bank. Green bonds have the potential of enhancing the issuer's reputation in that it aids in showcasing the issuer's commitment towards sustainable development and provides the issuer access to global and domestic investors who invest only in green ventures.

The Federal Government of Nigeria has set plans in motion to launch a N20 billion (US\$64 million) Green Bond in April 2017 to fund environmental sustainability projects and enhance sustainable development¹⁰. This is part of Nigeria's sustainable development project which had been developed in 2016 and will be a source of funding for the emission projects such as solar power projects and clean transportation, and will also be a funding source for part of infrastructure projects in the 2017 budget.

3. INTERNATIONAL FUNDING SOURCES FOR FINANCING CLIMATE CHANGE ADAPTATION AND MITIGATION

The funding sources for financing climate change adaptation, mitigation and building resilience include but are not limited to the following.

3.1 CARBON CREDITS AND EMISSIONS TRADING

A carbon credit is a permit which allows a country or organization to produce a certain amount of carbon emissions and which can be traded if the full allowance is not used. It places a cost on carbon emissions by creating credits valued against one ton of hydrocarbon fuel. It is essentially a permit that allows the receiver to burn a specified amount of hydrocarbon fuel over a specified period of time. Credits are granted to companies or other groups that take action to measurably reduce carbon emissions.

The Wikipedia categorized carbon trading into two forms – international and personal trading. It defined international trading¹¹ as:

“a generic term for any tradable certificate or permit representing the right to emit one tonne of carbon dioxide or the mass of another greenhouse gas with a carbon dioxide equivalent (tCO₂e) equivalent to one tonne of carbon dioxide”.

¹⁰ 23/2/2017 Vanguard Newspaper titled “FG to float N20bn Green Bond for environmental sustainability projects”; <http://www.vanguardngr.com/2017/02/fg-to-float-n20bn-green-bond-for-environmental-sustainability-projects/>. Also from 24/2/2017 Guardian Newspaper titled “Nigeria plans \$64m green bond issue by April”, <https://guardian.ng/news/nigeria-plans-64m-green-bond-issue-by-april/>

¹¹ Available at https://en.wikipedia.org/wiki/Carbon_credit

Carbon credits and carbon markets are a component of national and international attempts to mitigate the growth in concentrations of greenhouse gases (GHGs). One carbon credit is equal to one tonne of carbon dioxide, or in some markets, carbon dioxide equivalent gases. Carbon trading is an application of an emissions trading approach. Greenhouse gas emissions are capped and then markets are used to allocate the emissions among the group of regulated sources.

Although it broadly implies the same thing as International Carbon Trading, Personal Carbon Trading¹² was also defined by Wikipedia as:

“the generic term for a number of proposed emissions trading schemes under which emissions credits would be allocated to adult individuals on a (broadly) equal per capita basis, within national carbon budgets”.

It also gave further insight on the way it works by stating that individuals will:

“surrender these credits when buying fuel or electricity. Individuals wanting or needing to emit at a level above that permitted by their initial allocation would be able to purchase additional credits from those using less, creating a profit for those individuals who emit at a level below that permitted by their initial allocation”.

The purpose of carbon trading is to allow market mechanisms to drive industrial and commercial processes in the direction of low emissions or less carbon intensive approaches than those used when there is no cost to emitting carbon dioxide and other GHGs into the atmosphere. Since GHG mitigation projects generate credits, this approach can be used to finance carbon reduction schemes between trading partners and around the world.

The Kyoto protocol created three carbon market mechanisms: Clean Development Mechanisms (CDM); Joint Implementation (JI) and International Emissions Trading Mechanism. These were categorized under the mandatory carbon credits as against the voluntary carbon credit (Voluntary Emission Reductions, VERS) where carbon offset are traded voluntarily for carbon credits. The Clean Development Mechanism is a project based mechanism and only enforces countries to partially meet Kyoto targets through the financing of carbon reduction vehicles in mainly developing countries like tree planting projects and forest conservation. Joint Implementation is also a project based mechanism which credit transfers is between the developed countries (otherwise known as Annex 1 countries). The JI system is long term oriented. By the International Emission Trading Mechanism, a group of countries are

¹² Available at https://en.wikipedia.org/wiki/Personal_carbon_trading

given an emission limit not to exceed as a body. An example of this is the EU Emissions Trading Scheme¹³.

However, whether Emission Trading Schemes reduce greenhouse gases is doubtful. A detailed reaction to emissions trading aptly responds to the purported benefits this way¹⁴.

Emissions trading is based on two premises. First, that it limits the emissions of climate-killing CO₂. Second, the scheme aims to stimulate investments in protecting the climate. Sadly, it does neither, as can be seen from how the European Scheme has performed. Under heavy lobbying pressure, the EU set the permitted limits for emissions far too generously, and subsequently cut them back too slowly. From the start, the number of permits has been too high, so the prices they have attracted have been too low to stimulate investment in climate protection. In addition, governments have given away permits for free to the most climate-damaging firms, handing them a big financial windfall.

The recipients, including large power generators, took advantage of the situation and sold their excess certificates. Between 2008 and 2012, the ten major beneficiaries profited by 3.2 billion euros. The energy companies must now bid for the permits they want, but lavish exemptions mean that nearly all polluters in the industry still get them for free. Plus, all companies continue to benefit from the transfer of their surplus permits from earlier trading periods. The steel firm ArcelorMittal, for example, will not have to buy any extra permits before 2024.

In theory, emissions trading is capable of reducing CO₂ emissions while still allowing entrepreneurial freedom. In practice, however, the trading scheme has not made a significant contribution to climate protection. This is because of the so-called offset credits that companies have been able to buy in large numbers outside the emissions trading scheme. The reasoning goes like this: it does not matter where in the world the CO₂ emissions are cut, so rather than investing lots of money in reducing their own emissions, European companies may as well contribute to initiatives that save emissions elsewhere. But how would the initiatives have performed without this financial support? Between one-third and one half of such projects result in no additional benefit because the investments would have been made anyway. Further, these offsets reduce the pressure in Europe to switch to products that produce fewer emissions.

¹³ Seventeen of such emission trading schemes have been set up around the world and seven more are planned. The biggest is the European Union Emission trading Scheme. National schemes exist in Switzerland, New Zealand and South Korea; California, the Canadian city of Quebec, Tokyo and several provinces in China have regional schemes. Some 6.8 billion tonnes of CO₂ equivalent had been traded as at 2016- Coal Atlas: Facts and Figures on a Fossil Fuel by Heinrich Boll Foundation and Friends of the Environment, 2015 at page 48.

¹⁴ Coal Atlas: Facts and Figures on a Fossil Fuel by Heinrich Boll Foundation and Friends of the Environment, 2015 at page 48 - 49.

Emissions trading has long become a business opportunity for the financial industry. Simple, direct transactions between buyers and sellers of pollution permits have become rare. For institutional investors, carbon dioxide is now something akin to a raw material, and is traded in the form of various financial products. But because of the oversupply of permits, trade is virtually at a standstill. Scandals involving tax fraud, including those involving the Deutsche Bank, have revealed the susceptibility and vulnerability of the system. HM Revenue & Customs, the British tax authority, believes that a large share of emissions trading is laced with fraud.

Through offsets, oversupply, the economic crisis of 2008/9 and the associated erroneous forecasts, the number of excess permits in Europe has risen to over two billion. As a result, the price of CO₂ is far too low. Combined with low prices for coal and high prices for natural gas, coal has boomed. Between 2010 and 2013, emissions from this sector rose by six percent. The CO₂ surcharge was not high enough to make power generated from less-harmful natural gas competitive with the more-harmful coal. To achieve the desired effect, the trading scheme needs stricter limits on emissions.

Essentially, money may be available under the Emissions Trading Scheme but it may not be fulfilling the ultimate objective of reducing worldwide carbon emission.

3.2 GLOBAL ENVIRONMENT FACILITY (GEF)

Global Environment Facility is an independent international financial entity established to help defray the costs of making projects environmentally friendly and to tackle the most pressing global environmental issues. Established on the eve of the Rio's Earth Summit in 1992, the GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants.

The GEF is a unique partnership of 18 agencies (which include United Nations agencies, multilateral development banks, national entities and international non-governmental organisations) working with 183 countries to address the challenging environmental issues facing the globe. The GEF is a financial mechanism for five (5) major international environmental conventions namely: the Minamata Convention on Mercury; the Stockholm Convention on Persistent Organic Pollutants (POPs); the United Nations Convention on Biological Diversity (UNCBD), the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC). The facility also functions as an innovator and catalyst which supports multi-stakeholder alliances with the target of preserving the ecosystems on land and in the oceans that are threatened; promote the building of greener cities; improve food security and promote clean energy for a

more climate resilient world and leverages \$5.2 in additional financing for every \$1 invested¹⁵.

3.2.1 The GEF Funding, Contributions and Eligibility Criteria

The GEF funds are available to developing countries and countries whose economies are in transition to meet the objectives of the afore-listed international conventions and agreements. The GEF funding is for government agencies, civil society organisations (CSOs), private sector companies, research institutions and potential partners to execute and implement projects/programmes in recipient countries.

The GEF administers many trusts funds and renders secretariat services for the Adaptation Fund on an interim basis. The facility funding contributions are replenished every four (4) years by the GEF 39 donor countries¹⁶.

Regarding eligibility for the funding, all prospective projects or programmes must satisfy the following criteria:

- i. Country: A country must have ratified the conventions the GEF serves and conforms with the eligibility criteria decided by the Conference of the Parties of each convention. A country is also eligible to receive GEF funding if it is eligible to receive World Bank (IBRD and/or IDA) financing or is eligible to receive UNDP technical assistance.
- ii. The project must be a national priority and not driven by an external partner and should be consistent with national priorities that support sustainable development.
- iii. The project will have to address one or more of the GEF focal area strategies which include biodiversity, international waters, land degradation, chemicals and waste, climate change mitigation as well as cross cutting issues like forest management.
- iv. The project has to seek financing only for the agreed incremental costs on measures to achieve global environmental benefits.
- v. The project has to involve the public in the designing and implementation of the project and has to be in conformity with the policy on public involvement in GEF-financed projects and the respective guidelines.

¹⁵ Global Environment Website. More from <https://www.thegef.org/about-us>

¹⁶ The GEF contributors comprise of both developed and developing countries. At the last replenishment, 30 countries, which included Nigeria, pledged a record US\$4.43 billion for the GEF-6 period which runs from 2014 – 2018. More from <https://www.thegef.org/partners/participants>

On eligibility in operational focal points, countries are eligible for funding in a focal area if:

- i. They meet eligibility criteria established by the relevant COP of that convention.
- ii. They are members of the conventions and are countries eligible to borrow from the World Bank (IBRD and/or IDA).
- iii. They are eligible recipients of UNDP technical assistance through country programming.

3.2.2 GEF Small Grants Programme (SGP)

The GEF SGP was also established in the year of the Rio's Earth Summit (1992). It provides financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods. The SGP recognizes the danger that all forms of environmental degradation poses to everyone but most especially, the poor and vulnerable communities who depend on access to natural resources for their livelihoods and often live in fragile ecosystems.

The SGP provides grants of up to US\$50,000 directly to local communities including indigenous people, community-based organizations (CBOs) and other non-governmental groups (NGOs) for projects in the GEF focal areas of biodiversity, climate change mitigation and adaptation, land degradation, sustainable forest management, international waters and chemicals, etc.

The grant eligibility criteria entails that the entity applying for the grant must be an NGO, a grassroots organization or a CBO in an SGP participating country¹⁷. Secondly, the proposed project must correspond to one of the GEF's focal areas and at the same time align with the country programme strategy of the SGP participating country¹⁸.

3.3 CLIMATE INVESTMENT FUNDS (CIFs)

The CIFs are global multilateral financing instruments set up to promote and sustain the transition towards low-carbon and climate-resilient development with investments channeled through multilateral development banks (MDBs). They were established

¹⁷ There are 125 participating countries in the SGP of which Nigeria is a member. More from https://sgp.undp.org/index.php?option=com_content&view=article&id=274&Itemid=276#.WNz11We1vIU

¹⁸ Details of each country's programme strategy can be accessed by clicking on that country's tab via this link https://sgp.undp.org/index.php?option=com_countrypages&view=countrypages&Itemid=152

in 2008, in support of the Bali Action Plan¹⁹, to ensure that additional financial resources are provided to developing countries to assist them in meeting the costs of mitigation and adaptation measures in response to the challenge of climate change. The CIFs also aim to develop and test approaches for future delivery of climate finance and to help inform the development of the Green Climate Fund.

The World Bank acts as a trustee for the CIFs while the International Bank for Reconstruction and Development (IBRD), the International Finance Corporation, the Regional Development Banks (RDBs), the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank are the implementation partners. Within the UNFCCC framework, the CIFs are a delivery channel for fast-start finance.

The total CIFs pledges²⁰ amount to US\$8.3 billion and it is used in making the urgently needed funds available to over 72 developing and middle income countries²¹ to address the challenges of climate change and reduce their greenhouse gas (GHG) emissions. The CIFs comprise of the following four (4) programmes:

- The Clean Technology Fund (CTF)
- Pilot Programme for Climate Resilience (PPCR)
- Scaling Up Renewable Energy in Low Income Countries Programme (SREP)
- The Forest Investment Programme (FIP)

3.3.1 Clean Technology Fund (CTF)

The Clean Technology Fund (CTF) is a total of \$5.8 billion pledge. It provides middle-income countries with highly concessional resources to scale up the demonstration, deployment, and transfer of low carbon technologies in renewable energy, energy efficiency, and sustainable transport. The CTF empowers developing and emerging economies to scale up low carbon technologies with significant potential for long-term greenhouse gas emissions savings by providing funds to them.

¹⁹ The decisions of the conference of the parties to the United Nations Conference on Climate Change (COP 13) held from the 3rd – 15th Dec., 2007, in Bali, Indonesia.

²⁰ The donor countries include Australia; Canada; Denmark; France; Germany; Japan; Korea; the Netherlands; Norway; Spain; Sweden; Switzerland; United Kingdom and the Us.

²¹ A comprehensive list of recipient countries and the plans that have so far been developed and approved for implementation in these countries could be found via <https://www-cif.climateinvestmentfunds.org/country>

The CTF Investment Plan (IP) for Nigeria was endorsed by the CTF Trust Fund Committee (TFC) in November 2010 with a tentative allocation of US\$250 million CTF funding, subject to the availability of CTF resources for the further implementation of projects. The CTF IP for Nigeria comprised of three projects in the Transport, Renewable Energy, and Energy Efficiency sectors. These were: (a) Bus Rapid Transit Lagos (LUPT2), (b) Bus-based Mass Transport Support for Abuja, Kano and Lagos (Nigeria Urban Transport Project - NUTP), and (c) Financial Intermediation for Clean Energy/Energy Efficiency²². On the update status on the projects, the following excerpt from the Clean Technology Fund Investment Plan for Nigeria²³ paints us a picture:

“Following the endorsement of the CTF IP for Nigeria in November 2010, the CTF Trust Fund Committee approved the release of two tranches for a total of US\$135 million of CTF funding. As of May 2014, US\$26 million CTF funding has been approved by the CTF Trust Fund Committee for two AfDB’s projects, including US\$1 million project preparation grant for Nigeria Urban Transport Project – Abuja Mass Transit and US\$25 million for project proposal titled Nigeria: Line of Credit for Renewable Energy and Energy Efficiency Projects”.

The African Development Bank through her 2014 Annual Report²⁴ gave a status update on some CTF projects in Nigeria and other African countries. The Table below contains the details.

Table 3: Clean Technology Fund Projects in Africa

Project/Program Title	Investment Plan	Project Status	CIF Funding (US\$ Million)	AfDB Funding (US\$ Million)
200MW Gulf of Suez Wind Farm	Egypt	Preparation	50.00	140.00
120 - 160 MW CSP Complex in Ouarzazate Morocco	MENA	AfDB Approved	100.00	240.00
Morocco Ouarzazate CSP - Project II	MENA	AfDB Approved	119.00	140.00
Egypt Kom Ombo CSP	MENA	Preparation	61.50	
Tunisia Akarit	MENA	Preparation	31.00	
CSP Technical Assistance Program	MENA	Preparation	2.92	
One Wind Energy Plan	Morocco	AfDB	125.00	448.39

²² Clean Technology Fund Investment Plan for Nigeria, July 2014, Update Note (Revised), page 6. Available on the CIF website via <http://www-cif.climateinvestmentfunds.org/country/nigeria>

²³ Page 8

²⁴ AfDB CIF Annual Report 2014, Financing Change, the AfDB and CIF for a Climate-Smart Africa; page 21. Available at https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfDB_CIF_Annual_Report_2014_-_Full_Document.pdf

		Approved		
Abuja Mass Transit	Nigeria	Preparation	50.00	
Renewable Energy Utility-Scale Solar Pv – Bauchi	Nigeria	Preparation	25.00	89.00
Line of Credit for Renewable Energy/Energy Efficiency	Nigeria	AfDB Approved	25.00	75.00
Eskom Renewable Supp Projects (Wind & CSP)	South Africa	AfDB Approved	100.00	260.00
Sustainable Energy Acceleration Program - Xina CSP Project	South Africa	AfDB Approved	41.50	100.00
RE - Sustainable Transport	South Africa	Preparation	52.50	

Source: AfDB CIF Annual Report 2014

Two of the three CIF projects (Abuja Mass Transit and Renewable Energy Utility-Scale Solar PV – Bauchi) which Investment Plan are for Nigeria are at the preparation stage, while the third (Line of Credit for Renewable Energy Efficiency) has been approved by the African Development Bank as at the time of the production of the report. The AfDB 2015 Annual Report²⁵ on approved projects also confirmed the “Line of Credit for Renewable Energy/Energy Efficiency” as the only approved project as at the time of producing the report.

3.3.2 Pilot Programme for Climate Resilience (PPCR)

The PPCR is a funding window of the CIF for climate change adaptation and resilience building. The PPCR’s portfolio is a sum of \$1.2 billion. The PPCR uses a two-phase programmatic approach to assist national governments in mainstreaming climate resilience into development planning across sectors and stakeholder groups. It also provides additional funding to put the plan into action and pilot innovative public and private sector solutions to pressing climate-related risks. It is noteworthy however, that there are no projects for execution in Nigeria under this programme.

According to the PPCR Factsheet²⁶, about \$939 million of the fund has been approved for fifty eight (58) projects in the twenty eight (28) PPCR countries²⁷. The factsheet also showed that PPCR investment was divided across continents in the following proportion: 33% for Africa; 35% for Asia; 25% for Latin America and Caribbean and 7% for Europe and Central Asia. Of the 28 PPCR countries, 10 of the countries joined in 2015.

²⁵ Also available on the AfDB Website via https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/cif2015/AfDB_CIF_AR2015_AprovedProjects.pdf

²⁶ November 2016 Factsheet available on the CIF website at <http://www-cif.climateinvestmentfunds.org/knowledge-documents/ppcr-fact-sheet-november-2016>

²⁷ Also listed in the factsheet

3.3.3 Scaling Up Renewable Energy in Low Income Countries Programme (SREP)

SREP aims to scale up the deployment of renewable energy solutions and expand renewable markets in the world's poorest countries. It pilots and demonstrates the economic, social, and environmental viability of development pathways that do not worsen global warming. SREP's total pledge is a total of \$780 million. It helps to deploy renewable energy solutions for increased energy access and economic growth in the poorest countries of the world.

SREP is active in six (6) pilot countries across the world which includes three African countries namely: Ethiopia; Kenya and Mali. The AfDB supports these nations as they coordinate with their respective private sectors, CSOs and other communities to develop SREP investment plans. The AfDB expects to co-finance approved SREP projects from its own resources in addition to channeling SREP funds.

3.3.4 Forest Investment Programme (FIP)

The FIP is a \$775 million funding window of the CIF, which provides indispensable direct investments to benefit forests, development and the climate. The FIP grants and low interest loans are channeled through multilateral development banks (MDBs). The FIP empowers countries to address the drivers of deforestation and forest degradation both from within and outside of the forest sector to achieve the triple objective of maintaining good forests; good for development and good for climate change.

The FIP has 23 member countries²⁸ which does not include Nigeria. All the 23 members are FIP pilot members who in a 2016 member countries meeting stressed on the need to have coherent approach to maintaining the remaining forests, ensuring their sustainable management and restoring the already degraded forests²⁹.

3.4 LEAST DEVELOPED COUNTRIES FUND (LDCF)

The Least Developed Countries Fund (LDCF) was established to support a work programme to assist Least Developed Country Parties (LDCs) carry out, among other things, the preparation and implementation of national adaptation programmes of action (NAPAs). The Global Environment Facility is the entity which was entrusted with the responsibility of operating this fund.

The LDCF was established in November 2001 under the UNFCCC to address the needs of least developed countries whose economic and geophysical characteristics make them especially vulnerable to the impact of global warming and climate

²⁸ Listed on the CIF website <http://www-cif.climateinvestmentfunds.org/fund/forest-investment-program>

²⁹ FIP Pilot Countries June 2016 Meeting Report, page 2. Available at https://www-cif.climateinvestmentfunds.org/sites/default/files/how_knowledge_sharing_moves_countries_to_sustainable_forestry_management.pdf

change. The total fund contributions³⁰ amount to a sum of US\$ 1.214 billion. The funds balance as at the ending of 2017 Q₁ is US\$643.30 million. Eligibility for this funding is same for other GEF funds as stated under Global Environment Facility under 3.2.1.

3.5 SPECIAL CLIMATE CHANGE FUND (SCCF)

The SCCF was established under the 2001 UNFCCC to finance projects relating to:

- Adaptation;
- Technology transfer and capacity building;
- Energy, transport, industry, agriculture, forestry and waste management; and
- Economic diversification.

The Fund was set up to complement other funding mechanisms for the implementation of the Convention's decisions. The 2001 Convention's decisions included setting up a:

“funding that is new and additional to contributions which are allocated to the climate change focal area of Global Environment Facility and to multilateral and bilateral funding, for the implementation of the Convention”.

The Convention's decisions also included that parties categorized in Annex II³¹ and other parties included in Annex I that are in a position to contribute to the Fund shall be invited to contribute to the Fund. The GEF was entrusted to operate the SCCF. It was reported by a GEF report³² that only adaptation and transfer of technologies windows are active as of the time of production of the report.

3.5.1 Eligibility for SCCF and Key Distinctions Between GEF Trust Fund and SCCF

The decision of the seventh session³³ of the Conference of the Parties (COP 7) included that any Non-Annex I country, who is party to the UNFCCC, is eligible for project funding under the SCCF. Annex II countries of the UNFCCC who wish to contribute to the SCCF funding could do so along with some Annex I countries. Nigeria falls within the Annex II countries and is eligible to obtain funding for climate change projects from the facility.

Table 4 below lays out the key distinctions between GEF Trust Fund and SCCF.

³⁰ The development partners contributors (in order of highest to the lowest contributor) are Germany; the UK; the US; Belgium; Sweden; the Netherlands; Denmark; Canada; Australia and France. See <http://fiftrustee.worldbank.org/Pages/lcdf.aspx>

³¹ The Less developed Countries while Annex I countries are the developed countries.

³² Accessing Resources Under The Special Climate Change Fund; page 7. See more at https://www.google.com.ng/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKewiXstyK2ofTAhWIBBoKHUU1CP8QFghOMAM&url=http%3A%2F%2Fwww.thegef.org%2Fsites%2Fdefault%2Ffiles%2Fpublications%2F23470_SCCF_1.pdf&usq=AFQjCNEkNXUdjEqctUAfGTtX2PiXGUSi7Q&sig2=7KixLr1gGGtbTxHPLw1c9A

³³ Held between 29th October – 10th November 2001, in Marrakesh, Morocco.

Table 4: Key Distinctions between GEF Trust Fund and SCCF

	Conventional GEF Trust Fund	SCCF
Project Must Generate Global Benefits	Yes	No*
Project Must Generate Adaptation Benefits	No	Yes*
Funding Allocated According to Resource Allocation Framework or STAR	Yes	No
Projects Financed According to the "Incremental Cost" Principle	Yes	No*

Source: GEF Report, Accessing Resources under the SCCF

* Means that Technology Transfer for Mitigation projects are exempted.

Information in Table 4 above implies that SCCF funding allocation is not based on the resources allocation framework³⁴. It also means that the projects funded under the SCCF must not generate global benefits neither are they financed in keeping with the “incremental cost” principle, but the opposite is the case regarding projects involving technology transfer for mitigation. Projects funded under the SCCF must generate adaptation benefits; but this does not apply to projects for technology transfer for mitigation.

3.6 ADAPTATION FUND (AF)

The Adaptation Fund finances projects and programmes that help vulnerable communities in developing countries adapt to climate change. Initiatives are based on country needs, views and priorities. The Fund’s overall goal is to help developing nations build resilience and adapt to climate change. Established in 2001 under the Kyoto Protocol of the UNFCCC, the Fund has committed US\$357.5 million in 63 countries since 2010 to support climate adaptation and resilience activities.

The rationale for helping developing countries in the fight against climate change is because climate change is predicted to affect the poorest people in the world, as they are often the hardest hit by weather catastrophes, desertification and rising sea level, but have contributed the least to the problem of global warming. Contribution to the Fund is partly by government and private donors, and also from a two percent share of proceeds of Certified Emission Reductions (CERs) issued under the Protocol’s Clean Development Mechanism projects.

Adaptation Fund is financed by a share of proceeds from the Clean Development Mechanism (CDM) project activities and from other sources. AF funding from CDM is

³⁴ As indicated by Row 3, Column 3 of Table 4 above.

a 2% levy on CERs issued for a CDM project activity. The Fund is supervised and managed by the Adaptation Fund Board (AFB) made up of sixteen (16) members and sixteen (16) alternates, who meet twice a year. The board has a secretariat which provides it with research, administrative and other services. The World Bank serves as trustee of the Adaptation Fund on an interim basis.

3.6.1 Clean Development Mechanism (CDM)

The Wikipedia defined the Clean Development Mechanism³⁵ (CDM) as:

“one of the Flexible Mechanisms defined in the Kyoto Protocol that provides for emissions reduction projects which generate Certified Emission Reduction units (CERs) which may be traded in emissions trading schemes”.

Flexible mechanisms³⁶ refer to the mediums introduced by the Kyoto Protocol through which the GHG emissions reduction targets set for the 37 industrialized countries and the European Community can be achieved. CDM's main goals³⁷ are: (i) to help countries without emissions targets (i.e. developing countries) in achieving sustainable development. (ii) to help the developed countries who have emission reduction targets under the Kyoto Protocol in achieving compliance by allowing them to purchase offsets created by the CDM projects. CDM operates in a way that allows governments and companies in Annex I category to buy emission reduction credits (CERs) from CDM projects instead of reducing their own emissions.

Projects eligible for CDM accreditation include: hydropower projects; wind energy projects; fuel switching and industrial efficiency improvements. There also needs to be a proof of additionality³⁸ by a project developer for a project to qualify for accreditation. Projects are then issued CER (which are tradable) with each unit equaling a reduction of one tonne of carbon dioxide. These CERs, otherwise referred to as offsets, can then be purchased by companies (in Annex I countries) and Annex I countries themselves to meet their Kyoto commitments.

3.7 GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY (GFDRR)

The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership that helps high-risk, low-income developing countries better understand and reduce their vulnerabilities to natural hazards, and adapt to climate change. The GFDRR is a grant funding mechanism managed by the World Bank to support disaster risk management projects globally. This facility is mainly for the regions

³⁵ See https://en.wikipedia.org/wiki/Clean_Development_Mechanism

³⁶ They include the International Emissions Trading (IET), Joint Implementation (JI) and the Clean Development Mechanism (CDM).

³⁷ See more at <https://www.theguardian.com/environment/2011/jul/26/clean-development-mechanism>

³⁸ That is for a developer to show what emission reductions that are additional to what would have otherwise been obtainable. This is calculated by using an approved methodology to subtract the estimated emissions of a given project from a hypothetical 'business-as-usual' emissions baseline.

identified as the most vulnerable to natural disaster so as to improve their capacity for disaster prevention, emergency preparedness, response and recovery.

GFDRR finances demand-driven technical assistance through a number of implementing partners. Financing Windows include a multi-donor trust fund (MDTF) funded by all donor members of GFDRR and two special programs financed by the European Union and Japan.

Nigeria is among the 18 GFDRR members³⁹. The GFDRR 2016 Annual Report stated that US\$169 million investment initiative have been informed by development finance in Africa, with more than 23 countries engaged in the continent in the year 2016⁴⁰. Other regions of the world reported include: \$760 million for East Asia and Pacific with more than 18 countries engaged; \$395 million for Europe and Central Asia with more than 11 countries engaged; \$324 million for Latin America and the Caribbean with more than 22 countries engaged; \$200 million for Middle East and North Africa with more than 5 countries engaged and \$1 billion for South Asia with more than 7 countries engaged. The report⁴¹ also revealed that an investment sum of US\$700,000 is in the pipeline for Nigeria for the year 2017. Other African countries like Morocco, Niger and Mali also have investment sums of \$200 million, \$101.2 million and \$27.5 million in the pipeline for the year 2017.

3.7.1 GFDRR Thematic Initiatives and Criteria for Funding Country Programme

The thematic initiatives supported by GFDRR provide the grantees with specialized knowledge and quality assurance in the design and implementation of activities. These initiatives give GFDRR the room to collaborate with a broad array of partners, facilitate global engagements and capacity building and also produce innovative knowledge. The thematic initiatives as listed in the GFDRR 2016 Annual Report⁴² include:

- The Innovation Lab
- Hydromet
- Disaster Risk Financing and Insurance (DRFI)

³⁹ Other member countries include Australia; Austria; Denmark; Germany; India; Italy; Japan; Luxembourg; Mexico; Nigeria; Norway; Saudi Arabia; Serbia; Sweden; Switzerland; the UK; the US and Vanuatu. The international agencies listed under this category include: Africa, Caribbean & Pacific (ACP) Secretariat; the EU; UN Office for Disaster Risk Reduction (UNISDR) and the World Bank. The observers include Brazil; Canada; China; Djibouti; Finland; France; Indonesia; Ireland; Korea Republic; Kuwait; the Netherlands; Nepal; Philippines; Qatar; Russia; Spain; Turkey and UAE. The international agencies listed here include: Global Network of Civil Society Organizations for Disaster Reduction; International Federation of Red Cross and Red Crescent Societies; Islamic Development Bank; Organization of Economic Cooperation and Development; Organization of Islamic Cooperation and United Nations Development Programme (UNDP). See the GFDRR 2016 Annual Report, page 5. <https://www.gfdr.org/sites/default/files/gfdr-2016-annual-report.pdf>

⁴⁰ Page 4

⁴¹ Page 16

⁴² Page xiv

- Resilient Recovery
- Inclusive Community Resilience
- Urban Resilience
- Safer Schools and
- The Small Island States Resilience Initiative (SISRI)

The GFDRR implements the majority of its programmes through the World Bank in partnership with national, regional, and other international agencies. As stated in the GFDRR 2016 Annual Report⁴³, activities funded under the country programme must:

- respond to a request from a vulnerable country;
- contribute to the goal of the Sendai Framework;
- ensure technical soundness in their design; and or
- demonstrate high potential for impact either because they inform development financing or support policy change.

3.8 GREEN CLIMATE FUND (GCF)

The GCF is a unique global initiative to respond to climate change by investing into low-emission and climate-resilient development. GCF was established by 194 countries that are party to the UNFCCC in 2010, to limit or reduce greenhouse gas emissions in developing countries, and to help adapt vulnerable societies to the unavoidable impacts of climate change. Given the urgency and seriousness of the challenge, the Fund is mandated to make an ambitious contribution to the united global response to climate change. It was designed as an operating entity of the Convention's financial mechanism and is headquartered in the Republic of Korea.

The Green Climate Fund was established with a mission to advance the goal of keeping the temperature increase of the earth below 2 degrees Celsius. The GCF mission is to expand collective human effort to address climate change. The Fund was created by the UNFCCC with the aim of mobilizing investments in low-emission and climate-resilient projects and programmes in developing countries. It also has a focus on the needs of societies that are highly vulnerable to the effects of climate change – the least developed countries (LDCs); small island developing states (SIDs) and African states.

The Fund's initial resource mobilisation in 2014 realized over US\$10 billion and is still ongoing. Its investment over time aims to strike a balance between mitigation and adaptation. It gives at least 50% of adaptation funding to the vulnerable countries – LDCs, SIDs and African states. It also has a variety of financial instruments available including grants, concessional loans, subordinate debt, equity

⁴³ Page 16

and guarantees, giving flexibility to match project needs. The Fund's governance structure is balanced between developed and developing countries – 12 each.

4. WHERE IS NIGERIA IN CLIMATE CHANGE FINANCING AND CLIMATE CHANGE MITIGATION?

It is not clear where Nigeria stands as it regards tapping into the available international climate change financing funding. Yes, Nigeria is tapping into Clean Technology Funding (CTF) to fund projects that are expected to change the face of energy and transport landscapes in the cities of Abuja, Lagos and Kano; and is also on course to tap from the GFDRR approved investment sum of US\$700,000 for 2017. But there is still room for improvement as there are other funding options that she can take advantage of and ramp up her adaptation and mitigation actions.

Regarding adaptation and mitigation, the scenario is no different. Nigeria has submitted her Intended Nationally Determined Contributions (INDC) at the Paris COP 21 UN Climate Change Conference in 2015, which is well on course to become her Nationally Determined Contributions (NDC). She has also signed and ratified the Paris Climate Change Agreement in which the nation pledged to reduce GHGs emission unconditionally by 20% and conditionally by 45%. The purpose of the National Renewable Energy and Energy Efficiency Policy (NREEE) include among other things to:

“take a step in the right direction and broadens the definition of energy security to include renewable energy and energy efficiency as equally important indigenous sources of energy, in addition to oil and gas”⁴⁴.

It is contradictory however, for a country that have made plans for climate change adaptation and mitigation through investments in renewable energy sources to be making advanced plans for investments in coal and nuclear power plants. This will definitely add to the level of the country's GHGs emission which begs the question of how she hopes to keep the ratified Paris Agreement. Nigeria should be committed to her NDCs and other climate change action plans and move away from projects that will suggest that we are not serious with reducing our GHGs emission.

5. CONCLUSIONS AND RECOMMENDATIONS

Climate Change adaptation, mitigation and building resilience can only be done properly with firm political commitment and necessary funding to execute the needed projects. The following recommendations are imperative:

⁴⁴ NREEEP page ix, Approved by Federal Executive Council for the Power Sector; Ministry of Power 4/20/2015.

i. Greater Accountability and Transparency in the use of Ecological Funds: Ecological Funds at the federal and state levels should be managed with greater transparency and accountability so as to generate greater value for money. The proposal is for an evidence led approach to project identification and design, open contracting in the use of the funds and more detailed and timely reporting to the public and legislative bodies. Civil society organisations should show greater interest in exercising oversight over the management of this Fund.

ii. Establish a Climate Rehabilitation and Remediation Fund: This should be funded on the basis of polluter pays principle and used as a basis (through levies, surcharges and taxes on designated products) to change lifestyles, discourage production, service delivery and distribution systems that emit high levels of carbon. Further, individuals and corporations should be encouraged to make voluntary donations to the Fund through making such donations tax deductible.

iii. Establish a Special Public Fund for Climate Change Initiatives: Nigeria should seriously consider the establishment of a special fund to finance climate change initiatives. This should be done by the Central Bank of Nigeria through a special window that attracts single digit interest rates and this will be available to the private sector, civil society and communities under flexible conditions of access that guarantees repayment and achievement of Fund objectives.

iv. Appropriate Import Duties for Renewable Energy Products: FGN needs to properly classify all materials required for the installation of renewable energy as import duty free materials. The current half- hearted categorization is not facilitating the lowering of costs of access to renewable energy.

v. Plans Should Be Based on National Strategies and Should Be Followed Strictly: Nations in general find it easier to come up with high quality funding proposals to submit to climate funds when they already have national plans to address climate change which they are committed to. Effective national plans are generally products of high quality data collection and cross sectoral collaboration, which also includes thinking strategically on how best to get access to finance and leverage it to support nation-wide change.

vi. Build Strong Institutions/Make the Existing Ones Stronger: The presence of strong institutions which can oversee high-impact initiatives is a prerequisite for effective use of climate finance. For developing countries such as Nigeria to get direct access to finance, they must show that they have strong institutions that can effectively deploy funds and oversee the implementation of funded initiatives. This ought to be one of the priorities of the government especially the Federal Ministry of Environment (the focal point with the responsibility of sourcing for climate funds for the country).

vii. Coordination and Stakeholders Engagement is Crucial: For there to be effective action against climate change, there needs to be solutions that cut across multiple sectors and also with the buy-in of the affected stakeholders. Nations able to coordinate inter-ministerial and inter-agency activities and also between non-governmental actors, are more easily able to arrange for and implement effective climate initiatives. It should be noted that climate funds are more inclined to fund requests that reflect support from the affected people, and so future funding requests should be made bearing this in mind.

viii. Getting Better Access to Finance and Capacity Building: Countries have found that to be successful in getting financing from the climate funds via the UNFCCC requires putting the right persons and plans in place. Nigeria should always take part in experience sharing events with other nations who have been successful in getting direct access to climate finance. This lesson sharing could cover how to apply, deployment and management of climate finance in such a way that it would lead to more access to finance and more effective use of funds. Specific targeted capacity building events need to be organized to acquire new capacities and competencies in areas where the country has deficiencies.

REFERENCES

- BNRCC. (2011). *National Adaptation Strategy and Plan of Action for Climate Change in Nigeria (NASPA-CCN)*. Ibadan: NEST.
- Clean Technology Fund. (July, 2014 (Revised)). *Clean Technology Fund Investment Plan for Nigeria (Update Note)*.
- Climate Investment Fund. (2016). *PPCR Fact Sheet (November 2016)*. Retrieved March 25th, 2017, from Climate Investment Fund: <http://www.climateinvestmentfunds.org/knowledge-documents/ppcr-fact-sheet-november-2016>
- Climate Investment Funds. (n.d.). *Country Plans*. Retrieved March 25th, 2017, from Climate Investment Funds: <https://www.climateinvestmentfunds.org/country>
- Forest Investment Program. (2016). *Forest Investment Program Pilot Countries Meeting*.
- Global Environment Facility. (2011). *Accessing Resources Under the Climate Change Fund*.
- Global Environment Facility. (2016). *Global Environment Facility-About Us*. Retrieved March 22nd, 2017, from Global Environment Facility: <https://www.thegef.org/about-us>
- Global Facility for Disaster Reduction & Recovery. (2016). *Global Facility for Disaster Reduction and Recovery Annual Report 2016*.
- Guardian Newspaper. (2017, Feb 24th). Nigeria Plans to \$64m Green Bond Issue by April.
- Heinrich Boll Stiftung. (2015). *Coal Atlas*. Berlin, Nigeria and London: Heinrich Boll Stiftung Berlin Germany & Nigeria and Friends of the Earth International, London.
- Min. of Power Fed. Rep of Nigeria. (2015). *National Renewable Energy and Energy Efficiency Policy (NREEEP), approved by FEC for the Electricity Sector*.
- The African Development Bank. (2014). *The AfDB CIF Annual Report 2014, FINANCING CHANGE - the AfDB and CIF for a Climate-Smart Africa*. AfDB's Energy, Environment and Climate Change Department.
- The GEF Small Grants Programme. (2012). *Grant Eligibility*. Retrieved March 27th, 2017, from The GEF Small Grants Programme: https://sgp.undp.org/index.php?option=com_content&view=article&id=274&Itemid=276#.WR2Wuty1vIV
- The UK Guardian. (2012, Feb 28th). What are the Options for Financing Climate Change Adaptation.
- Thompson, A. (2017, Jan 18th). *2016 Was the Hottest Year on Record*. Retrieved March 20th, 2017, from Scientific American: <https://www.scientificamerican.com/article/2016-was-the-hottest-year-on-record/#>
- Vanguard Newspaper. (2017, Feb 23rd). FG to Float N20bn Green Bond for Environmental Sustainability Projects.

Wikipedia. (n.d.). Carbon Credit.

World Bank. (2009, October 19th). *Press Release*. Retrieved March 25th, 2017, from World Bank Launches "MultiCat Program": <http://www.worldbank.org/en/news/press-release/2009/10/19/world-bank-launches-multicat-program>