ASSESSING CLIMATE CHANGE, COP26 COMMITMENTS IN AFRICA

NIGERIA
SOUTH AFRICA
UGANDA
Assessing Climate Change, COP26 Commitments in Africa: Case Studies of Nigeria, South Africa and Uganda

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2022

Community # Solidarity # Impact
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<td>Africa Climate Policy Center</td>
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<td>AGN</td>
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<td>African Development Bank</td>
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<td>AFOLU</td>
<td>Agriculture, Forestry and Other Land Use</td>
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<td>AMCEN</td>
<td>African Ministerial Conference on the Environment</td>
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<tr>
<td>BCM</td>
<td>Billion Cubic Meters</td>
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<td>BSTF</td>
<td>Billion Standard Cubic Feet</td>
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<tr>
<td>CAHOSOCC</td>
<td>Committee of African Heads of State and Government on Climate Change</td>
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<td>CNOOOC</td>
<td>Chinese National Offshore Oil Corporation</td>
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<td>ClimDev Africa</td>
<td>Climate for Development in Africa Program</td>
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<td>COP</td>
<td>Conference of Parties</td>
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<td>CSO</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>EACOP</td>
<td>East African Crude Oil Pipeline</td>
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<td>ETO</td>
<td>Energy Transition Office</td>
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<td>Energy Transition Plan</td>
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<td>ETS</td>
<td>Emission Trading Scheme</td>
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<td>ETWG</td>
<td>Energy Transition Implementation Working Group</td>
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<td>EU</td>
<td>European Union</td>
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<td>Food and Agriculture Organization</td>
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<td>Gross Domestic Product</td>
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<td>GGA</td>
<td>Global Goal for Adaptation</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<td>IEA</td>
<td>International Energy Agency</td>
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<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<td>JETP</td>
<td>Just Energy Transition Partnership</td>
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<tr>
<td>Kwh</td>
<td>Kilowatt-hour</td>
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<tr>
<td>KTPA</td>
<td>Kilo Tonnes per Annum</td>
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<tr>
<td>LEDS</td>
<td>Low-Emission Development Strategy</td>
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<td>LTAS</td>
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<td>MV</td>
<td>Medium Voltage</td>
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<tr>
<td>MtCo2</td>
<td>1 Miillion Tonnes of Co2</td>
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<td>LTV</td>
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<td>NCCA</td>
<td>National Climate Change Act</td>
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<td>NCCAS</td>
<td>National Climate Change Adaptation Strategy</td>
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<td>NCCRWP</td>
<td>National Climate Change Response White Paper</td>
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<td>NDC</td>
<td>Nationally Determined Contributions</td>
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<td>NDP</td>
<td>National Development Plan</td>
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<td>NEPAD</td>
<td>New Partnership for Africa's Development</td>
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<td>NERC</td>
<td>Nigeria Electricity Regulatory Commission</td>
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<td>ODA</td>
<td>Official Development Assistance</td>
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<td>PCCCCC</td>
<td>Presidential Climate Change Coordination Commission</td>
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<td>PIA</td>
<td>Petroleum Industry Act</td>
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<td>REDD+</td>
<td>Reducing Emissions from Deforestation and Forest Degradation</td>
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<td>REIPPP</td>
<td>Renewable Independent Power Producer Programme</td>
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<td>SCF</td>
<td>Standard Cubic Feet</td>
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<td>TWH</td>
<td>Terawatt-Hour</td>
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<td>UTCOP</td>
<td>Uganda–Tanzania Crude Oil Pipeline</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>WMO</td>
<td>World Meteorological Organization</td>
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EXECUTIVE SUMMARY

If world wars were the leading human catastrophe of the last century, climate change will no doubt qualify as the foremost human and environmental crisis of the 21st century. Climate change can be described as “long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle”\(^1\). While there could be other reasons for climate change, since the 1800s, human activities have been its main driver, primarily due to the burning of fossil fuels like coal, oil and gas\(^2\).

This situation has led to an increased concentration of Green House Gases (GHG) in the earth’s atmosphere that is spurring extreme weather patterns, biodiversity loss, heat waves, drought, and rising sea levels resulting in devastating floods across the world. As extreme weather patterns impact environments, land, and water sources, they cause human displacements, illnesses, degradation of ecosystems, loss of shelter and livelihoods while intensifying conflicts and competition for scarce resources.

At the heart of the climate crisis are questions about how best the human species can live in harmony with nature. Decades of scientific research have long established the fact that the current path is unsustainable, and a catastrophe awaits the planet and all that lives on it. Hence, addressing the climate crisis requires a whole-society approach to manage current emission levels, and a plan towards an energy transition from fossil fuel to renewables like wind, hydro, solar, biomass, geothermal, etc., to safeguard the environment and build a sustainable future.

From time immemorial, there have been fervent efforts to raise awareness about climate change and mobilize efforts and commitments towards curbing it. In fact, the global climate change discourse and environmental governance can be traced back to the United Nations Scientific Conference in Stockholm, Sweden in 1972. There, the first appraisal of global human impact on the environment happened. The Stockholm Conference ended with participants adopting a series of principles on the environment, including the Stockholm Declaration which placed environmental issues on the front burner of international concerns, and marked the start of dialogues between industrialized and developing countries on the linkages between water, economic growth, air pollution and the wellbeing of people around the world\(^3\).

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\(^2\) Ibid.

With the recognition that international cooperation was necessary to tackle environmental problems that transcend national boundaries, subsequent mega conferences\(^4\), and numerous multilateral environmental agreements began to emerge around climate change discourses.

The United Nations Framework Convention on Climate Change (UNFCCC) is one such multilateral agreements adopted at the Earth Summit otherwise known as UN Conference on Environment and Development (UNCED) in 1992 in Rio de Janeiro, Brazil. On March 21, 1994, the UNFCCC entered into force with 196 countries ratifying it. The international treaty acknowledges the existence of anthropogenic climate change, provides the framework for climate negotiations and binds member countries to act in the interest of human safety to stabilize GHG concentrations in the earth’s atmosphere.

Each year, the UNFCCC holds a series of meetings known as the Conference of the Parties (COPs) to review the progress made by members in halting climate change. The COP is made up of representatives from all parties and is considered the UNFCCC’s apex body responsible for decision-making. Each party to the UNFCCC is represented at sessions of the conference by a national delegation consisting of one or more officials authorized to represent and negotiate on its behalf. However, to strengthen their bargaining power and position, countries usually negotiate in blocs.\(^5\) Since March 1995 when the first COP was held in Germany, it has met every year subsequently.

The negotiation of the Paris Agreement at COP21 has been widely celebrated as a watershed in the global climate journey towards decarbonization. Negotiated by 196 countries in December 2015, the landmark accord established a universal framework for action on climate change to ensure the preservation and sustainability of the earth. Central to this agreement are climate change plans and actions to be developed by respective signatories known as Nationally Determined Contributions (NDCs).

The NDC explains how a country intends to combat the effects of climate change, enhance climate resilience, and reduce its national GHG emissions in alignment with the long-term goals of the Paris Agreement. To this end, countries are required to update, communicate, and submit their NDCs to the UNFCCC Secretariat every five years to reflect ambitious climate actions that improve on previous commitments.


However, there are doubts about whether climate ambitions can be fully achieved given the varying circumstances of nations, arguments over climate responsibilities such as big polluters paying up for historical damages they have caused vulnerable developing nations, and ideal approaches for adapting to and mitigating climate change. In particular, the capacity of states in Africa to transform NDC commitments into real-life actions and interventions has come under doubt.

**Africa’s Climate Ambitions and NDCs**

While all 54 countries in Africa have signed the Paris Agreement and 53 (with the notable exception of Libya) have submitted their NDCs, the African Development Bank (AfDB) notes that most NDCs submitted by African countries were hastily put together and did not consider long-term effects on national goals. In addition, even though there is improved awareness of the urgent need to act on climate change in Africa, significant encumbrances in the race towards a clean energy transition and carbon-less society continue to stifle real progress. For instance, the economies of many African countries are currently on life support because of high public debts and post-coronavirus pandemic-induced economic contractions that have combined with other stressors to hamper national efforts to achieve sustainable development and climate goals.

This report examines the NDC/COP26 and other climate change commitments, including the climate-action progress of African countries by focusing on three case studies: Nigeria, South Africa, and Uganda, representing the Western, Southern, and Eastern regions of the continent. The report notes that all three case studies have updated their NDCs with climate change ambitions that qualify as improvements over their previous NDCs. However, the following underlying factors continue to inhibit the feasibility of their climate commitments:

1. Across the three countries studied, state authorities are keen on getting things right but there is still room for improvement, especially in the area of developing and implementing policies that truly aspire to regulate GHG emissions.

   For instance, despite its aspirations to cut carbon emissions, the Nigerian government continues to perpetuate fossil fuel exploration and commit to the usage of other non-renewable energy sources that contribute to GHG emissions.

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An example is the earmarked 30% allocation (provided in the Petroleum Industry Act, PIA 2021) for the exploration of crude oil in the country's frontier basins. Likewise, the Nigerian government is playing a role in the establishment of heavy carbon investments like the gigantic Dangote Refinery and Petrochemicals. Also supporting this massive hydrocarbon entity are International Financial Institutions and global banking consortiums. These include the World Bank, the African Development Bank, Standard Chartered Bank, and trade banks from China, India, and some European countries. This further underlines the global hypocrisy, inconsistency, and lack of political will behind the absence of traction in the efforts toward curtailing global warming and achieving a carbon-free world.

While committing to a net zero CO2 target by 2050, South Africa has largely not been able to wean itself off reliance on coal. South Africa depends on coal for 70 per cent of its total energy supply. According to Climate Action Tracker, South Africa’s emissions trajectory for 2030 is expected to “decrease by around 5 – 6 per cent below 2010 levels but would end up at around 36 per cent to 38 per cent above 1990 levels (excluding Land Use, Land-Use Change and Forestry - LULUCF)” - much above the target range set in its 2021 updated NDC.

Another variable countermanding South Africa’s GHG emission reduction aspirations is the role of the state-owned electricity company, Eskom, which is driving towards more coal consumption due to its vertical monopoly over the nation’s energy system, and its favouring of its coal-fired power plants over private renewable generation. For instance, Eskom is reportedly putting final touches to the construction of a 4800 megawatts dry-cooled plant on the hills of South Africa’s Mpumalanga province. This project also known as the Kusile Power station is set to burn as much as 15 million tons of coal annually.

If taken together with Eskom’s poor financial health and inability to fund clean energy projects, the situation may succeed in hindering South Africa from achieving its emissions reduction targets.

10Ibid
As for Uganda, the implementation of its NDC targets of approximately 22 per cent reduction of national greenhouse gas emissions by 2030 is constrained by its national circumstances and development priorities. Uganda’s greatest mitigation potential is in the land use, land-use change, and forestry sectors. Under its business-as-usual scenario, the Agriculture, Forestry, and Other Land Use (AFOLU) sector featured the most significant source of emissions for three gases (CO2, CH4, and N2O), and accounted for 86.4 per cent of the total emissions.

Comparatively, the energy sector accounted for 10.9 per cent, and the waste sector and Industrial Processes and Product Use accounted for 2.1 per cent and 0.6 per cent respectively. This means that a successful reduction in emissions in the AFOLU sector can have a big impact on Uganda’s total GHG emissions profile thus guaranteeing the likelihood of meeting its NDC aspirations.

Unfortunately, approximately 90 per cent of Uganda’s energy needs are generated from biomass, mostly dominated by firewood and charcoal which remain the primary energy source for many sectors of the economy apart from the transport and service sectors. It goes without saying that this level of nearly absolute reliance on biomass by big sections of the population has wide-ranging implications both for the ambitious plan to reverse the current deforestation trend (of approximately 14 per cent in 2013) and increase forest cover to 21 per cent in 2030 and other emission reduction aspirations noted in its NDC.

(2) The three countries under focus also present critical challenges in their march towards a just energy transition. In the case of Nigeria, a major drawback in its just energy transition is the plan to use natural gas as transition energy. Many stakeholders believe that Nigeria is well positioned to gain from this due to the abundance of fossil fuel resources in its environment as well as high gas prices in Europe occasioned by the Russian invasion of Ukraine. However, the use of gas as a transition fuel comes with a dilemma for climate change goals.

Although it is a low carbon, natural gas is a fossil fuel that emits GHG which contributes to global warming. Also, considering the situation of continuous gas flaring and venting despite government efforts, and the enactment of laws to curb them, Nigeria and any African country risk...
undermining their carbon-free objectives if they intensify natural gas exploration over the next few years. Indeed, any new exploration for gas, alongside the exploitation of Africa’s vast reserves of oil, could make it close to impossible for the world to limit global heating to 1.5C above pre-industrial levels\textsuperscript{15}. Additionally, the exploration of natural gas as transitory energy poses a risk of Nigeria becoming “locked in” to a path of non-renewable energy generation.

Also, Nigeria’s energy transition plan makes no provision for holding oil corporations to account for their despoliation of oil-producing communities of the Niger Delta nor does it have any in-built provision to ensure that a truly just energy transition occurs without a carryover of the same exploitative and environmentally damaging practices associated with crude oil exploration. The acquisition by Royal Dutch Shell of Nigerian solar energy provider, Daystar Power, as part of efforts to cut its GHG emission and focus on renewables raises concern given its dark history in Nigeria’s oil-producing communities\textsuperscript{16}.

In the case of South Africa, its Just Energy Transition Partnership (JETP) does not fully accommodate the interest of formal and informal workers in coal-dependent municipalities, and others who would be displaced or adversely affected in the process of the energy transition. Given the extent of coal dependency in South Africa’s economy, a just energy transition requires a more careful and nuanced approach that takes care of the interests and fears of all, most especially communities, workers, and other stakeholders.

A running theme in the energy transition of several African states, South Africa inclusive, is the positioning of the private sector as the leading force. As we have seen with fossil fuel extractivism, the private sector often prioritizes profit over people’s needs and the environment while using Corporate Social Responsibility (CSR) as a cynical measure to divide communities and push its false narratives.

Unlike others, Uganda’s energy transition plans envision the exploration of newly discovered oil deposits to drive growth and fund renewables. In 2006, commercially viable oil was discovered in the country’s Albertine Graben region, prompting foreign companies such as the French Total Energies and the Chinese National Offshore Oil Corporation (CNOOC) to sign agreements with the government to extract oil in this eco-sensitive


There is also the ongoing construction of the 1,445 km East African Crude Oil Pipeline (EACOP) also known as the Uganda–Tanzania Crude Oil Pipeline (UTCOP) which is intended to transport crude oil from Uganda's oil fields to the Port of Tanga, Tanzania on the Indian Ocean. Once completed, the pipeline will be the longest-heated crude oil pipeline in the world.

Because of the large-scale displacement of communities and wildlife, and the condition of how this project fails to square up to the global push towards emission reduction, global environmental groups such as Friends of the Earth Africa and activists in the country are protesting the construction and financing of EACOP.

Their principal argument is that Uganda’s fossil fuel exploration undermines national and global imperatives for emission reduction and transition to renewables. In addition to the concerns about exploring fossil fuel resources amid the global race to reduce carbon emissions is the increasing militarization of resource-rich localities. Already, there are increasing reports of human rights violations, and targeted attacks on activists, students, and community people speaking up against the likely costs and social impacts of the EACOP project on the environment, livelihoods, and cultural heritage of community people whose land resources will be affected and are already being acquired without compensation.

(3) There is no doubt that climate finance will be critical for enabling Africa to adapt to the growing impacts of climate change and to ensure that its future development path is consistent with the goal of limiting global warming to no more than 1.5°C. However, despite the positive objectives of the NDCs, financing Africa’s climate ambition is becoming a tall order for the continent and its development partners. African countries are yet to recover from the economic dislocation caused by the COVID-19 lockdown as well as other associated economic crises.

Amid a downturn in the global economy, Nigeria and South Africa, the two biggest economies on the continent, have both faced economic recession at least once in the past decade together with rising public debt,
inflation, and cash crunch. Uganda on the other hand, is an extremely impoverished country, with a mounting public debt of at least $20.98 billion. Now according to the IMF, growth forecasts for both Nigeria and South Africa for 2023 have been downwardly reviewed to 3.2 per cent and 1.4 per cent respectively²¹.

The reluctance of the global North to make true their commitment to Africa’s climate ambitions is also a matter of concern. To date, “only $80 billion of the $100 billion per annum commitment by developed countries for developing countries by 2020 has been met; of this, only around $20 billion was provided to Africa over 2016-2019”²². Meanwhile, the financial implication of climate mitigation and adaptation in Africa continues to rise as the environmental crisis deepens. This has prompted the Africa Group of Negotiators to call for $1.3 trillion a year in climate finance to be made available from 2025.

In order to address the financial constraints affecting African countries, there are suggestions for alternative financing options like the global trade in carbon credits. Carbon credits are permits that allow the holder to emit one ton of carbon or equivalent greenhouse gases. “These permits are issued by governments or independent verifying companies and can be traded. Typically, carbon credits are issued to companies or projects that reduce or avoid carbon emissions. Firms that exceed government emissions limits (in places where those exist) or that seek to compensate for their carbon emissions then buy these credits to offset their emissions footprint”²³.

The trio of Nigeria, South Africa, and Uganda have keyed into prospects and activities of negotiating climate finance via carbon trade mechanisms. The idea behind carbon trading is that it should incentivize lower emissions and provide funding for embarking on infrastructure powered by renewables. But this is rarely the outcome that emerges at the end of the day. Rather, what has been made evidently clear is that carbon trading is an escape route for big polluters to avoid transitioning thereby undermining global climate aspirations.

(4) The transport sector is a key player in mitigating climate change across all case studies. For instance, Nigeria is the 10th largest producer of carbon dioxide emissions from an average journey. It was found to have the

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longest average commute time at just over an hour - 61.97 minutes\textsuperscript{24}. Similarly, emissions from the South African transport sector account for 10.8 percent of the country’s total greenhouse gas emissions, with road transport being responsible for 91.2 percent of these GHG emissions\textsuperscript{25}.

“With an estimate of 4,859 grams of CO\textsubscript{2} per journey, South Africa is reportedly the country producing the most carbon dioxide emissions per journey, making it and Lebanon (4,621g) the only countries to produce more than 4,500 grams of Co\textsubscript{2} per journey”\textsuperscript{26}. On average, Uganda’s transport and agriculture sectors combined were responsible for 62 percent of national emissions in 2000 and are projected to represent 70 percent by 2030 under a ‘business as usual scenario’\textsuperscript{27}.

Across all three countries, the transport sector accounts for significant GHG emissions and urban air pollution. These pollutants from the transport sector are powered by fossil-derived gasoline, diesel, and liquid coal. Transitioning to a less carbon-powered transport economy will not be easy because of the prominent social and economic inequalities in each of the three countries, and in extension Africa. Ultimately to raise eco-transport ambitions, countries must not only work to improve the welfare and living conditions of citizens but also explore pathways to transport decarbonization that recognizes local needs, realities, and purchasing power.

**RECOMMENDATIONS**

Africa has demonstrated ample evidence of enthusiasm and commitment towards effective action to combat climate change. Unfortunately, these efforts are hampered by the continent’s national circumstances, the reluctance of rich countries of the Global North to meet up with climate finance needs, and the pursuit of false solutions. One such false solution is the plan of African leaders to pursue the adoption of natural gas as a transition fuel for African countries.

These leaders, among whom are those who have prospected oil and minerals for decades with nothing to show for it, argue that Africa should at least be allowed


to build and develop its economy using low-carbon fossil fuels like gas pointing out how the countries of the Global North built their own economies with fossil fuel and slavery. For instance, Uganda argues that it needs to exploit its newly discovered oil fields to build its economy and create jobs.

Although clever, these arguments are nothing but excuses for maintaining the destructive status quo of fossil fuel exploration and usage in Africa despite the urgency the situation demands. As a new report from UN Climate Change which assessed the combined climate pledges of 193 Parties under the Paris Agreement has revealed, even though countries are bending the curve of global greenhouse gas emissions downward, “we are still nowhere near the scale and pace of emission reductions required to put us on track toward a 1.5 degrees Celsius world.” If Africa is currently bearing the worst burden of the climate crisis despite contributing the least emission, one can only imagine how bad things can get for the continent if global warming persists.

At worst, these arguments expose just how much African leaders appreciate the immense opportunity the ongoing energy transition presents for the continent. While previous transitions in energy and production systems left Africa behind, the transition to renewables can put the continent in the leadership of the future. This is because almost all renewable energy sources and components can be found in Africa. For instance, Africa receives the most sunlight in comparison to all the other continents on Earth.

One study indicates that a solar generating facility covering just 0.3 per cent of the area comprising North Africa could supply all the energy required by the European Union. Also, Africa has a large coastline, where wind and wave power resources are abundant and underutilized in the north and south of the continent. Geothermal power has the potential to provide considerable amounts of energy in many eastern African nations while the availability of wind on the western coast of Africa is substantial, exceeding 3,750 kW·h. There is also enormous potential for geothermal energy in the East African Rift which is roughly 5,900 kilometers in length and spans several countries in East Africa including Eritrea, Ethiopia, Djibouti, Kenya, Uganda, and Zambia.

Therefore, instead of wasting time on a destructive status quo of fossil extractivism, Africa should be preoccupied with how to take full ownership of these renewable energy potentials and invest in the infrastructures to make them drive harmonious growth and equitable development for the continent and all

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30 https://en.wikipedia.org/wiki/Renewable_energy_in_Africa
31 Ibid.
32 Ibid.
its people. At the moment, there is a renewed “scramble for Africa” manifested in multinational companies racing against time to take vantage positions in Africa’s renewable energy field including buying off forested areas for use as carbon sinks, wind, and solar energy sources and infrastructures.

This means corporations have caught on to the game while state actors are squabbling about fossil fuel. Unless African leaders act, the transition to renewable energy sources could become a new center for host communities and multinational squabbles, alongside a repeat of the same exploitative practices associated with fossil fuel extraction.

However, African leaders are right in one respect and that is in highlighting the hypocrisy of the Global North towards climate change goals. The recent turn of American and European economies towards Africa for new sources of natural gas supplies, amid a climate catastrophe, due to the unfolding energy crisis in the global economy arising out of the Russian invasion of Ukraine further demonstrates that leaders of the West want the global south to live by a set of rules they themselves are not willing to abide once the chips are down. Unfortunately, as bad as this is, we must not lose sight of the big picture which is that our planet is cooking away and every additional emission either due to the persistence of fossil fuel burning by Big Oil or the adoption of natural gas as a transition energy by African leaders, will continue to imperil the present generation and future of humanity.

Ultimately, what African leaders must understand is that transition to renewables is an inevitability. It is a question of when not if. The key question for Africa is what kind of transition? Would it be an all-inclusive, balanced, and equitable transition that leaves no one behind? Or would it be one that renews the same dynamics of fossil fuel extractivism based on cruel exploitation for profit above people’s needs and disregard for the environment and ecosystem? Now Africa has the chance of becoming a master of its destiny and turning a page on the past.

Only an energy transition that is equitable, feminist, democratic, affordable, just and insulated from corporate influence can place the continent on a new path of growth and development. As the continent prepares for COP27, more than ever before, Africa’s voices need to be strengthened to advance the continent’s climate ambitions. To this end,

**AFRICAN LEADERS MUST:**

1. **Leverage Green Economic Opportunities**: As the world begins to transit to renewables, increased demands for electric vehicles, solar panels,
batteries, etc. which are produced with critical minerals some of which are sourced from Africa places the continent at a vantage point to renegotiate its position on the global stage while stimulating inclusive economic growth. This would require the government of African countries to take the lead and establish an enabling environment for attracting investment in renewables taking care to avoid re-establishing the exploitative, and environmentally damaging character of fossil fuel extractivism of the past decades. In establishing a sustainable environment for renewable investment, state authorities and stakeholders in Africa must also utilize their resources to negotiate for knowledge transfer of technical skills and capacities that will boost human capital on the continent.

(2) **Remove Barriers to Renewable Energy Technologies in Africa Such as Import Tariffs:** This is necessary to make renewable energy accessible and affordable to most of the energy-poor African population. For instance, Nigeria still imposes import tariffs on renewable energy components. A zero tax on renewable components alongside other incentives will go a long way to speed up the process towards improved energy access in the country and Africa.

(3) **Withdraw Support for Heavy-Carbon Project:** Such projects like Dangote refineries and petrochemicals and Uganda’s EACOP are targeted at locking Africa into Fossil fuel dependency. Financiers and African governments must withdraw all support for such projects.

(4) **Frame Just transition in an African Context:** There is a need to draw up a Just Transition Agenda for Africa that frames the understanding of an energy transition from an African context in order to take care of the “one-size fits all” conception of the subject in mainstream conversation which fails to account for Africa’s peculiarities. A just transition in an African context must be equitable, inclusive, gender-sensitive, and respect the language - cultural and religious rights of people. A just transition in an African context must also acknowledge local realities, expectations, and concerns of communities while also offering space for social dialogue. The Friends of the Earth ‘Just Renewable Energy Plan for Africa’ offers a perfect vision and system approach for a just transition framed in the context of African realities\(^{33}\).

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(5) **Protect Workers and Communities**: Every transition comes with a price, sometimes painful. However, with the right policies and social protection, employees in heavy-carbon industries and communities can be protected. Africa needs programmes to re-train and relocate skills from fossil fuel industries to renewables, and remedial measures to upgrade fossil-fuel communities (Niger Delta in Nigeria, coal-dependent communities in South Africa, etc.) with a view to protecting lives and livelihood.

(6) **Harness Capacity to Secure Funding Support to Finance Africa’s Climate Ambition**: The Africa Group of Negotiators has called for $1.3 trillion a year in climate finance to be made available from 2025. There is a need to utilize the global stage afforded by COP 27 to campaign and secure commitment to this as well as a strategy to follow up and net in the commitments after the conference.

(7) **Drop False Solution Schemes**: Prevailing conversation which puts forward carbon market, trading schemes, and gas as a transition fuel as a pathway towards carbon emission reduction begs the question. They are false capitalist solutions that do not move the needle on climate goals but are intended to make the big polluters avoid reckoning and perpetuate fossil fuel burning. The only pathway towards climate justice, carbon neutrality, and a just energy transition is by stopping fossil fuel burning, transitioning from fossil fuel power to renewable energy, making historic polluters pay for loss and damage, and transforming societies towards economic and political paradigms that promote inclusive growth and development.

(8) **Increase Climate Change Education and Awareness**: While many people in Nigeria, South Africa, and Uganda are noticing the effects of climate change around them, they are starved of real-time information about what exactly it is and are often doubtful of the measures that must be undertaken to address these changes. A heavy investment in climate education for the public is most important to influence voluntary actions toward mitigating the effects of climate change. Successful national adaptation and mitigation responses to climate change must be fair, inclusive, and spur broad public support and interest.

(9) **Ensure Human Rights Protection**: Mainstream human rights protection into climate change mitigation and adaptation actions while encouraging social dialogue with communities, media, and civil society to negotiate Africa’s energy transition imperatives.
(10) **Scale Up Adaptive Capacities:** The recent flooding episodes in Uganda and Nigeria show that a lot is still lacking in the terms of building resilience and providing adaptation support for victims of climate change in Africa. Whereas early warning systems have improved, countries like Nigeria continue to lack effective adaptation and response mechanisms for weather emergencies such as well-trained and equipped firefighters, police and civil defense units, well-equipped hospitals and field clinics, public shelters, manned and unmanned aerial surveillance, etc. Building capacity in this regard will save lives while also offering protection and succour to affected communities.

(11) **Strengthen Stakeholder and Inter-Ministerial Coordination:** To achieve climate resilience, state authorities across all three countries in focus must take care to ensure that all stakeholders, including departments and ministries connected to the struggle to build climate resilience, work together in unity of purpose. This is important if countries must resolve climate challenges.

**THE GLOBAL COMMUNITY MUST:**

(1) **Pay Loss and Damage:** It is time for the global north and big polluters to make reparations for historical losses suffered by individuals and communities on the frontline of the climate crisis in Africa. This demand has been a prominent component of Africa’s proposals in global climate negotiations.

(2) **Cancel the Debt:** Africa’s economies need a breather through debt cancellation in order to better focus and redirect scarce resources to their climate change actions and aspirations.

(3) **Stop Financing Heavy-Carbon Projects in Africa:** Financiers of heavy-carbon projects in Africa, especially European governments, and Asian and North American financial institutions must stop pumping monies into projects that risk locking Africa into fossil-fuel dependency.

(4) **Stop Fossil Fuel Burning:** The most contribution to global warming comes from the industrialized world. False solutions like carbon trading will continue to create a false sense of progress while global temperature continues to rise. We need concerted efforts to stop fossil fuel burning and move towards the use of renewables in order to accelerate the reduction of GHG emissions and by extension global warming.
Drop False Solutions: The turn by American and European economies towards Africa for new sources of natural gas supply in view of the unfolding energy crisis caused by the Russian invasion of Ukraine is a false solution that risks locking Africa in fossil fuel dependency while undermining global climate goals including the 2030 GHG emission target of 1.5°C. This decision which is being driven by Big Oil which hopes to benefit from the situation is rather unfortunate as it exposes the hypocrisy of the leaders of the Global North who all the while had opposed Africa’s proposal to use gas as transition energy but are quick to abandon their support for global climate goals once their economies were hit by the energy crisis. He who comes to equity must come with clean hands. The leaders of the West cannot on, the one hand, exhort African countries which are already overwhelmed by hunger, unemployment, and energy poverty to demonstrate fidelity to climate goals while they, on the other hand, abandon it at the first sign of trouble. As the world marches towards COP27, the leaders of the West must retrace their steps and begin immediate investment in renewable projects that can help to gradually erect an adequate green energy architecture to replace fossil fuel.

Channel Finance and Technical Support: International financiers need to contribute to the development of renewable energy infrastructure in Africa in adherence to just energy transition ideals.
INTRODUCTION

Heat waves, drought, rising sea levels resulting in devastating floods, long-term shifts in temperature and weather patterns, and biodiversity loss are all indicative of climate change – which has been identified as a leading human and environmental crisis of the 21st century. At the root of the climate change crisis are increasing concentrations and emissions of greenhouse gases in the earth’s atmosphere induced by human activities.

Although many of these greenhouse gases such as water vapour and carbon dioxide (CO\textsubscript{2}) occur naturally and help to trap the sun’s ultraviolet rays to stop them from direct reflection on the earth, over time, humans have added more to the concentration of these gases in the atmosphere through practices such as deforestation, the burning of fossil fuels like coal and oil\textsuperscript{34} amongst others. These activities have in turn created a massive heat trap, better known as global warming, which is intensely cooking the world out of existence.

While climate change remains a global challenge, it continues to pose systemic risks and significant impacts in Africa than elsewhere in the world. This is despite the region contributing the lowest emissions, with just about three per cent of emissions attributable to it in the global mix between 1960 - 2020 compared with Asia, Europe, and North America which have each emitted over eight times more in the same time frame\textsuperscript{35}\textsuperscript{36}.

The most economically developed African countries like South Africa generate 7.62 metric tons of emissions per capita while the least developed countries like Chad generate as little as 0.06 metric tons per capita. In comparison, America generates 17 metric tons per capita\textsuperscript{37}. Across Africa, the cruel irony of the climate change burden is manifesting in the degradation of environments, food shortages, loss of economic investments and livelihoods among other disastrous consequences.

According to the State of Climate in Africa Report 2021, Africa continues to observe a warming trend more rapid than the global average\textsuperscript{38}. This has contributed to an increase in the frequency and severity of disasters, including coastal flooding and desertification.

\textsuperscript{34}Fossil fuels are materials containing carbon and hydrogen, found under the earth’s crust and can be burned for energy.
\textsuperscript{36}Ibid
Continental water bodies such as Lake Chad\textsuperscript{39} are steadily drying up leading to adverse impacts on the agricultural sector and ecosystems of communities that depend on it for survival. In the 1960s it was ranked the world's sixth largest inland water body with an open water area of 25,000 km\textsuperscript{2} but the Lake Chad has shrunk dramatically to less than 2,000 km\textsuperscript{2} during the 1980s and still shrinking\textsuperscript{40}.

The susceptibility of Africa to the vagaries of climate change is especially driven by its poor socio-economic levels, debilitating energy poverty, fragile political environments, and close dependency of most of its population, especially frontline communities on natural resources and climate-sensitive sectors and systems such as rain-fed agriculture, forestry, fishing, etc.

Given the multifaceted impacts of climate change, it is not unexpected that the global community is paying more attention to it with decision-makers across the world constantly shifting and weighing perspectives on how to respond to the challenge. The Paris Agreement of 2015 in particular reflects a significant step in global action toward addressing climate change. Negotiated by 196 countries in December 2015 at the COP21, held in Paris, the hallmark accord represented a historic turning point in transnational climate politics.

That meeting established a universal framework for action on climate change and set out to define strategic actions to preserve the environment and ensure a sustainable future for inhabitants of the earth against the reality of a rapidly heating world. The three key goals of the landmark climate treaty are:

1. \textit{To halt global warming to well below 2 degrees Celsius (2°C) above pre-industrial levels and bolster efforts to limit the increase to 1.5 degrees Celsius (1.5°C)};

2. \textit{Strengthen the ability of countries to adapt to the adverse impacts of climate change, mitigate carbon emissions and foster climate resilience, and}

3. \textit{Mobilize finance from a variety of sources, including both private and public sectors to facilitate climate-resilient developments.}

At the heart of the Paris Agreement are Nationally Determined Contributions (NDCs) which are climate plans and actions to be developed by signatories. A signatory’s “contribution” to address climate change is first “nationally determined” and comprises \textit{mitigation} and \textit{adaptation} aspirations that are peculiar to its national circumstances and priorities.

\textsuperscript{39}Lake Chad is a freshwater body located in the far west of Chad and Northeast of Nigeria. Its basin covers parts of Nigeria, Niger, Chad and Cameroon, and has been a water source for between 20 million and 30 million people.

\textsuperscript{40}Pham-Duc, B., Sylvestre, F., Papa, F., Frappart, F., Bouchez, C., & Crétaux, J. F. (2020, March 26). The Lake Chad hydrology under current climate change - Scientific Reports. Nature. Retrieved October 17, 2022, from https://www.nature.com/articles/s41598-020-62417-w#:~:text=After%20being%20ranked%20at%20the%2C%20its%20area%20has%20been%20found%20to%20be%20less%20than%2090%25%20of%20its%20original%20area.
The NDC explains how a country intends to combat the effects of climate change, work to enhance climate resilience and reduce its national greenhouse gas emissions in alignment with the long-term goals of the Paris Agreement.

To this end, countries are required to update, communicate and submit their NDCs to the UNFCCC Secretariat every five years to reflect ambitious climate actions that improve on previous commitments. The official countdown towards the five-year cycle update of countries' NDCs commenced from the year of the Paris Agreement. This means that country-signatories to the Agreement ought to have submitted an updated post-Paris NDC, and every five years afterwards.

In spite of the success of Parties at COP21 in reaching an agreement on the course of action to tackle climate change, the Intergovernmental Panel on Climate Change (IPCC) periodic report on global progress in addressing climate change would seem to indicate that the progress to avoiding a climate catastrophe is slow and disproportionate. The IPCC report for 2022 warned that the world is set to reach the 1.5°C threshold within the next two decades and reiterated that only the most drastic and timely cuts in carbon emissions would help prevent an imminent environmental disaster.

Essentially, for the world to reverse this impending doom, all hands must be on deck to stop global warming. This warning, though ominous, is not new seeing as countries have already formally committed to fighting climate change. However, there are nagging doubts about whether climate ambitions can be achieved given the varying circumstances of nations, arguments over climate responsibilities such as big polluters paying up for historical damages they have caused vulnerable developing nations, and ideal approaches for mitigating climate change.

In particular, the capacity of states in Africa to transform NDC commitments into real-life actions and interventions is being scrutinized and has come under doubt. To begin with, all 54 countries in Africa have signed the Paris Agreement and 53 (with the notable exception of Libya) have submitted their NDCs. However, the African Development Bank (AfDB) notes that most NDCs submitted by African countries were hastily put together and did not consider long-term effects on national goals.

While there is improved awareness of the urgent need to act on climate change in Africa, significant encumbrances in the race towards a clean energy transition

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and carbon-less society continue to stifle any real progress. For instance, the economies of many African countries are currently on life support as a result of high public debts and post-coronavirus pandemic-induced economic contractions that have combined with other stressors to hamper national efforts to achieve sustainable development and climate goals.

Meanwhile, a report by the AFDB observes that the Russia-Ukraine war is set to impoverish an additional 1.8 million people across Africa in 2022 - a figure set to reach 2.1 million in 2023. At least 40 per cent of Ukraine’s wheat and corn are exported to Africa while 15 African countries import over half of their wheat, including fertilizers and oil from Ukraine and Russia. In the wake of the war, the cost of bread has hit an all-time high in many African states as the war continues to disrupt food supply chains.

Fuel prices have also skyrocketed in recent times as Europe desperately search for alternative energy sources from Africa to replace Russia’s oil supply. To effectively implement our NDCs, many countries in Africa and frontline communities would require adequate technical and financial support to effect responsive and homegrown adaptation and mitigation mechanisms among other things, something which is currently lacking in the resource bag. An example is the persistent failure of developed countries that contribute the most to global carbon emissions to make good their pledge at COP15, 2009 to pay $100 billion a year by 2020 to help developing nations execute meaningful climate change actions and transit to cleaner energy.

In addition, there are also widespread concerns about the varying definitions of climate finance, structure, and quality of climate finance which impedes the abilities of African countries to access such monies. One of these is the issuance of climate finance as loans instead of grants. Likewise, the Green Climate Fund is the single largest climate fund available presently, yet many African countries do not stand to benefit from it because of the high interest associated with the fund together with other bottlenecks such as the lack of direct access to the fund. In some instances, poor countries are required to access the fund via big intermediaries such as the World Bank or regional development banks thereby throwing their climate policies to corporate influence and limiting country ownership.

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45 OECD (n.d.). Climate Finance and the USD 100 Billion Goal | OECD. Retrieved October 9, 2022, from https://www.oecd.org/climate-change/finance-usd-100-billion-goal/


The moves towards less carbon-driven economies are of paramount importance, but they need to acknowledge and reflect the realities and aspirations of local peoples. Africa needs a just, equitable, feminist and inclusive energy transition that will empower its people with modern energy access which is not only important for enriching the lives of many communities but also vital to right the wrongs perpetrated by polluting corporations against communities whose environments and livelihoods have suffered decades of careless and greedy exploitation by fossil fuel merchants.

Oftentimes, the conversations on a just energy transition are far removed from the contextual realities of local peoples and frontline communities at the nozzle of climate change in Africa. It is with this in mind that this study sets out to review ahead of COP27 in Egypt, the preparedness and progress of select African countries in delivering their climate commitments, including NDC ambitions and pledges made by their respective leaders at the last COP.

The first chapter examines the impact of climate change in Africa and discusses Africa’s climate architecture and proposals in international climate negotiations.

The second chapter outlines the climate regime and aspirations of Nigeria, South Africa, and Uganda with regard to each country’s updated NDCs and promises conveyed at the COP26 which was held from 31 October to 12 November 2021, in Glasgow, Scotland.

The third chapter engages in a synthesized analysis and review of the climate action progress and challenges of all three countries against the backdrop of their NDCs and indices such as greenhouse gas emission goals, and adaptation and mitigation. It also looks at their just energy transition roadmaps, renewable energy plans, and climate action in the transportation and forest sectors. Drawing on the analysis of the climate change situation and response outlook of all three countries, the report concludes with actionable recommendations for scaling up climate aspirations for both Africa and the international community.

It is our hope and expectation that these cases-in-point drawn from the East, West and South African sub-regions will not only provide insight into the state of affairs of the identified countries in addressing climate change but also reveal a snapshot of the wider African context whilst simultaneously initiating discourses about Africa’s strategic goals and objectives at COP27.
METHODOLOGY

This study initiated between August to October 2022 analyzed the state of climate goals and actions of three countries: Nigeria, South Africa and Uganda by focusing on their NDCs, pledges made at COP26 and key national climate policies and interventions. The research was collectively undertaken by three organizations - Corporate Accountability and Public Participation Africa (CAPPA), the Africa Institute for Energy Governance (AFIEGO) and the South Africa Climate Action Network (SACAN).

To deliver on the objectives of the research, research partners utilized a data-gathering template developed by the Corporate Accountability and Public Participation Africa to catalogue relevant climate change policies and response measures, notable environmental changes and weather events linked to climate change, key features of nationally determined contributions, and important civil-society discourse on climate issues in all three countries. This data diary also provided allowance for partners to review the positions of the countries on contemporary climate debates such as just transition, renewable energy infrastructures, green economy, mass transit, greenhouse emission, climate finance, mitigation and adaptation, and reforestation among other climate change priorities.

During the research time which spanned a period of two months, partners met at regular intervals to review findings from different countries including draft reports. These sessions helped partners reflect better on country-specific issues to dig deeper into, including perspectives to further clarify. This report incorporated insightful thoughts from one-on-one key informant interviews with climate change experts, members of resource-rich communities, civil society practitioners, and relevant state actors and decision-makers.

This study further benefitted from the inputs of an external reviewer, and information derived from robust climate change conversations such as that of the Pan-African and National Conference on Climate Change hosted by Corporate Accountability and Public Participation Africa from September 29 – 30, 2022. Researchers also reviewed tons of climate literature accessed from secondary sources (such as news reports, articles, scholarly publications, and information available on UNFCCC’s portal and related channels) in undertaking the analysis of research findings.
It is our hope that this study which covers a wide range of themes surrounding climate change in Nigeria, South Africa, and Uganda engenders radical thinking in the minds of state authorities and relevant stakeholders to embrace an African approach toward dealing with the challenges and realities of climate change on the continent, especially in view of the global discourse on transitioning from fossil-fuel dependent economies to renewables.

In the end, this report sets out as an additional contribution to the existing body of literature that offers contextual knowledge on climate issues in Africa.
CHAPTER ONE

CLIMATE CHANGE AND AFRICA

Africa is the second largest continent in the world with a land mass of over 30 million square kilometers, slightly more than 20 per cent of the world’s landmass. The continent straddles the equator centrally and by position, is bound on the west by the Atlantic Ocean, on the north by the Mediterranean Sea, on the east by the Red and the Indian Ocean, and on the south by the waters of the Atlantic and Indian oceans. The continent is home to fifty-four independent countries, with a total population of over 1,411,519,017 persons as provided by the latest United Nations record. Africa has a wide range of climate types that span from the moist humid regime through the semi-arid Sahel to the hyper-arid climate of the Sahara and Kalahari deserts.

It also has a mild Mediterranean climate in the northern part and a temperate climate in the mountainous regions. However, about a third of the continent is classified as arid and semi-arid. In recent times, the continent has experienced several climatic events including floods and withering droughts. Scientific records in the past century show that Africa has been warming at the rate of about 0.5 °C every ten years. This surge in temperature is expected to influence a rise in sea levels and variable effects on precipitation. In some areas, the warming is associated with increased rainfall while in other places it is projected to cause extreme dryness in the air and long-term droughts.

These changes have negative impacts on human development in Africa, income, and the environment. According to a 2021 report published by the World Meteorological Organization (WMO) in partnership with the AU Commission, climate change will expose 118 million impoverished Africans to drought, floods, and extreme weather conditions by 2030 if not addressed urgently.

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In East Africa, and in particular, parts of Somalia, Djibouti, Ethiopia, and Kenya, about 25 million persons are currently suffering acute food and water shortages attributed to alarming dry weather conditions and the most scorching temperatures ever in the region since satellite record-keeping began. Between January and February 2021, Madagascar, Mozambique, and Malawi experienced severe flooding and back-to-back tropical storms, including three catastrophic cyclones that hit the countries, causing heavy damage and destruction of lives and livelihoods.

While climate change impacts are broadly felt across ecosystems and economies, informal, subsistence and extractive communities in Africa are particularly vulnerable due to their connection to land resources and the fact that these communities already suffer gross energy poverty and live on the frontlines of pollution, insecurity, and conflicts.

As sea level rises, once-thriving coastal communities are being overrun by ocean surges thereby wreaking unprecedented havoc. An example in this regard is Nigeria’s coastal city of Lagos where over 66 per cent of the city’s residents live in low-lying urban slums and informal communities close to the sea. Here, flooding alongside storm surges has become a common and recurring calamity. Likewise, communities like Elegushi, a once-upon-a-time postcard settlement, perched on the coastline of the Atlantic Ocean have become shadows of their flourishing past. This is because of climate change-induced sea level rise that has robbed the community of its pristine coastline and decimated hitherto flourishing livelihoods.

On the other hand, excessive greenhouse emissions from crude oil exploration, gas flaring and venting, mineral extraction, coal mining and other carbon-intensive activities have made Africa’s extractive communities such as Port Harcourt in Nigeria, Cabo Delgado in Mozambique, Mpumalanga, and Limpopo in South Africa, amongst others much more susceptible to climate change. In these extractive enclaves, ruthless oil corporations who have equally conscripted artisanal operators are the biggest polluters, releasing dangerous gases that cause atmospheric soot pollution, producing large amounts of solid waste that are hard to treat, and carelessly disposed into the environments of local communities thereby causing destruction of lands, water bodies and aquatic life as in the case of the endless oil spills in Ogoniland, Nigeria.

An important factor in Africa’s climate change conundrum is its energy poverty which forces its inhabitants to engage in a range of practices that are not only unhealthy but also contributory to global warming, even though negligibly. Africa still lags with a staggering number of its population lacking access to electricity. The African Development Bank notes that over 640 million Africans lack access to energy which corresponds to an electricity rate for African countries at just over 40 per cent - the lowest in the world. Consequently, a huge chunk of the continent’s population, especially women and children saddled with household responsibilities, including rural dwellers, rely on biomass such as firewood, coal, and waste to meet up with their energy demands.

Fuelwood harvesting as well as primitive agricultural practices like bush burning inevitably leads to deforestation, more greenhouse gases in the atmosphere, increased exposure of the soil to erosion, and a decline in rural resilience.

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53 Ibid
54 Ibid
To cut down Africa’s dependence on biomass and fossil fuel, conversations must center on providing cleaner alternatives, and cheaper energy sources for its people and communities.

In the Sahel region, the Lake Chad Basin, the Horn of Africa, and Southern Africa, climate change is exacerbating threats of deadly conflicts, banditry, and terrorism in local communities. Even though there is no established direct link between climate change and conflicts, changes in climate can alter environmental and economic conditions thereby precipitating social interactions under which conflicts are likely to occur.

In this sense, climate change has been rightly dubbed to be a threat multiplier and fragility amplifier which exploits existing vulnerabilities and burdens weak governance systems, while worsening pre-existing tensions. In particular, extended droughts and scorching temperatures have wiped off farmlands in the Sahel region and led to the desertification of the Lake Chad Basin. This has resulted in the monumental loss of livelihoods, economic impoverishment, and displacement of vast swathes of population in the area, now estimated at 30 million persons who once depended on farming, fishing, and livestock rearing for their livelihoods.

According to the African Union, the unfortunate situation and loss of traditional livelihoods have encouraged some individuals to explore membership in armed and terrorist groups such as Boko Haram, Islamic State West African Province (ISWAP), bandits, and other militant fronts ravaging parts of sub-Saharan Africa, to survive.

In another instance, herdsmen and traditional pastoralists deprived of freshwater and lush vegetation for their livestock due to the shrinkage of water bodies and a decrease of rainfall in the Sahel, have been forced to seek pasture and water holes for their herd elsewhere in the green lands of farmers in the coastal southern areas, ultimately breeding ethnic skirmishes and grave conflicts as parties struggle to assert ownership over scarce land and water resources. As recent developments in Mali and Burkina Faso indicate, this crisis which has some roots in climate change has far-reaching ramifications which include undermining state authority and compromising national security while creating conditions for political instability and regime change. Overall, the facts of the situation of a changing climate as it affects Africa underscore very dire circumstances that pose heightened threats and risks to the region’s socio-economic development prospects.


Notwithstanding, Africa can deliver on its climate aspirations if adequately supported to scale up its adaptation systems and harness its renewable natural and human resources to break enduring cycles of poverty, weak governance structures, and underdevelopment. To achieve this, Africa must look inward to design robust localized approaches to confront climate change while the Global North whose industries are the most responsible for carbon emissions must reassess and scale up commitment to climate change priorities and adaptation support for vulnerable communities in Africa.

GLOBAL CLIMATE ARCHITECTURE - THE UNFCCC

The global climate change discourse and environmental governance dates back to 1972 at the UN Scientific Conference in Stockholm, Sweden, where the first appraisal of global human impact on the environment happened. The Stockholm Conference ended with participants adopting a series of principles on the environment, including the Stockholm Declaration which placed environmental issues on the front burner of international concerns, and marked the start of dialogues between industrialized and developing countries on the linkages between water, economic growth, air pollution and the wellbeing of people around the world\textsuperscript{59}.

With the recognition that international cooperation was necessary to tackle environmental problems that transcend national boundaries, the Conference accelerated subsequent mega-conferences\textsuperscript{60} and numerous multilateral environmental agreements. The UNFCCC is one such multilateral agreement adopted as one of the three conventions at the Earth summit otherwise known as the UN Conference on Environment and Development (UNCED) in 1992 in Rio de Janeiro, Brazil.

The other two are the \textit{UN Convention on Biological Diversity} and the \textit{Convention to Combat Desertification}. On March 21, 1994, the UNFCCC entered into force with 196 countries ratifying it. The international treaty acknowledges the existence of anthropogenic climate change, provides the framework for climate negotiations, and binds member countries to act in the interests of human safety to stabilize greenhouse gas concentrations in the earth’s atmosphere.

Each year, the UNFCCC holds a series of conferences known as the COPs to review the progress made by members in halting climate change. The COP is made up of representatives from all parties and is considered the UNFCCC’s apex body


responsible for decision-making. Each party to the UNFCCC is represented at sessions of the conference by a national delegation consisting of one or more officials authorized to represent and negotiate on behalf of it. However, to strengthen their bargaining power and position, countries usually negotiate in blocs. Developing countries band together to negotiate common positions at international climate deliberations through the Group of 77 (G-77), a coalition of developing nations plus China founded in 1964.

The Group’s prevailing chair, which rotates every two years, often speaks on behalf of it. However, developing country parties within the Group such as the African Group can independently intervene in debates because the G-77 plus China is a diverse group with unique interests. Since March 1995 when the first COP was held in Germany, it has met every year ever since to review the implementation of the Convention, negotiate climate responsibilities, and build on decisions and resolutions of previous COPs. The negotiation of the Paris Agreement at COP21 has been widely celebrated as a watershed in the global climate journey towards decarbonization.

AFRICA IN THE UNFCCC PROCESSES

African governments work through a number of global and regional institutions and mechanisms to strengthen their response to climate change. In particular, the African Union plays a key role in ensuring that Africa presents a united front in evolving global negotiations and mechanisms. In 2007, the AU adopted its own Declaration on Climate Change and Development, and whilst at the Copenhagen COP in 2009, it put forward the “African Common Position on Climate Change” which set the mandate for African Negotiators. This collective position was hinged on the concept of environmental justice, and projected adaptation as the highest priority for Africa seeing that the continent’s greenhouse gas emissions are insignificant.

The AU is generally considered one of the most influential continental bodies at the Conference of Parties and three institutions are responsible for this. They include the African Ministerial Conference on the Environment (AMCEN), the Committee of African Heads of State and Government on Climate Change (CAHOSOCC), and the African Group of Negotiators (AGN). These three bodies entrenched in the African Union form the three tiers of African Climate negotiation on the global stage.

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62 AU/ACMEN 2009
The African Ministerial Conference on the Environment
Established in 1985, the AMCEN first set out as a political forum for Africa’s environmental ministers but has evolved into an important platform involved in the process of presenting the common African position at the UNFCCC. The group, made up of African experts, is responsible for providing technical input for African positions on climate change, including coordinating joint environmental policy. In 2009, the *African Common Position on Climate Change* was updated at an AMCEN session and endorsed by the AU.

The Committee of African Heads of State and Government on Climate Change
The Conference of African Heads of State and Government on Climate Change (CAHOSCC) is the highest political body in the tier. It was established in 2009 upon an AU decision at the 13th AU Assembly, with its primary objective set at providing clear political leadership in African climate negotiations. The body meets once a year on the sidelines of the AU summit, and issues key statements bordering on environmental and climate matters as events demand.

The African Group of Negotiators
The African Group of Negotiators (AGN) was established in 1995 and comprises technical experts from all African countries. The Group partakes in all COPs to negotiate the interests of Africa in international climate deliberations. The AGN draws up strategies for engagements in global climate change processes, including negotiating texts which are subject to the approval of both AMCEN and CAHOSCC.

In interlinking the workings of the aforementioned bodies – AMCEN, CAHOSCC, and AGN - the goal of African climate diplomacy is to present a formidable and unified position at international climate negotiations in order to boost the region’s negotiating influence and counter the asymmetrical power dynamics that often characterize interactions between the Global North and Global South. The AU and its constituent bodies on climate change also work with and receive vital technical support from continental entities such as the AfDB, the United Nations Economic Commission for Africa (UNECA), the Africa Climate Policy Centre (ACPC), the New Partnership for Africa’s Development (NEPAD), and the Climate for Development in Africa (ClimDev Africa) Program.
AFRICA PROPOSALS IN GLOBAL CLIMATE NEGOTIATION PROCESSES

Africa contributes the most negligible emissions globally but bears the brunt of climate challenges. At present, much of the Gross Domestic Product (GDP) of African states, about nine per cent - often more than the budgetary allocation for education or even health is devoted to climate change adaptation. Whereas much of global conversations on climate change and climate finance have centered on curbing or mitigating greenhouse emissions, African countries and negotiators insist on adaptation as a most pressing priority alongside adequate climate finance for the continent to implement effective adaptation measures that can withstand the ravages of climate change.

Adaptation refers to pre-emptive actions, and systems that boost human resilience and environments to withstand the impacts of climate change. In fact, one of the wins of the AGN was the inclusion of a Global Goal for Adaptation (GGA) in Article 7 of the Paris Agreement. The GGA aims to catalyze adaptation funding and also entrench a system for tracking the progress of countries on adaptation actions.

- **Climate Finance, Loss and Damage Finance Facility**
  The availability of predictable climate finance for Africa remains imperative if states must realize their climate ambitions for a rapid transition beyond carbon. In July 2022, the AfDB and International Monetary Fund (IMF) noted that African countries require an investment of up to $1.6 trillion within seven years if they must realize the pledges outlined in their NDCs by 2030. Against this background of climate adaptation finance, are also the ongoing debates on whether climate finance should be classified as Official Development Assistance (ODA) or budgeted as a stand-alone, including demands by African communities for rich nations that emit far more greenhouse gases into the atmosphere to commit to a dedicated loss and damage financing facility for Africa.

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The conversation is sharply divided. There are those who argue that similarities exist between ODA and climate finance in the sense that, development aid must also address challenges related to climate change in order to achieve sustainable development goals. But arguments for clear distinctions in financial contributions to Africa reiterate that Africa does not want climate aid to be mixed with development aid and that climate funds must be new and additional.

This logic is quite valid considering that development assistance are voluntary contributions by wealthier economies, awarded in solidarity to developing countries to help them meet up with their economic needs whereas climate finance is based on the principle of big polluters responsible for the bulk of historic emissions, paying up, especially for loss and damages.

**Loss and damage** are essentially costs associated with climate change that adaptation and mitigation as framed in the UNFCCC’s context do not address. Vast populations especially in Africa not only lack access to resources for adaptation and mitigation but are already suffering psychological trauma, the irreversible loss of human lives, territorial, ecological, and economic displacements which are all severe consequences of climate change that stretch beyond environmental challenges, and for which existing funds on adaptation do not address.

At COP26, African climate campaigners, activists and representatives of vulnerable communities from the Global South, including the G-77 had pushed for the establishment of a facility structure under the UNFCCC that frames explicit financial arrangements to address climate change loss and damage, especially because vulnerable communities in the Global South contribute the least to global emissions yet suffer the most from its consequences.

However, developed countries refused to consider such arrangements at COP26 but agreed to consider it as an item for “dialogue” on the agenda of the 56th sessions of the UNFCCC Subsidiary Body for Implementation (SBI) and Subsidiary Body for Scientific and Technological Advice (SBSTA) in Bonn, Germany, an intersessional meeting halfway to COP27. Yet as discussions at the Bonn intersessional meeting progressed in June 2022, there was an unwillingness to engage in talks on the prospects of a loss and damage facility as rich nations foot-dragged all the way prompting the G77 to communicate a letter to the Executive Secretary of UNFCCC with a new proposal: “Let the Dialogue continue as a parallel process
within the SBI, but place Loss & Damage as a sub-item under Agenda 10 of CoP27/CMA in Egypt”⁶⁶⁶⁷ In the face of mounting inaction on specific arrangements for a loss and damage facility, and with Big Polluters and the Global North carrying on with business as usual, frontline communities in Africa continue to hold the short end of the stick which brings them face to face with devastating impacts of climate change. It is expected that African countries will push for having Loss and Damage as a formal agenda item at COP27.

- **Gas as Transition Fuel**
  Following a meeting in June 2022, the African Union Technical Committee and energy ministers from across the continent proposed an “African Common Position on Energy Access and Transition” intended to be adopted at COP27. This document reveals the fact that African leaders would desire to use gas as a transition fuel as the world transitions to clean energy. This proposal is based on the premise that Africa needs more time to use fossil fuels to accelerate development and prosperity for its people.

  Backing the proposal, Senegal’s President Macky Sall said ending financing for gas would deal a fatal blow to economies in West Africa, adding that “blocking financing for the gas sector would add a great economic injustice to the climatic injustice Africa is already suffering from more than any other continent.”⁶⁸ Also, Mohammed Amin Adam, Ghana’s deputy minister of oil, said the transition is a curse that will be disruptive to the economies of Africa and ensure the continent is left behind by the rest of the world⁶⁹.

**OTHER AFRICAN PROPOSALS BY CIVIL SOCIETY, ACTIVISTS, AND CLIMATE CAMPAIGNERS**

- **Drop the False Solutions of Carbon Offset-Trading, and gas as a transition fuel**
  False solutions are capitalist and market-based schemes that give the impression of doing so much to tackle climate change but, are nothing but placeholders that delay effective climate actions. They also offer allowances to big polluting industries and countries to carry on with their disastrous emissions if they can offset them by trading and bargaining.

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⁶⁸ Ibid.

⁶⁹ Ibid.
emission permits and credits from their wealthy purses. Such false solutions include the idea of carbon credit trading schemes, carbon capture and offsets that was birthed following the UN Kyoto protocol of 1997 which laid the foundation for emissions trading.

With carbon offsets, notorious polluting entities can buy carbon credit from carbon trading markets to make up for the GHG emissions they continue to emit into the atmosphere. The money received from such polluting companies by the beneficiary is channelled toward funding projects, especially green projects such as the cultivation of trees that absorb a specified amount of carbon that matches the polluter’s purchase. Schemes like the cap-and-trade system otherwise known as Emissions Trading Scheme (ETS) set up by the European Union (EU) are designed to stipulate specific amounts of carbon emissions that are permissible from culprits that emit significant carbon.

Governments at national, regional, or international levels typically set carbon emission limits across certain industries or sectors of the economy and then give out carbon permits to companies for free or by way of auction. Companies in return pollute the atmosphere only to limits allowed in their carbon permits. If they exceed the limits, they must buy extra permits. In cases where they manage to cut down their emissions, they can trade the excess of their permits in a carbon market for cash.

Supporters and promoters of this approach have argued that carbon trading will ultimately push emitters to want to save money by cutting down on cash spent purchasing carbon permits but more and more climate activists and at-risk communities in Africa are rejecting the idea of commodifying carbon as a way of reducing emissions rather than emitting companies simply refraining from polluting the earth further and drawing doomsday nearer.

Climate change is a complex winding problem that cannot be solved simply by negotiating the reduction of GHGs in the sense of capitalism and profit-making. If anything, carbon markets expose the insincerity of the Global North and big polluters in effecting any real change where communities are keeling over as a result of their refusal to tame their vicious appetites hooked on consuming fossil fuels and belching enormous disastrous waste in the air.

The argument that carbon trading may hurt companies enough to save money by reducing emissions falls flat on its face as wealthy companies and nations go through no trouble at all dipping hands into their deep
pockets in comparison to vulnerable communities dying off in Africa as a result of the activities of such polluting entities that have the purchasing power to buy permits that endorse the pollution of society. Not only does carbon trading continue to hurt communities in Africa, but it is also opening up new frontiers of colonialism and breeding a crop of carbon capitalists who are making a rush to acquire Africa’s prime lands, displacing original landowners in order to own so-called carbon sinks that can be traded as offsets for money.  

Another false solution is the “African Common Position on Energy Access and Transition” which African leaders plan to adopt at COP27. A cornerstone of this common position is the argument that African countries be allowed to use natural gas as a transition fuel. In a 25-page memorandum, intergovernmental organizations in Africa have kicked saying that this approach is not an energy transition but a step that will “lock Africa into fossil fuels for decades.”

To be clear, the argument of the African leaders that gas revenue is needed to build economies and fund climate actions does not add up. African companies control only 33 per cent of projected oil and gas production in Africa. “The rest is controlled by companies in the global north holding the majority, making it highly unlikely that a significant share of the revenues from their sale will remain in Africa to fund local development and climate action solutions.” At the same time, less than 50 per cent of African countries are known to have proven oil and gas reserves, and only 12 have significant amounts, so “If natural gas exploration were to be a policy direction and priority, then over 50 per cent of the countries would be excluded from these projected developments.”

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72 ibid
73 ibid
CHAPTER THREE

CASE STUDIES

3.1 NIGERIA

Nigeria, a country in the West African sub-region, is bordered to the North by the Sahel and Niger, to the East by Chad and Cameroon, to the West by the Benin Republic, and to the South by the Gulf of Guinea of the Atlantic Ocean. The country with its 36 states and a Federal Capital Territory occupies a land mass area of 923,769 square kilometers which includes a coastline of about 853 kilometers that faces the Atlantic Ocean. Its topography follows through southern coastal swamps to tropical forests, woodlands, grasslands, and semi-arid deserts in the north74.

Meanwhile, its tropical climate is associated with two precipitation regimes, namely, low precipitation in the North and high precipitation in the South West and South East75. With a population of over 218 million, Nigeria is not only regarded as Africa’s most populous country but also the largest economy with a significant part of its labour force employed in the agricultural sector even though crude oil is the country’s major source of foreign exchange earnings. Nigeria is historically the largest oil producer in Africa although recent crises in its oil sector have led to a significant decline in output thereby forcing it to the fourth position behind Angola, Algeria, and Libya. The country also boasts of a fairly large mining sector that is poorly regulated thereby allowing for illegal mining of minerals and precious stones by artisanal operators and local gangs.

In the context of climate change, Nigeria has been identified as one of the ten highly vulnerable countries to the impacts of climate change and natural hazards, particularly in agriculture, land use, biodiversity, energy, health, and water resources76. Nigeria’s vulnerability to climate change is mostly defined and exacerbated by its topography, tropical climate, and environmental problems coupled with the interaction of certain socioeconomic conditions and political factors. Changes in climatic conditions, therefore, interact with varying economic and geographic circumstances in Nigeria to manifest in different forms such as flooding, land degradation, deforestation, erosion, droughts, aridity, and desertification across areas of the country.

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For instance, in the south-south region of the country also known as the Niger Delta where oil exploration occurs, extractive activities are regularly associated with oil spillages and discharges from refineries, gas flaring, and venting, incessant conflicts over resource extraction, soot pollution amongst other challenges which have altogether contributed to the loss of farmlands, destruction of aquatic habitats and land environments, insecurity, displacement of populations and decline in quality of life. In 2018, Port Harcourt in Rivers State, southern Nigeria, was rated the worst polluted city in the world with an air index of 188.

In Nigeria’s urban coastal cities like Lagos State where over 66 per cent of the city’s residents live close to the shorelines, in low-lying urban slums and lagoon fronts, flooding is a common epidemic especially as the state lies within the coastal lowland of Nigeria generally less than a few meters above sea level. Storm surges are also regular occurrences that torment communities in Lagos that are situated on the shoreline of the Atlantic Ocean.

The country’s remarkable water bodies also influence the incidence of annual flooding in Nigeria among other factors such as lack of drainage systems and poor spatial planning. Nigeria is located downstream of the River Niger basin and is host to two of West Africa’s biggest rivers - River Niger and Benue. Eight other countries namely Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, and Niger are also located in this basin but upstream. This means whenever there is rainfall, the flow of water, even from other countries in the basin, largely channels towards the direction of Nigeria, greatly increasing the volume of its rivers.

In September 2022, large areas of Kogi and Anambra States in the North Central and Southeast regions of Nigeria sank underwater after the Niger and Benue rivers broke their banks. The situation was further compounded by the release of excess water from the bloated Lagdo Dam in Cameroon, a neighbouring country. Released water from the dams of Cameroon usually cascades down to Nigeria through River Benue and its tributaries thereby impacting communities already suffering heavily from flooding caused by heavy rains in Nigeria. In October 2020, torrential rains in neighbouring countries such as the Republic of Benin and Niger reached a red alert zone causing devastating floods that impacted 91, 254 persons and 15, 209 households in Kebbi, Kwara, Sokoto, Zamfara States, and other areas of Nigeria.

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Likewise in September 2022, unprecedented rainfall in Lagos State claimed the lives of seven persons who were swept away by the accompanying deadly floods. In the same period, flooding recorded in other parts of the country such as Jigawa, and Ogun State left several persons dead and gravely injured. According to Nigeria’s Ministry of Humanitarian Affairs, Disaster Management and Social Development (FMHADMSD) in 2022, Nigeria is battling its worst flood in a decade with over 1.4 million people displaced, more than 500 hundred persons killed already, 790, 254 displaced, 1,546 persons injured, 42, 249 houses completely submerged in water, 76,168 hectares of farmlands partially destroyed and 70, 566 hectares of farmlands completely destroyed.


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At the same time, decreasing rainfall and increasing heat waves have rendered farmlands in the northern areas of the country unfit for crop production and pastoral farming even as the persistent flooding of coastlines and communities in southern Nigeria has resulted in crop damages, sedimentation of floodplains, gullies, and landslides that disrupt soil fertility and ecosystem. A typical example is Benue State which is still suffering the harsh effects of flooding since early September 2022. Reports put the number of people affected at 3,274, and houses destroyed at 1,213. Benue State is notably referred to as the food basket of Nigeria as such, the destruction of huge expanse of farmlands will worsen an already unacceptable food crisis in the country.

According to Nigeria's Ministry of Agriculture, Dr. Mohammad Mahmood Abubakar, 65 per cent of the country’s population is bound to suffer food insecurity even though more than half of employment in the country is in the agricultural sector and its value chain. This is because 90 per cent of food produced in the country comes from small rain-fed farms which have been badly affected by adverse climatic conditions, and insecurity amongst other factors.

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The scarcity of food in the country is not only exposing people to extreme hunger but also conflicts arising from the competition for scarce resources. In 2021, the Global Hunger Index ranked Nigeria 103 out of 116 countries in the category. At the same time, climate change has become a threat multiplier of deadly conflicts, banditry, and terrorism in the North of Nigeria. The rise of the Boko Haram/Islamic fundamentalist insurgency (ISWAP) in the Northeast and the spread of banditry including farmers-herders clashes across the country are also linked to the effect of climate change, in addition to other factors. This can be explained by looking at the decline in the stock of available resources in the region. Firstly, the drought and shrinkages recorded in the Lake Chad Basin have disrupted hitherto flourishing fishing and farming economies thus leading to the impoverishment of a significant population in the area, now estimated at 30 million, which depend on farming, fishing, and livestock rearing for their livelihood.

This unfortunate situation has served to provide an army of willing recruits for terrorists and other militant groups ravaging the northern parts of Nigeria. Secondly, deprived of freshwater and lush vegetation for their livestock due to the shrinking of Lake Chad and the decrease in rainfall, herdsmen are driven to pursue pasture and water holes for their herd in the green lands in the southern region of the country populated by sedentary farmers, ultimately breeding grave conflicts as parties struggle to assert ownership over resources.

Long-standing and now-heightened conflicts between farmers and herdsmen, over depleting land and water resources in the country’s north-central region, also known as the middle belt, have led to killings on both sides, loss of livelihoods, and displacement of communities.

An additional factor responsible for Nigeria’s climate change conundrum is its confounding energy poverty. Despite the privatization of the power sector as far back as 2013, access to reliable electricity remains very poor with the power sector suffering several challenges that hamper it from delivering sufficient electricity to citizens. According to a report, Nigeria has one of the lowest electrification rates in the world as 43 per cent of its population have no access to grid electricity, an indication “that 85 million Nigerians are not connected to - and cannot receive electricity from - the Nigerian transmission grid.”

The Nigeria Electricity Regulatory Commission (NERC), relying on 2021 data, reported that power distribution in the year averaged 4,094.09 megawatts (MW), despite an available generation capacity of about 8,000 MW.

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Despite its huge oil and gas reserves including renewable energy resources, local manufacturing capacity for cooking gas, and supply of electricity via the utilization of renewable energy sources such as wind, sun, and water among others, is still very much limited. With natural gas reserves of 5.2 trillion cubic meters compared to proven oil reserves exceeding 9 billion tons, Nigeria’s natural gas resources are more than three times greater than its crude oil resources.

The Nigerian Liquefied Natural Gas (NLNG), incorporated as a Limited Liability Company on May 17, 1989, oversees the harnessing of Nigeria's vast natural gas resources for domestic consumption and export. With a total production capacity of 22 Million Tons Per Annum (mtpa) of LNG and 5mtpa of Natural Gas Liquids (NGLs) from its six-train plant complex, the NLNG is one of the world’s top 10 suppliers of NLG. Despite this, the price of Liquefied Natural Gas (LNG) colloquially known as cooking gas has increased exponentially over the years to an amount unaffordable for many low-income earners. At the same time, gas flaring remains a problem despite a reported decline in recent years. About 6.63 billion cubic meters (bcm) of gas worth $761.19 million was flared in 2021.

Consequently, many Nigerians, especially those residing in rural areas rely greatly on cheap sources of energy and dirty fuels such as fuelwood, coal, sawdust, and generators that run on petrol and diesel to meet their daily energy needs. This situation is detrimental to both human and environmental conditions and is a contributor to deforestation and global warming. For instance, between 2008 - 2014, Nigeria recorded over 10,000 deaths resulting from electric generator fumes whilst also maintaining its position as one of the countries with the highest deforestation rates in the world with about 450,000 to 600,000 hectares of forest lost annually. Likewise, the process of harvesting wood from the forest for use as fuelwood often makes the soil vulnerable to harsh conditions of the atmosphere and contributes to GHG emissions.

NIGERIA’S CLIMATE RESPONSE OUTLOOK

Nigeria has a robust climate change response mechanism developed over several years. They include a plethora of targeted legislations, multi-sectoral policies, and action plans often developed in conformity with its national priority, regional obligations, or because of its commitment to global objectives on climate change mitigation and adaptation.

One of the key obligations imposed on member states by the UNFCCC is to integrate climate change measures into national policies. Article 4 (2) (a) UNFCCC states that “Each of these Parties shall adopt national policies and take corresponding measures on the mitigation of climate change …”
Also, part of the Sustainable Development Goals (SDGs), specifically SDG 13 establishes the necessity of climate action. It instructs member states to integrate climate change measures into national policy and planning.

As a party to the UNFCCC and signatory to both the Kyoto Protocol, and the Paris Agreement including global sustainable development goals, Nigeria has ratified its laws and mainstreamed them into its governance responsibilities, and climate commitments in accordance with global climate change agreements. This is aside from many other instruments and policy initiatives that Nigeria has undertaken over the years to tackle the effects of climate change and promote adaptation.

The table below presents a list, by no means exhaustive, of Nigeria’s climate change policy initiatives and action plans:

<table>
<thead>
<tr>
<th>CLIMATE CHANGE POLICIES AND LEGISLATION OUTLOOK</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Climate Change Act 2021</td>
<td>The Act codifies national climate actions by mandating the Ministry of Environment to set, among others, a carbon budget to keep the average increase in global temperature within 2°C and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.</td>
</tr>
<tr>
<td>Nigeria Energy Transition Plan</td>
<td>The Nigeria Energy Transition Plan seeks to use a data-driven approach to generate new funding and investment opportunities for an energy transition in Nigeria, in line with Nigeria’s goal of achieving Carbon Neutrality by 2060.</td>
</tr>
<tr>
<td>National Policy on Climate Change and Climate Change Policy Response and Strategy</td>
<td>The National Policy on Climate Change is a strategic policy response to climate change that aims to foster a low-carbon, high-growth economic development path and build a climate-resilient society through the attainment of set targets.</td>
</tr>
</tbody>
</table>
# National Integrated Infrastructure Master Plan

This document is Nigeria's blueprint for infrastructure development. It notably seeks to make the country's infrastructures resilient to the adverse impacts of climate change, enable a low carbon development of the transport sector, and prepare the country for natural disasters.

## CLIMATE CHANGE POLICIES AND LEGISLATION OUTLOOK

<table>
<thead>
<tr>
<th><strong>OBJECTIVES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Action Plan on Gender and Climate Change for Nigeria</strong></td>
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<tr>
<td>This document focuses on effective strategies for integrating gender into the implementation of national climate change initiatives.</td>
</tr>
<tr>
<td><strong>National Forest Policy 2020</strong></td>
</tr>
<tr>
<td>This document sets the country's forest policy and replaces the National Forest Policy 2006. It seeks to improve sustainable management of the resource and increase total forest cover.</td>
</tr>
<tr>
<td><strong>National Adaptation Plan Framework</strong></td>
</tr>
<tr>
<td>This plan lays the country's framework for guiding adaptation actions in the country. Its main goals are to 1) Build appropriate capacity for adaptation action. 2) Define adaptation options at the various levels of governance. 3) Create an enabling environment for effective adaptation. 4) Design a coherent approach to fund mobilization for effective climate change adaptation. 5) Develop suitable strategies for engaging the private sector. 6) Effective communication strategies in the various phases of the adaptation process, and 7) Develop an effective monitoring and evaluation plan to facilitate implementation.</td>
</tr>
<tr>
<td><strong>Nigeria’s National Action Plan to reduce short-lived climate pollutants</strong></td>
</tr>
<tr>
<td>This document lays out the country's strategy to reduce the emission of short-lived climate pollutants (SLCPs), most prominently black carbon and methane, from a range of socioeconomic sectors.</td>
</tr>
<tr>
<td>CLIMATE CHANGE POLICIES AND LEGISLATION OUTLOOK</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>The Flare Gas (prevention of waste and pollution) Regulations 2018</td>
</tr>
<tr>
<td>Nigeria Green Bond Programme</td>
</tr>
<tr>
<td>National Gas Policy 2017</td>
</tr>
<tr>
<td>National Policy on Environment</td>
</tr>
<tr>
<td>National Renewable Energy Efficiency Policy, NREEP 2015</td>
</tr>
<tr>
<td>CLIMATE CHANGE POLICIES AND LEGISLATION OUTLOOK</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Petroleum Industry Act, 2021</td>
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<tr>
<td>2050 Long Term Vision (LTV)</td>
</tr>
<tr>
<td>Nigeria’s Sovereign Green Bond</td>
</tr>
<tr>
<td>Emission Trading Scheme (ETS)</td>
</tr>
</tbody>
</table>

*Table Source: Gratham Research Institute on Climate Change and the Environment*\(^3\)

NINGERIA’S NATIONALLY DETERMINED CONTRIBUTIONS

Nigeria began developing its NDCs as far back as 2017 pursuant to Article 4.2 of the 2015 Paris Agreement under the UNFCCC which clearly states that parties are to pursue domestic measures to achieve the NDCs. Nigeria signed the Paris Agreement in September 2016 and ratified it in March 2017. By 2021, Nigeria updated its NDC with significantly enhanced climate change ambitions.

The updated NDC is an improvement on previous commitments. It clearly spells out ambitious objectives which if judiciously followed through can move the needle in mitigating Nigeria’s Greenhouse gas emissions and establishing adaptability measures to restore Nigeria’s damaged ecosystem arising from decades of climate-polluting economic activities and practices.

<table>
<thead>
<tr>
<th>SUMMARY OF KEY PARAMETERS</th>
<th>2017 NDC</th>
<th>UPDATED NDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconditional Targets</td>
<td>20% reduction for Business as Usual by 2030</td>
<td>20% reduction for Business as Usual by 2030</td>
</tr>
<tr>
<td>Conditional Target</td>
<td>45% reduction for Business as Usual by 2030</td>
<td>47% reduction for Business as Usual by 2030</td>
</tr>
<tr>
<td>Mitigation Sectors</td>
<td>Energy, transport, Agriculture, land use and industry.</td>
<td>Transportation, cooking and lighting in households, industry, waste, oil and gas, agriculture, power, and hydrofluorocarbon</td>
</tr>
<tr>
<td>Adaptation Sectors</td>
<td>Agriculture, coastal zones, disaster risk reduction, environment and health</td>
<td>Agriculture, coastal zones, disaster risk reduction, environment and health, the water resources sector, other emission reduction opportunities from nature-based solutions.</td>
</tr>
</tbody>
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<th>SUMMARY OF KEY PARAMETERS</th>
<th>2017 NDC</th>
<th>UPDATED NDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GreenHouse Gases to be Mitigated</td>
<td>Carbon dioxide, Methane, and Nitrous Oxide</td>
<td>Carbon dioxide, Methane, Nitrous Oxide and Hydrofluorocarbons</td>
</tr>
</tbody>
</table>

*Figure 2: Table comparing key provisions of Nigeria’s NDC in 2017 and 2021*

As can be seen from the table above, the updated NDC is, amongst other things, committed to implementing an unconditional reduction of GHG emissions by 20 per cent, and a 47 per cent conditional reduction based on international support and sufficient financial assistance as against the 45 per cent conditional reduction noted in its previous NDC. It aims at improving air quality and lowering GHG emissions through specific mitigation measures in eight source sectors namely: transportation, cooking and lighting in households, industry, waste, oil and gas, agriculture, power, and hydrofluorocarbon.

Likewise, the new document contains measures to mitigate four greenhouse gases: carbon dioxide (CO2), Methane (CH4), nitrous oxide (N2O), and hydrofluorocarbons (HFCs), as against the three GHG (CO2, CH4, and N2O) proposed in the previous NDC submitted. At the same time, GHG mitigation assessment in the updated NDC has also been expanded to cover 11 pollutants in total, including short-lived climate pollutants (black carbon) and their air pollutants (PMs, NOx, SO2, NH3, OC, NMVOCs, and CO) to evaluate the co-benefits of mitigation measures in reducing these substances, alongside GHGs.

Furthermore, the updated NDC emphasizes adaptation priorities in the water resources sector and articulates other emission reduction opportunities from nature-based solutions not included in the 2017 NDC. In relation to oil and gas emissions, the language of the updated NDC is stronger and more decisive than that contained in the previous document. According to the revised NDC, Nigeria commits to ending gas flaring by 2030 as against its previous submission which committed only to “work towards ending” gas flaring by 2030. Alongside this, the updated NDC commits to reducing fugitive methane emissions from oil and gas operations by 60 per cent by 2031.

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The NDC reports that fugitive emissions represent 36 per cent of energy sector GHG emissions, which in turn account for 60 percent of the country’s total GHG emissions. Thus, a 60 percent reduction would represent about 13 percent of total GHG emissions for Nigeria\(^{\text{86}}\).

Other commitments recorded in the NDC include the *increase in the use of bus transit as a means of transportation for the public*, the *elimination of kerosene lighting by 2030*, a *50 per cent reduction in the fraction of crop residues burnt by 2030*, and the *implementation of forest programmes*. An investment of 177 billion USD is indicated in the NDC for implementation that covers 2021-2030. This value is economy-wide productive investments that are not expected to be a burden exclusively on the government budget\(^{\text{87}}\).

**NIGERIA’S COMMITMENTS AT COP 26**

At the UNFCCC COP 26 in Glasgow, Nigeria’s President Muhammadu Buhari submitted that the country is committed to achieving net zero by 2060 listing desertification, conflicts, and food insecurity as the impacts of climate change in Nigeria.

- President Muhammadu Buhari also informed parties that the country had developed a detailed, data-backed energy transition plan and roadmap, and is committed to investing in tangible actions like new roads, renewable energy, creation of jobs, and transition from fossil fuels to clean energy. According to him, the Nigerian energy transition will implement a government electrical project that will electrify 5 million households and offer solar energy solutions to 25 million persons in the country by 2030\(^{\text{88}}\).

- On green projects in Nigeria, the President declared that Federal Government agencies had been directed to ensure the inclusion of projects with climate change credentials in the budget and cautioned that the outcome of COP26 must result in quick resolution of all outstanding issues pertaining to the finalization of the Paris Agreement Rulebook, Adaptation, Mitigation, Finance, Article 6 and Loss and Damage.

- The President expressed the country’s commitment to integrating an unprecedented 7GW additional renewable capacity each year to align


\(^{\text{87}}\)https://unfccc.int/sites/default/files/resource/Nigeria_LTS1.pdf

with its ambitious Energy Compact goal aimed at bridging the energy gap and energy poverty.

IMPLEMENTATION STATUS OF NIGERIA’S COP 26 COMMITMENTS

- A week after the conference, Nigeria passed its Climate Change Bill. The legislation paves way for environmental and economic accounting and a push for a net zero deadline plan in the country between 2050 and 2070 which is at variance with the President’s commitment at COP26. The Act also provides for the establishment of a National Council on Climate Change which will be headed by the president. Other members are relevant national ministers, the National Security Adviser, the governor of the Central Bank of Nigeria, civil society advocates, and the private sector.

It is believed that the Council together with Nigeria’s Ministry of Environment will work to implement the framework and national platform for mainstreaming climate change actions such as climate change fund, carbon budget, climate change action plan, climate change education and awareness strategies for the country. Despite the imperativeness of establishing the National Council on Climate Change which is purported to be the engine room of the Act, the Council was only inaugurated in September 2022, ten months after the climate bill was signed into law.

The Act mandates the Federal Ministries for Environment and National Planning to develop a carbon budget that conforms with the Paris Agreement to keep the average rise in global temperature within 2°C and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. In conjunction with the above Ministries, the Council, through its secretariat, is tasked to develop a National Climate Change Action Plan every five years, the first of which is expected at a date not later than 12 months from the commencement of the Act.  

- Nigeria officially launched its Energy Transition Plan (ETP) in August 2022. The Plan sets out a timeline and framework for the attainment of emissions reduction across five key sectors: power, cooking, oil and gas, transport, and industry. Chiefly focused on tackling the crises of energy poverty, the plan aims to harness natural gas in the short term to facilitate the establishment of low energy capacity and provision of liquefied petroleum gas to address the deficit of clean cooking gas in the country.

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In the long run, the plan envisions vibrant industries powered by low-carbon technologies, transportation by electric cars, and livelihoods bolstered by sufficient and clean energy. In terms of economic empowerment, the plan aspires to provide about 340,000 jobs by 2030 and 840,000 jobs by 2060 including lifting 100 million people out of poverty in a decade while managing expected long-term job loss in the oil sector due to global decarbonization. To achieve these lofty ambitions, Nigeria would need about $410 billion by 2060 which translates to about $10 billion per year.

3.2 SOUTH AFRICA

The Republic of South Africa, as its name suggests, is located on the southern fringes of Africa and shares a border with six countries: Namibia, Botswana, Zimbabwe, Mozambique, Swaziland, and Lesotho. The country’s extensive coastline spans two oceans and is the second largest on the African continent.

Approximately 3,000 kilometers long, South Africa’s coastline starts at the Mozambican border in the east to the Namibian border in the west. The Indian Ocean borders the east coast of South Africa with the Atlantic Ocean on the west coast. South Africa occupies a land area of 1,219,090 km² (470,693 mi²) and showcases a topography that comprises mostly high and flat areas called plateaus. To the east, south, and west of the plateau lands is a mountainous region called the Great Escarpment. The escarpment divides the country into four distinct regions: the interior plateau, the eastern plateau slopes, the Cape Fold belt, and the western plateau slopes. South Africa is associated with a generally warm climate, with cooler temperatures in high-altitude regions.

With a population of 59.6 million persons, South Africa is often described as a middle-income emerging market with an abundant supply of natural resources; well-developed financial, legal, communications, energy, and transport sectors; and a stock exchange that is Africa’s largest and among the top 20 in the world. As with elsewhere in the world, erratic changes in weather and temperature are having an impact on nearly everyday life in the country. From the drought in the Western Cape and wildfires to rises in vector and waterborne diseases, climate change is playing a key role in defining living conditions in the country.

92 https://www.nationsonline.org/oneworld/map/south_africa_map.htm
Global warming, which manifests as climate variability, has already been implicated in increased transmission of malaria, Rift Valley Fever, schistosomiasis, cholera and other diarrheal pathogens, and Avian influenza in the country. In recent times, the country has experienced extreme high and low temperatures with its coastlines increasingly impacted by heavy waves, and storm surges, amongst others. Just after the catastrophic extreme weather conditions in Mozambique, Madagascar, and Malawi, South Africa suffered a cloud burst in its Kwazulu-Natal province that produced disastrous landslides and flooding which wreaked havoc on homes and business infrastructures and led to the deaths of more than 300 persons. Although considered the most advanced economy in Africa, South Africa emits a considerable amount of carbon and is in fact considered the largest emitter of GHGs in Africa and 14th in the world with an emission rate calculated at 9.5tons of CO2 per capita at 2015.

This situation has been attributed to its heavy reliance on coal mining and oil extraction for energy. South Africa is the world’s seventh consumer of coal and sustains 85 per cent of its national energy needs from burning coal. The impacts of climate change in the country have been projected to affect climate-sensitive sectors such as agriculture, water, and forestry. It is well known that increases and decreases in rainfall and temperature threaten soil productivity and any negative impacts of climate change will have major implications on access to food in the country which is largely dependent on affordability.

Already food security is fragile given the economic shocks associated with the coronavirus pandemic, existing levels of poverty, unemployment, and inequality in the ownership of arable lands that particularly reflects the country’s dark history of apartheid. Increasing droughts episodes are also affecting water security in the country and leading to situations of water shortages in parts of the country such as Limpopo.

References:
The pressure of temperature fluctuations is mostly defined in South Africa’s extractive and mining regions where climate change is interacting with environmental challenges arising from mining activities to disrupt livelihoods. Coal plants in addition to polluting the air around them also contribute to enormous carbon emissions. According to researchers, South Africa’s coal belt is blanketed in smog and coal ash with a pervasive stench of sulfur. The area east of Johannesburg is considered one of the world’s most polluted environments⁹⁸.

Notwithstanding, South Africa is a party to the UNFCCC and signatory to the Paris Agreement, and in accordance with global climate action to reduce GHG emissions, submitted its first NDC in October 2015 wherein it committed to keeping carbon emissions within a range from 389 Mt CO₂-equivalent for 2025 and 2050. In September 2021, the country submitted its updated NDC.

**SOUTH AFRICA CLIMATE CHANGE RESPONSE OUTLOOK:**

South Africa’s National Climate Change Response White Paper (NCCRWP) was approved by its Cabinet in 2011. The NCCRWP goals are informed by both national and international climate commitments, including the South African Constitution, the Bill of Rights, the National Environmental Management Act, the Millennium Declaration, and commitments made under the UNFCCC. The NCCRWP is a comprehensive policy document that sets out to address “both mitigation and adaptation in the short, medium and long term (up to 2050).”

⁹⁷ https://www.theguardian.com/environment/2022/may/13/south-africa-floods-climate-crisis-global-heating
GHG emissions are set to stop increasing at the latest by 2020-2025, to stabilize for up to 10 years and then to decline in absolute terms\footnote{https://climate-laws.org/geographies/south-africa/policies/national-climate-change-response-policy-white-paper-nccrp}.

Also connected to the NCCRWP are the Emission Reporting Regulations and the Pollution Prevention Plan Regulations which are both key elements of the national climate change mitigation system developed by South Africa’s Department of Environmental Affairs. They feed into broader climate change policies under the NCCRWP, including the development of the carbon budgets and the management of the carbon tax.

South Africa’s climate priorities span climate adaptation and mitigation. The South African Cabinet has also approved key climate actions including the creation of a Presidential Climate Change Coordinating Commission, South Africa’s Low Emission Development Strategy, and a carbon tax. The table below also outlines some of South Africa’s climate change policies and legislation.

<table>
<thead>
<tr>
<th>SOUTH AFRICA CLIMATE CHANGE POLICIES AND LEGISLATION</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2050 Low-Emission Development Strategy (LEDS)</td>
<td>Sets the goal of net-zero emissions by 2050</td>
</tr>
<tr>
<td>Presidential Climate Change Coordination Commission (PCCCC).</td>
<td>Seeks to coordinate climate change responses pushed forward by the state including measures on adaptation and mitigation.</td>
</tr>
<tr>
<td>NCCA Strategy</td>
<td>Provides a policy instrument which articulates South Africa’s national climate change adaptation objectives to provide overarching guidance to all sectors of the economy.</td>
</tr>
<tr>
<td>SOUTH AFRICA CLIMATE CHANGE POLICIES AND LEGISLATION</td>
<td>OBJECTIVES</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Economic Reconstruction and recovery Plan</td>
<td>Aims to build a sustainable, resilient and inclusive economy with priority on energy security and green economy.</td>
</tr>
<tr>
<td>National Energy Efficiency Strategy</td>
<td>Determines how to improve energy utilization, mainly through improvements in energy intensity and decoupling economic growth from energy demand.</td>
</tr>
<tr>
<td>Green Transport Strategy for South Africa.</td>
<td>Developed to provide a world class transport system that will reduce the quantity of Greenhouse Gases (GHG), as well as other pollutants that are emitted by the sector.</td>
</tr>
<tr>
<td>Pollution Prevention Plan</td>
<td>Prepared specifically for the mitigation of greenhouse gases emitted from the listed production processes (e.g. coal mining, production and/or processing of natural gas, iron and steel production)</td>
</tr>
<tr>
<td>Carbon Tax Act, 2019</td>
<td>Mandates 5% carbon budget allowance on taxpayers once they participate in the carbon budget system on a voluntary basis.</td>
</tr>
</tbody>
</table>
**HIGHLIGHTS OF SOUTH AFRICA’S NDC**

**Mitigation Priorities**

1. Commitment to a fixed target for greenhouse gas emissions levels of 398-510 MtCO2e by 2025, and 350-420 MtCO2e by 2030, compared to 398 and 614 MtCO2e between 2025 and 2030 as communicated in the first NDC.

2. Updated goal to reach net zero emissions by 2050 through its Low-Emission Development Strategy.

3. Aspirations to access significantly higher levels of climate finance during the periods of implementation of the NDC, with a view to achieving a floor of USD 8 billion per year by 2030.

4. Economy-wide covering Agriculture, Forestry and Other Land Uses (AFOLU), Energy, Industrial Processes and Product Use (IPPU), Waste, and five gases (CO2, CH4, N2O, HFCs, and PFCs). The land sector is included but excludes emissions from natural disturbances.

**Adaptation Priorities**

The updated NDC includes South Africa’s first adaptation communication, detailing plans for the country’s contribution to global goals on adaptation, as well as the country’s risks and vulnerabilities, in priority sectors, including water,
agriculture, health, biodiversity, and human settlements. The National Climate Change Adaptation Strategy (2020) is the guiding policy for implementation, outlining nine key objectives of the national adaptation policy that guides sectoral and provincial planning\textsuperscript{100}. Most importantly, South Africa’s NDC is hugely focused on just transition support and programmes for workers and communities in the shift away from coal to low-carbon infrastructure. Over the next decade, the implementation of the NDC will require a much greater investment programme of between R860 billion and R920 billion (in 2019 Rands; USD60-64 billion). The shift away from coal will also require support in the form of transition finance, and associated technology and capacity-building.

\textit{Emission Goals in the NDC}

While South Africa has volunteered to reduce their emission targets, they have decided on GHG emissions ranges that are conservative and largely unambitious for 2021 to 2030. The country is likely to face dire consequences if more ambitious actions and targets are not pursued. According to Climate Action Tracker, climate ambitions in the country could be enhanced by increasing renewable energy capacity further by 2030, removing coal-fired power generation latest 2040, and restricting the use of natural gas\textsuperscript{101}.

\textbf{SOUTH AFRICA AT COP26}

At COP26, the South African government forged the Just Energy Transition Partnership (JETP) jointly with the governments of the United Kingdom, the United States, France, Germany, and the European Union. Under the JETP, partner governments pledged an initial amount of $8.5 billion as a contribution towards financing South Africa’s long-term just transition process to reduce the carbon intensity of South Africa’s electricity system, while also developing new sectors such as green hydrogen and electric vehicles.

The objective of this process is also to ensure a just transition for workers and communities that have historically relied on South Africa’s coal-based value chains for their livelihoods. The scale of the challenge means that partnerships - including with the private sector and development finance institutions, will be indispensable to achieving desired outcomes.


\textsuperscript{101} https://climateactiontracker.org/countries/south-africa/2019-06-17/
IMPLEMENTATION STATUS OF SOUTH AFRICA’s COP26 COMMITMENT

On August 31, 2022, South Africa reached a landmark milestone with the presidential cabinet’s adoption of a just transition framework. The framework lays out a shared vision for shifting to an equitable, zero-carbon economy and identifies key policy areas and principles to achieve this.

3.3 UGANDA

Uganda is a landlocked country located in East Africa. The country covers an estimated land area of approximately 241,500 km² with water bodies, forests, and wetlands covering a third of it. Uganda is bordered by Kenya to the East, South Sudan to the North, Tanzania, and Rwanda to the South, and the Democratic Republic of the Congo to the West. With a population estimated at 43 million, Uganda’s National Development Plan (NDP) III (2020-2025) indicates that a large proportion of households (68.9 per cent) caters to a subsistence economy.

Notable staple crops grown in Uganda include maize, plantains, beans, cassava, groundnuts, sorghum, and millet. Coffee, gold, pulses, fish, and maize are Uganda’s key exports with the latter being mostly exported to neighbouring Kenya. Although blessed with some of the best environmental resources, including wetlands, rainforests, fertile soils, and freshwater bodies like Lake Victoria, Uganda is one of the poorest countries in the world, categorized as a least-developed country. Its economy is dominated by the services sector, contributing 47.6 per cent to the country’s GDP in 2018, followed by the agricultural sector with 24.2 per cent and the industrial sector with 19.9 per cent. As with the rest of the world, climate change is impacting Uganda through both rapid and slow-onset events.

According to Uganda’s National Risk and Vulnerability Atlas, droughts, floods, landslides, windstorms, hailstorms, and lightning are the country’s major climate-induced hazards. Notable impacts of climate change in the country also include a rise in the average temperature of semi-arid areas in Uganda, progressive changes in lake and river water levels, frequent and severe droughts, erratic and excessive rainfall leading to flooding, mudslides, and landslides across areas in the country. On August 1, 2022, flooding in the Bugishu, Mbale, and Kapochorwa districts of the Eastern part of Uganda killed 24 persons. Uganda’s eastern region is particularly prone to flooding after heavy rains.

103 Ibid
Heavy downpours have resulted in the deaths of many persons in the past. In 2018, more than 30 persons were killed when floods destroyed homes in Bududa district, Eastern Uganda. According to a report by the United Nations Office for the Coordination of Humanitarian Affairs, more than 300,000 people have been affected by floods and landslides in Bududa and Sironko districts both in eastern Uganda, and Budibugyo in the country’s western region.\(^\text{104}\)

A new research study commissioned by the International Organization for Migration (IOM) in Uganda shows that thousands of people are being forced to relocate due to climate change and environmental degradation. Climate change has also had implications for citizens’ overall well-being. For instance, cholera cases and frequency in occurrence have increased in the last 8-10 years due to erratic rainfall contributing to slow onset floods in many towns.\(^\text{105}\)

In Kampala, the country’s capital, the impacts of climate change are further worsened in slum settlements that lack access to running water and good sanitary facilities. Many slum dwellers in the city live on plains and reclaimed wetlands and are highly exposed to intense flooding during the rainy season. Due to a lack of social infrastructure, they mostly make use of pit latrines which become flooded and inaccessible during the rainy season. When flooding occurs in these communities, water sources in addition to sanitation sites are contaminated thus endangering lives.

Flooding in Uganda is also driven by the environmental challenges brought up by human activities such as illegal mining. The combination of unlawful sand mining and extreme climate events has given rise to grave flooding and the gradual destruction of vulnerable communities like the Kakumiro District in western Uganda where the degradation of wetlands is taking a toll on aquatic animals and residents who rely on wetlands for water.

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There are also heightened concerns about the outcomes of variations in temperature and precipitation, and extreme rainfall in relation to the country’s agricultural sector. As with other countries, Uganda has several policies that respond to climate change across sectors of the economy. Some of them have been outlined in the table below:

<table>
<thead>
<tr>
<th>UGANDA’S CLIMATE CHANGE POLICIES AND LEGISLATIONS</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Climate Change Policy 2015</td>
<td>The policy sets out to ensure a harmonized and coordinated approach towards a climate-resilient and low-carbon development path for sustainable development in the country.</td>
</tr>
<tr>
<td>National Climate Change Act 2021</td>
<td>The Climate Change Act, 2021 guides Uganda’s national response to climate change. The Act also mandates the creation of a Framework Strategy on Climate Change, as well as a National Climate Action Plan and District Climate Action Plans.</td>
</tr>
</tbody>
</table>

https://nilepost.co.ug/2019/01/07/kampala-floods-water-never-forgets-its-path/
<table>
<thead>
<tr>
<th><strong>UGANDA’S CLIMATE CHANGE POLICIES AND LEGISLATIONS</strong></th>
<th><strong>OBJECTIVES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Energy Policy 2002</td>
<td>This Energy policy pivots the Ugandan Government's overarching policy vision to make modern renewable energy a substantial part of national energy consumption.</td>
</tr>
<tr>
<td>Draft National Energy Policy 2019</td>
<td>The government of Uganda has proposed a National Energy Policy 2019 (still in draft form) which will override that of 2002. The policy is expected to support energy policy implementation through the promotion and development of new clean energy technologies to reduce GHG emissions including the investment of asset class, technology, and business sectors into clean energy, smart agriculture, environmental, and sustainable products and services.</td>
</tr>
</tbody>
</table>

Figure 4: Table showing some of Uganda’s Climate Change Policies and Legislation

**UGANDA’s NDCs**

Uganda submitted its updated NDC in September 2022 which contained an ambitious economy-wide mitigation target of 24.7 per cent reduction below Business-As-Usual (BAU) by 2030, a progression from the 22 per cent reduction target communicated in its first NDC in 2016. With adaptation as its number one priority response to climate change, Uganda aims to address key vulnerabilities across sectors of the economy by bolstering adaptive capacity at all levels, addressing loss and damage, and increasing the resilience of communities, infrastructure, and ecosystems. Consequently, the sectoral scope for adaptation in the country’s NDC has been broadened from agriculture, forestry,

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water, infrastructure, energy, risk management, and health to also include ecosystems (wetlands, biodiversity, and mountains), water and sanitation, fisheries, transport, manufacturing, industry, mining, cities, built environment, disaster risk reduction, tourism, and education.

**Adaptation Component and Action Plans in Uganda’s NDC**

Uganda’s climate change risk and vulnerability assessment found that climate change is impacting physical infrastructure, food security, water resources, agriculture, energy, health, and ecosystems. In economic terms, the assessment revealed that due to the impacts of climate change, adaptation inaction could result in annual costs rising in the range of USD 3.2 billion to USD 5.9 billion within a decade.

But even if there were no further increases in climate impacts, this would not prevent the cost of inaction to rise over time principally because of other factors such as an increase in population, amongst others. To address these and other concerns, the updated NDC identified new priority sectors for adaptation actions alongside those already captured in the first NDC. They include Environment and Ecosystems, Water and Sanitation, Agriculture, Fisheries, Forestry, Energy, Transport, Manufacturing, Industrial Processes and Mining, Built Cities, Tourism, Education, Health, and Disaster Risk Management.

A unique feature of Uganda’s updated NDC is the fact that unlike the initial NDC wherein priority adaptation actions lacked specific targets, “adaptation interventions and actions have been assigned sectoral indicators and targets drawn from its National Development Plan (III), (NDP III) and other relevant policies and strategies, as well as other related plans such as the national adaptation plan for agriculture, the budget framework paper for the financial year 2022/23 to 2026/27 and alignment to the Long Term Climate Strategy (LTS)”¹⁰⁸. Consequently, Uganda has the following action plan for the enhancement of the country’s ecosystem resilience:

1. Enhance wetlands management and restore peatlands, riverbanks and lake shores
2. Protect and restore mountain ecosystem
3. Protect manage and restore rangeland

¹⁰⁸ [https://unfccc.int/sites/default/files/NDC/2022-09/Updated%20NDC%20_Uganda_2022%20Final.pdf](https://unfccc.int/sites/default/files/NDC/2022-09/Updated%20NDC%20_Uganda_2022%20Final.pdf)
4. Enhance biodiversity conservation and management. Likewise for the achievement of a climate-resilient water and sanitation sector.

<table>
<thead>
<tr>
<th>SUMMARY OF KEY PARAMETERS</th>
<th>INITIAL NDC</th>
<th>UPDATED NDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconditional Targets</td>
<td>22% reduction for Business as Usual by 2030</td>
<td>24.7% reduction for Business as Usual by 2030</td>
</tr>
<tr>
<td>Mitigation Across Sectors and Sub-sectors</td>
<td>Energy Sub-sector under Energy: Electricity generation</td>
<td>Energy Sub-sector under Energy: Electricity generation, Transport, other energy</td>
</tr>
<tr>
<td></td>
<td>AFOLU Subsector under AFOLU: Agriculture, Forestry, Land Use, and Wetlands</td>
<td>AFOLU Subsector under AFOLU: Agriculture, Forestry, Land Use, Wetlands and Peatlands</td>
</tr>
<tr>
<td></td>
<td>Waste</td>
<td>Waste Subsector under Waste: Solid waste and waste water</td>
</tr>
<tr>
<td></td>
<td>IPPU Subsector: Mineral industry and Product Use</td>
<td></td>
</tr>
<tr>
<td>GreenHouse Gases to be Mitigated</td>
<td>Carbon dioxide (CO2)</td>
<td>Carbon dioxide (CO2)</td>
</tr>
<tr>
<td></td>
<td>Methane (CH4)</td>
<td>Methane (CH4)</td>
</tr>
<tr>
<td></td>
<td>Nitrous oxide (N2O)</td>
<td>Nitrous oxide (N2O)</td>
</tr>
</tbody>
</table>

Figure 5: Table showing climate ambitions captured in Uganda’s initial and updated NDC
Mitigation Component and Priorities of Uganda’s Updated NDC

The mitigation component of Uganda’s updated NDC is premised on the scientific understanding that the country’s “greenhouse gas (GHG) emissions are projected to increase from 90.1 MtCO2e in 2015 to 148.8 MtCO2e in 2030 and 235.7 MtCO2e by 2050 under the BAU Scenario”\(^\text{109}\). To tackle this projection, Uganda seeks through its updated NDC to implement a suite of circular economy mitigation actions in certain sectors especially energy, Agriculture, Forestry, Other Land Use (AFOLU), wetlands and peatlands, Waste, Mineral Industry and Product Use (IPPU).

Furthermore, Uganda has committed through the updated NDC to contribute unconditionally to the global mitigation target such that the country’s net emissions will be reduced by 24.7% below the BAU level of 148.80 MtCO2e in 2030 totaling an absolute reduction of 36.75 MtCO2e in that year. At the same time, the updated NDC encourages Uganda to improve her national planning process “to mitigate short-lived climate pollutants (SLCPs) by developing a national emission inventory of SLCPs and air pollutants for instance black carbon, methane and hydrofluorocarbons (HFCs).

This will complement Uganda’s efforts towards the implementation of the Kigali Amendment to the Montreal Protocol on substances that deplete the Ozone layer”\(^\text{110}\). However, the success of the updated NDC will depend largely on the twin pillars of finance availability and capacity building. According to the government of Uganda, the country “requires USD 28.1 billion to implement both unconditional and conditional adaptation and mitigation actions and targets of the updated NDC and its cross-cutting issues of technology development and transfer, gender, and capacity building across all sectors up to 2030.

Financial support is expected to be mobilized from domestic and international sources. The estimated cost of the adaptation up to 2030 across all sectors is USD 17.7 billion of which USD 2.5 billion equivalents to 14% of the total adaptation cost is unconditional and USD 15.2 billion equivalent to 86% is conditional on international support. The estimated cost of the mitigation policies and measures up to 2030 across all sectors is USD 10.3 billion of which USD 1.6 billion equivalents to 15% of the total mitigation cost is unconditional and USD 8.7 billion equivalent to 85% is conditional on international support. The estimated cost of crosscutting activities including coordination support is USD 0.1 billion”\(^\text{111}\).

\(^{109}\) https://unfccc.int/sites/default/files/NDC/2022-09/Updated%20NDC%20_Uganda_2022%20Final.pdf
\(^{110}\) https://unfccc.int/sites/default/files/NDC/2022-09/Updated%20NDC%20_Uganda_2022%20Final.pdf
\(^{111}\) https://unfccc.int/sites/default/files/NDC/2022-09/Updated%20NDC%20_Uganda_2022%20Final.pdf
UGANDA AT COP26

- At the UNFCCC 26th Conference of Parties which was held in Glasgow, Uganda through her state minister for Environment, Hon. Beatrice Anywar, committed to focusing on adaptation to protect communities and natural habitats. Even though the country also committed to mobilizing funds, networking, and working together to deliver conservation measures, it refrained from signing an agreement to end and reverse deforestation by 2030 at COP26.

Although Uganda was silent at COP 26 over growing deforestation and the country did not sign the pledge to reduce deforestation, it has embarked on forest restoration programmes across the country. The country targets to increase forest cover from 15 per cent in 2010 to 24 per cent by 2040.\(^{112}\)

CHAPTER FOUR

SUMMARY OF FINDINGS ACROSS CASE STUDIES

A critical analysis of the three countries under focus, namely: Nigeria, Uganda, and South Africa vis a vis their NDCs, climate policies, and action plans reveal a set of findings that have direct and indirect implications for Africa’s climate change aspirations.

In this Chapter, we examine key findings from all three countries based on indices such as GHG Emissions, Just Transition, Renewable Energy Infrastructure, Mitigation and Adaptation, Mass Transit, Climate Finance, and Net Zero with a view to evaluate the progress and status of the countries’ climate change aspirations.

(1) REDUCTION OF GHG EMISSIONS

The University of Oxford defines GHG removal as the process of ejecting carbon dioxide or its equivalent from the atmosphere through techniques like “biological approaches, such as planting trees and increasing the amount of carbon stored in the soil and engineered approaches, such as enhancing the rate at which certain minerals weather and devices that directly capture CO2 from the air”.113 GHG emission reduction is an integral component of the Paris Climate Change Agreement and NDCs.

Nigeria

Nigeria has pledged in its updated NDC to achieve net-zero carbon emissions by 2060 and to contribute 20 per cent below BAU by 2030 and 47 per cent conditional on international support. However, careful observation of the prevailing situation in Nigeria especially with regard to sectors that are critical to CHG emissions reveals that despite its best effort in terms of developing policy initiatives, and building capacity for climate change objectives, there are still a number of challenges.

Some of these include policy inconsistency and misalignment between economic goals and overall climate change aspirations. For instance, despite its aspirations to cut carbon emissions, the Nigerian government continues

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to perpetuate fossil fuel exploration while intensifying the usage of other non-renewable energy sources that contribute to greenhouse gas emissions. In 2021, the Petroleum Industry Act was signed into law after years of delay. The new Act earmarks a 30 per cent allocation to the exploration of crude oil in frontier basins (new oil in northern Nigeria), aside from other provisions that reinforce fossil fuel usage and carbon emissions. Also concerning is the role of Nigeria’s government in the establishment of the gigantic Dangote Refinery and Petrochemicals - a 650,000 barrels per day integrated refinery project under construction in the Lekki Free Zone, Lagos which is expected to be Africa’s biggest oil refinery and the world’s largest single-train facility, upon completion.

The project also consists of two of the World’s Largest Fertilizer Trains expected to produce about 3 Million Tonnes Per Annum\textsuperscript{114}, and a petrochemical plant expected to produce 780 KTPA of Polypropylene, and 500 KTPA of Polyethylene\textsuperscript{115}. Last year, the government of Nigeria acquired a 20 per cent minority equity stake in the Dangote Refinery to the tune of $2.76 billion\textsuperscript{116}. This is aside from other envisaged supports in the form of crude oil feedstock, tax incentives, and policy instruments to liberalize the market\textsuperscript{117}\textsuperscript{118}.

Ironically, also supporting this massive hydrocarbon entity are international banking institutions and financial consortiums from the Global North. This includes the World Bank, Standard Chartered bank, African Development Bank, and trade banks from China, India, and some European countries\textsuperscript{119}. This further underlines the global hypocrisy, inconsistency, and lack of political will behind the absence of traction in the efforts toward curtailing global warming and achieving a carbon-free world.

Likewise, despite numerous efforts to curb it, gas flaring remains a teething problem for Nigeria and its CHG emission reduction goals. In 2016, the government of Nigeria launched the Nigerian Gas Flare Commercialization Programme (NGFCP), designed as a strategy to implement the policy objectives of the government to eliminate gas flares through technically and commercially sustainable gas utilization projects.
These projects are intended to be developed by competent third-party investors who will be invited to participate in a competitive and transparent bid process for flare sites\textsuperscript{120}. Similarly in 2018, the Flare Gas (Prevention of Waste and Pollution) Regulation was promulgated by the National Assembly to support the policy objectives of the federal government for the reduction of GreenHouse Gas (GHG) emissions through the flaring and venting of natural gas.

A key component of this new regulation is the increase of the “initial meagre flare payments (penalties) of N10 per thousand standard cubic feet, in the case of anyone producing 10,000 barrels of oil or more, to $2.0 per thousand standard cubic feet of gas and, in the case of anyone producing less than 10,000 barrels of oil per day, to US$0.50 per thousand standard cubic square feet of gas”\textsuperscript{121}.

The regulation also contains a mandatory additional payment of $2.50 per thousand standard cubic feet of gas for failure to produce accurate flare data, failure to provide access to flares or flare sites, and failure to sign a connection agreement. In the event of continuous or egregious breaches, there is also a possibility of suspension of operations or termination of the producer’s license. The combination of these efforts has reportedly led to a progressive reduction in Nigeria’s flaring trend in the last three years with flared output dropping from 7.82 bcm in 2019 to 7.19 bcm in 2020 and then 6.63 bcm in 2021\textsuperscript{122}.

However, there are also concerns that oil and gas companies operating in the country may be evading gas flare penalties, by deliberately under-reporting gas flares figures. For instance, whereas the NNPC’s data in 2018 showed that Nigeria flared 282 billion standard cubic feet (scf) of gas equivalent to 10 per cent of the total gas produced in the country within the period under review, the global Gas Flaring Tracker (GFT) reported 472.4bcf of gas for the same year.

While the NGFCP showed that Nigeria flared 325bscf of associated gas in 2019, representing 11 per cent of gas produced in the country, the GFT recorded 475bscf as gas flared for the same year.

\textsuperscript{120}Esiedesa. (2021, August 10). Nigeria’s gas flare falls 0.33% in Q1 2021 to 45.33BCF. Vanguard Nigeria. Retrieved October 8, 2022, from https://www.vanguardngr.com/2021/08/nigerias-gas-flare-falls-0-33-in-q1-2021-to-45-33bcf/
The implication of this discrepancy is that about 190 bscf was not reported in 2018, while 150bscf was under-reported in 2019, something which shows that all is not well despite the reported consistent reduction in Nigeria’s gas flaring figures.

In the same vein, ongoing challenges in the power sector mean that the country’s electrical grid only serves 55.4 per cent of the population thereby reinforcing the use of kerosene and fuelwood for cooking by low-income earners in urban and rural environments. These practices will intensify deforestation and carbon dioxide emissions. The Global Forest Watch estimates that from 2010 to 2019, Nigeria lost 86,700 hectares of tropical forest, releasing the equivalent of 19.6 MtCO2 in the process.

Accompanying this is the failure of a series of ambitious climate change mitigation initiatives to materialize into concrete projects on the ground due to certain challenges. For instance, President Buhari’s announcement in 2019 to plant 25 million trees to restore 4 million hectares of forest, could not take off immediately because of the Coronavirus Pandemic. Two years after, the state of insurgency in prime locations across the country has also worked to hinder the progress of this project.

Also in 2019, Nigeria published its National Action Plan to reduce short-lived climate pollutants. It joined the Global Methane Alliance, pledging to absolute methane targets of at least 45 per cent by 2025 and 60 -75 per cent by 2030. The country also included targets to reduce methane emissions on its NDC, yet methane emissions from AFOLU and waste have remained on the rise.

In the same vein, lack of disposal systems and unhealthy waste management such as poor drainage conditions and the state of slaughterhouses in the country where hundreds of animals are butchered every day and their wastes carelessly disposed of or left to fester have combined with other identified lapses to progressively undermine the government’s ambitions to reduce specific GHG emissions such as methane.

This submission is further reinforced by data from the International Energy Agency (IEA) which shows that GHG emissions have increased by at least 271 per cent since 1990 to about 104.27 MtCO2e in 2018. Likewise, findings from

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Nigeria’s first GHG inventory published in March 2021 have also revealed that the country’s GHG removal reduced by 23 per cent within the period between 2000 to 2017 while its emissions continued to rise within the same period. The inventory found that while Nigeria recorded a regression of 23 per cent in removals, from 5,908 Gg CO₂-eq to 4,543 Gg CO₂-eq between 2000 to 2017, the country’s “total emissions increased by 213,768 Gg from 464,416 Gg in 2000 to 678,184 Gg in 2017, representing an increase of 46 per cent over an 18-year period. The different gasses identified in the emissions also have significant percentage increases - carbon dioxide 56 per cent, methane 23 per cent, and nitrous oxide 65 per cent”\(^{127}\).

Conclusively, the foregoing review shows that even though the country is committed to getting things right, there is still room for a lot of work to be done.

**South Africa**

Available evidence suggests that despite its best efforts, South Africa has largely not been able to project adequate attention toward green economic recovery. Meanwhile, South Africa is the fourteenth largest greenhouse gas emitter in the world, relying on coal for 70 per cent of its total energy supply\(^{128}\). At the same time, South Africa is formally committed to a net zero CO₂ target by 2050, with its updated NDC targeting “an absolute emissions level in the range of 350–420 MtCO₂e including LULUCF for 2030”\(^{129}\).

However, this falls short and is inconsistent with the Paris Agreement of a \(1.5°C\) temperature limit. Assuming Land Use, Land Use Charge and Forestry (LULUCF) remains at the average level over 2007–2017 (-16 MtCO₂e), South Africa NDC target range translates to emissions levels in 2030 of between 366–436 MtCO₂e excluding LULUCF, equivalent to a 3–23 per cent increase above 1990 levels excluding LULUCF. According to Climate Action Tracker, South Africa’s emissions trajectory for 2030 is expected to “decrease by around 5 – 6 per cent below 2010 levels but would end up at around 36 per cent to 38 per cent above 1990 levels (excluding LULUCF)”\(^{130}\) - much above the target range set in the 2021 updated NDC.


\(^{130}\)Ibid
Other variables countermanding South Africa’s GHG emission reduction aspirations are the continued uncertainty around Eskom’s financial solvency which contributes to ongoing delays in expanding renewable energy capacity, and the inclusion of several carbon-intensive investments in COVID-19 recovery plans among other issues. Instead of progressing towards renewables, Eskom is driving towards more coal consumption due to its vertical monopoly over the nation’s energy system and favouring its coal-fired power plants over private renewable generation. This is drastically reducing the potential profitability of independent clean energy investments. If also taken together with Eskom’s inability to fund clean energy projects, the situation may succeed in hindering South Africa from achieving its emissions reduction targets.

Uganda

The implementation of Uganda’s NDC targets of approximately 22 per cent reduction of national greenhouse gas emissions by 2030 is constrained by its national circumstances and development priorities. Uganda’s greatest mitigation potential is in the land use, land-use charge, and forestry sectors. Under the business-as-usual scenario, the AFOLU sector featured the most significant source of emissions for the three gases (CO2, CH4, and N2O) accounting for 86.4 per cent of the total emissions.

Comparatively, the energy sector accounted for 10.9 per cent, and the waste sector, Industrial Processes and Product Use accounted for 2.1 per cent and 0.6 per cent respectively. This means that a successful reduction in emissions in the Agriculture, Forestry, and Other Land Use (AFOLU) sector can have a big impact on Uganda’s total GHG emission profile thus guaranteeing a potential of meeting its NDC aspirations. Unfortunately, approximately 90 per cent of Uganda’s energy needs are generated from biomass, mostly dominated by firewood and charcoal which remain the primary energy source for most sectors of the economy apart from the transport and service sector.

It goes without saying that this level of nearly absolute reliance on biomass by big sections of the population has wide-ranging implications both for the ambitious plan to reverse the country’s deforestation trend (of approximately 14 per cent in 2013) and increase forest cover to 21 per cent in 2030.

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(2) JUST ENERGY TRANSITION

A just energy transition can be defined as a negotiated vision and process centered on dialogue, supported by a set of guiding principles, to shift practices in energy production and consumption. Rather than a fixed set of rules, it is a process anchored on social dialogue and dependent on local contexts. For instance, what a just transition means can differ from country to country. The challenges also differ. Implementing a just transition in countries with low access to social protection systems and high dependence on fossil fuel production is more challenging than for those with functioning social protection and diversified economies.

Nigeria

In the aftermath of COP 26, Nigeria launched its Energy Transition Plan (ETP) to map out plans and activities required to achieve the 2060 net zero target while also meeting the country’s energy needs. Since then, the Climate Change Act 2021 has been passed, closely followed by the setting up of an inter-ministerial Energy Transition Implementation Working Group (ETWG), and an Energy Transition Office (ETO). Nigeria’s Energy Transition Plan has the following broad objectives: (1) Lifting 100 million Nigerians out of poverty and driving economic growth, (2) Bringing modern energy services to full population, (3) Managing the expected long-term job loss in the oil sector due to the reduced global fossil-fuel demand, (4) Playing a leadership role for Africa by promoting a fair, inclusive and equitable energy transition in Africa that will include gas as a “transitionary fuel”, (5) Streamlining existing and new government related energy transition initiatives.

Nigeria’s energy transition plan also recognizes “the role of natural gas in the short term to facilitate the establishment of this low energy capacity and address the nation’s clean cooking deficit in the form of LPG. It also envisions vibrant industries powered by low carbon technologies, streets lined with electric vehicles, and livelihoods enabled by sufficient and clean energy.” Many stakeholders believe that Nigeria is well positioned to gain from the energy transition regime due to the abundance of natural fossil fuels and renewable solar energy available in the country. Due to the Russian invasion of Ukraine, Russia’s fuel imports to Europe have been severely curtailed leading to high gas...
prices in Europe and also, an increase in gas prices and the prospect of a recession in Europe. In panic at the intensifying energy crisis, European leaders are now turning towards Africa for a new source for supply of natural gas - a commodity that countries like Nigeria with an abundance of reserves can fulfil. But while this situation opens up an incredible opportunity for struggling African economies to earn revenue and badly needed foreign exchange, a reality that cannot be ignored is that it poses a threat to global climate change goals and aspirations, especially at a period when the fate of the planet and humanity hang by a thread.

Although its carbon component is not as high as crude oil, natural gas is a fossil fuel that emits greenhouse gasses that contribute to global warming. Considering the persistence of gas flaring and venting, Nigeria and any African countries risk undermining their carbon-free objectives if they intensify natural gas exploration over the next few years. Indeed, any new exploration for gas, alongside the exploitation of Africa’s vast reserves of oil, could make it close to impossible for the world to limit global heating to 1.5C above pre-industrial levels. Therefore, any proposal for the perpetuation of the use of natural gas whether as a temporary measure to address the urgent concern of energy crisis in Europe or as a transition energy for African countries to build their economies is counterproductive for climate objectives at a most sensitive period in history.

Additionally, it poses a risk of Nigeria being “locked in” to a path of non-renewable energy generation. While Nigeria’s energy transition plans on managing the envisaged job loss in the oil sector, it does not make provision for holding energy multinationals to account for their despoliation of oil-producing communities in the Niger Delta. For instance, data indicates that nothing less than 1.89 million barrels of petroleum have been spilt in the Niger Delta between 1976 and 1996. Meanwhile, several clean-up exercises have failed to fully ensure total remediation of the Niger Delta environment and ecosystem.

In the same vein, the plan does not have in-built provisions to ensure that a truly just energy transition occurs without a carryover of the same exploitative and environmentally damaging processes associated with crude oil exploration. As oil multinationals are divesting from Nigeria’s oil and gas sector, they are scaling up investments in wind, solar, electric vehicle charging, hydrogen, and more. For instance, the Royal Dutch Shell has acquired Nigerian solar energy provider, Daystar Power, as part of efforts to cut its greenhouse gas emission and focus on renewables. The acquisition is expected to help Daystar increase its installed

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140 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7184024/
Given the history of Royal Dutch Shell in Nigeria oil producing communities, its plan to lead renewable energy infrastructure in Nigeria and Africa raises concerns that state authorities must address. A just energy transition must ensure that historic polluters do not compromise the new carbon-free energy future. Moreover, confidence, and buy-in of local communities for energy transition can be best secured where there is assurance that their social, economic, language, and cultural rights will be protected in the new dispensation.

South Africa

South Africa’s Just Energy Transition Partnership (JETP) - an $8.5 billion multinational venture between South Africa, the United States, the United Kingdom, France, Germany, and the European Union to accelerate the decommissioning of South Africa’s coal-fired power plants - represents a novel attempt to support energy transition in emerging economies. This is to be achieved by incentivizing the flow of clean energy investments while addressing related social concerns, such as job displacement, etc.

However, just like in Nigeria, the energy transition plan does not fully account for workers, coal-dependent municipalities, and others who would be displaced or adversely affected in the process of a just energy transition. Given the extent of coal dependency in South Africa’s economy, a just energy transition requires a careful and nuanced approach that takes care of the interests and fears of all, most especially communities, workers, and other stakeholders. In view of how the current coal-dependent South African energy sector is rooted in the country’s history of apartheid, South Africa perhaps more than any other country needs to adopt a more deliberate policy about who would be the ultimate beneficiary of its next energy environment: ordinary South Africans or the big energy corporations?

South Africa has a long history of industrial disputes as well as other grievances in the mining sector. In 2012, 34 striking mine workers were allegedly shot dead by the police during a wildcat strike at the Lonmin platinum mine in Marikana, Rustenburg, North West province. The workers’ unions and activist groups accused the police, despite being a public institution funded by taxpayers, of acting in the interest of the corporate owners of the mines.

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This ultimately raises questions about how the energy transition is structured and who takes the lead, between the public and private sectors. A running theme in the energy transition of several African states is the positioning of the private sector as a key driver of the process. As we have seen with fossil fuel extractivism, the private sector often prioritizes profit over people’s needs and the environment while using Corporate Social Responsibility (CSR) as a cynical measure to divide communities and push its narratives. Should the private sector take the lead in sourcing and building renewable infrastructures, the result would be a re-establishment of the same dynamics.

Uganda

Unlike others, Uganda’s energy transition plans envision the exploration of the country’s newly discovered crude oil resources to drive growth and fund renewables. In 2006, commercially viable oil was discovered in the Albertine Graben region, and foreign companies such as the French TotalEnergies and the Chinese National Offshore Oil Corporation (CNOOC) have signed agreements with the government to extract oil in this eco-sensitive area.¹⁴⁴

There is also the ongoing construction of the 1,445 km East African Crude Oil Pipeline (EACOP) also known as the Uganda–Tanzania Crude Oil Pipeline (UTCOP) which is intended to transport crude oil from Uganda's oil fields to the Port of Tanga, Tanzania on the Indian Ocean. Once completed, it would become the longest-heated crude oil pipeline in the world.¹⁴⁵ Because of the large-scale displacement of communities and wildlife and also due to how this fails to square up to the global push towards emission reduction, global environmental groups such as Friends of the Earth Africa and activists in the country are protesting the construction and finance of EACOP.

Their principal argument is that Uganda’s fossil fuel exploration undermines national and global imperatives for emission reduction and transition to renewables. Meanwhile, Uganda is one of the poorest nations in the world. In 2012, 37.8 percent of the population lived on less than $1.25 a day.¹⁴⁶ Against this background, fossil fuel exploration is seen as an opportunity in the short term to generate much-needed resources to begin to solve Uganda’s economic and social problems, develop public infrastructure and create jobs.

Given the historic corruption and misgovernance that has been the bane of development in Uganda and the experience of other oil-producing countries like

¹⁴⁵ https://en.wikipedia.org/wiki/East_African_Crude_Oil_Pipeline
Nigeria and Angola, there is no guarantee that the acquiring of petrodollars through fossil exploration would go into development and not instead end up as slush funds to service the wealth and profligate lifestyles of politicians.

This is aside from the risk of it undermining the country’s net-zero reduction ambitions while transforming it into a new frontier for fossil fuel burning, carbon emission, and global warming.

In addition to the concerns about exploring fossil fuel resources amid the global race to reduce carbon emissions are the increasing militarization of identified resource-rich communities, human rights violations, and targeted attacks at activists, students, and community people speaking up against the likely costs and social impacts of the EACOP project on the environment, livelihoods, cultural heritage of community people whose land resources will be affected and are already being acquired without compensation.

(3) CLIMATE FINANCE

There is no doubt that climate finance will be critical for enabling Africa to adapt to the growing impacts of climate change and to ensure that its future development path is consistent with the goal of limiting global warming to no more than 1.5°C. However, despite the positive objectives of the NDCs, financing Africa’s climate ambition is becoming a tall order for the continent and its development partners.

On the one hand, African countries are yet to recover from the economic dislocation caused by the COVID-19 lockdown as well as other associated economic crises. Amid a downturn in the global economy, Nigeria and South Africa, the two biggest economies on the continent, have both faced economic recession at least once in the past decade together with rising public debt, inflation, and cash crunch. Likewise, Uganda is an impoverished country with a mounting public debt of at least $20.98 billion.

Now according to the IMF, growth forecasts for both Nigeria and South Africa for 2023 have been downwardly reviewed to 3.2 per cent and 1.4 per cent respectively. On the other hand, the reluctance of the global North to make true their commitment to Africa’s climate ambitions is also a matter of concern. To date, “only $80 billion of the $100 billion per annum commitment by developed countries for developing countries by 2020 has been met; of this, only around $20 billion was provided to Africa over 2016-2019”.

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147 https://www.brookings.edu/blog/africa-in-focus/2022/02/08/the-criticality-of-climate-finance-for-africa/
148 https://thenationonlineng.net/imf-cuts-nigerias-economic-growth-to-3-2-
149 https://www.brookings.edu/blog/africa-in-focus/2022/02/08/the-criticality-of-climate-finance-for-africa/
Meanwhile, the financial implication of climate mitigation and adaptation in Africa continues to rise as the climate and environmental crisis deepens. This has prompted the Africa Group of Negotiators to call for $1.3 trillion a year in climate finance to be made available from 2025\(^{150}\). In order to address the financial constraints affecting African countries, there are suggestions for alternative financing options like the global trade in carbon credits.

Carbon credits are permits that allow the holder to emit one ton of carbon or equivalent GHG. “These permits are issued by governments or independent verifying companies and can be traded. Typically, carbon credits are issued to companies or projects that reduce or avoid carbon emissions. Firms that exceed government emissions limits (in places where those exist) or that seek to compensate for their carbon emissions then buy these credits to offset their emissions footprint”\(^{151}\).

The idea behind carbon trading is that it should incentivize lower emissions and provide funding for renewables. But this is rarely the outcome that emerges at the end of the day. Rather, what has been made evidently clear is that carbon trading is an escape route for big polluters to avoid transitioning thereby undermining global climate aspirations.

“Carbon offsets provide carbon majors with a more affordable approach to greenhouse gas mitigation than investing in transitioning their current operations. Carbon offsetting is simply a way for corporates to minimize their tax liability”\(^{152}\). Across all three countries studied, established parameters have been defined for funding their climate ambitions, especially their unconditional emission reduction commitments. We shall now review them below:

**Nigeria**

Nigeria’s Climate Change Act 2021 saddles the Federal Ministry of Environment with the responsibility of setting up a five-year-span country budget that will help the country achieve its net-zero carbon emission target between 2050-2070. On a yearly basis, the budget is to be submitted to the Federal Executive Council for approval before implementation.

The Climate change Act establishes a Climate Change Fund to be administered by the National Council on Climate change. The Fund is to be sourced from budgetary allocations by the National Assembly, fines obtained from entities found to have breached the provisions of the Act and other funding sources to

\(^{150}\) https://www.brookings.edu/blog/africa-in-focus/2022/02/08/the-criticality-of-climate-finance-for-africa/
\(^{151}\) https://techcabal.com/2022/06/01/solstroem-wants-to-help-african-clean-energy-startups-access-the-voluntary-carbon-credit-market/
\(^{152}\) https://www.energymonitor.ai/policy/carbon-markets/why-south-africas-carbon-offset-market-is-looking-to-expand
be prescribed by the Council from time to time. Amongst several objectives, the overall intent of the fund is to aid climate change mitigation and adaptation. In like manner, the fund will support climate change advocacy and incentivize entities to transition to clean energy and sustain reduced GHG emissions.

At the same time, Nigeria has established a carbon trading scheme, with the legal framework provided in the Climate Change Act of 2021 for the reduction of greenhouse gas emissions through a cap and trade-based emissions trading schemes to meet the Net Zero target\textsuperscript{153}. Through this initiative, Nigeria hopes to tap into the global carbon trading market which is worth over USD$175 billion a year. Recently, Nigeria commenced an aggressive campaign for a Debt for Climate (DFC) deal through which the country hopes to lighten its debt burden in exchange for climate change mitigation and adaptation investments.

DFC is “a type of debt swap where bilateral or multilateral debt is forgiven by creditors in exchange for a commitment by the debtor to use the outstanding debt service payments for national climate action programmes. Typically, the creditor country or institution agrees to forgive part of a debt, if the debtor country would pay the avoided debt service payment in a local currency into an escrow or any other transparent fund and the funds must then be used for agreed climate projects in the debtor country”\textsuperscript{154}

**South Africa**

South Africa’s National Climate Change Response Policy (NCCRP) alongside other policy documents such as South Africa’s 3rd Biennial Update Report (BUR3) to the United Nations Framework Convention on Climate Change approve and recognize the combination of private and public and blended finance in achieving national climate responses and actions. The NCCRP espouses the inclusion of the financial services sector in building the country’s climate finance architecture.

The Just Energy Transition Partnership (JETP) which the country recently secured with the governments of the United Kingdom, the United States, France, Germany, and the European Union at COP26 has become a model for the continent. Under the JETP, partner governments pledged an initial amount of $8.5 billion as a contribution towards financing South Africa’s long-term just transition process to reduce the carbon intensity of South Africa’s electricity system, while also developing new sectors such as green hydrogen and electric vehicles. Over the next decade, the implementation of the South African NDC will


require a much greater investment programme of between R860 billion and R920 billion (in 2019 Rands; USD60-64 billion). Also, the shift away from coal will require support in the form of transition finance, and associated technology and capacity-building. In 2019, South Africa revived its domestic carbon offset market by signing its carbon tax act into law. South Africa has had a carbon market since 2005, but in the early days, it failed to grow as fast as many had expected.\(^1\)

The Carbon Tax Act consists of an offset allowance that permits the use of eligible carbon offsets to reduce the volume of taxable emissions. This allows companies to reduce their tax liability and “invest in mitigation projects at a lower cost to what would be achieved on their own operations, and thereby lower their tax liability”\(^2\). South African consultancy, Promethium Carbon, estimates that annual demand in the first phase of the carbon tax could be as much as 18–30 million tonnes of CO2 equivalent (tCO2e) a year.\(^3\)

South Africa has also piloted its first internationally certified carbon programme for the agricultural sector - known as AgriCarbon - which is being anchored by Climate Neutral Group (CNG) to help curb greenhouse gas emissions. The initiative also encourages the transition from harmful agricultural practices like the use of fertilizer. A dairy farm, Lancewood, which keyed into the project has, for example, more than halved its nitrogen use per hectare per year in 2022 from 2018. Nitrogen in fertilizer can convert into nitrous oxide, a harmful greenhouse gas that can linger in the atmosphere for decades and is a better heat trap than carbon dioxide (CO2). Introduced in 2021, AgriCarbon “draws on farm-generated data to reward farmers who adopt better farming methods, such as reduced tilling”\(^4\).

**Uganda**

As a low-income country, Uganda does not have sufficient resources to fund its own climate change interventions. Currently, the majority of Uganda’s climate interventions have been funded by development partners including World Bank, Africa Development Bank, UNDP, and others. Uganda was, however, selected as a pilot country for funding under the Scaling Up Renewable Energy in Low Income Countries Program (SREP) of Climate Investment Funds. Various climate

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\(^2\) Ibid

\(^3\) Ibid

change-related activities are being implemented in Uganda, both through international climate funds and via other (bilateral or donor) channels which have contributed to Uganda’s efforts to address the climate change challenges.

The country has also mandated its officials to set aside part of their budgets for climate change measures to be able to get more funding from the government. At the same time, Uganda has a “Municipal Waste Composting” from which it earns carbon credits. The project consists of the collection of solid waste around municipalities. Instead of letting waste decay to release methane into the atmosphere, the municipal solid waste “is aerobically composted thereby avoiding the emission of greenhouse gases that causes climate change, the waste turns into compost manure which is sold to farmers to improve crop yields. This in a way protects nature, helps slow climate change, and improves livelihoods.”

Under this arrangement which is coordinated by the country’s National Emergency Management Authority (NEMA) in eight municipalities, Uganda has absorbed 16,549 metric tonnes of CO2 thereby earning $215,135 from the UNFCCC. The first 16,549 carbon credits were issued (equivalent to USD 215,137) by the UNFCCC to the first 8 projects' urban councils (Mukono, Jinja, Mbale, Soroti, Lira, Fort-Portal, Kabale, and Kasese) to prove that they have lowered greenhouse gas emissions. These carbon credits are being sold to the World Bank’s Community Development Carbon Fund, creating a revenue stream for the programme. Also, this initiative has become the first of its kind to receive certified emission reductions in Africa under the “waste handling and disposal” sector.

(4) MASS TRANSIT

Efficient public transportation is vital to addressing climate change. It can help reduce emissions of GHG and other emissions into the atmosphere while providing people with an efficient and affordable way to transit. The transport industry accounts for approximately 24% of global CO2 emissions. In 2020, approximately 7.3 billion metric tons of CO2 emissions came from the transport sector.
At COP26, Parties were reminded about the role public transit plays in creating a more sustainable, livable future. With better and more efficient transportation systems, emissions can be reduced worldwide.

Nigeria

As regards provisions of the Paris Agreement focused on reducing GHG emissions and increasing resilience, the transport sector is a key player in mitigating climate change. Nigeria is the 10th largest producer of CO2 emissions from an average journey. It was found to have the longest average commute time at just over an hour – 61.97 minutes\(^{164}\). In 2014, CO2 emission in transport for Nigeria was 35.4 per cent\(^{165}\). In Lagos State, however, transportation accounts for 60 per cent of total greenhouse gas emissions\(^{166}\). With over 5 million registered vehicles on its roads, Lagos has an average of 200 vehicles per kilometer, exceeding the national average of 11 vehicles\(^ {167}\).

Nigeria’s updated NDCs prioritized the revolution of the country’s mass transit systems as important to realizing its climate change ambitions. Some of the plans to deliver on the targets for the transportation sector include acquiring 100,000 extra buses by 2030, adopting Bus Rapid Transport (BRT) which will account for 22.1 per cent of passenger-km by 2035, the consideration of 25 per cent of trucks and buses using compressed natural gas by 2030 and that all vehicles meet EURO III emission limits by 2023 and EURO IV by 2030\(^ {168}\).

To this end, the country’s economic hub, Lagos State has introduced the Bus Rapid Transport (BRT)-Lite which is the first of its kind in Sub-Saharan Africa. The BRT-lite has displaced, in a number of routes, the local yellow buses commonly known as “Molue” whose trademark black carbon footprints pollutes the air and causes respiratory and other health challenges for commuters and residents. It has also helped to cut down personal vehicle travel thus reducing carbon emissions. Lagos Bus Services Limited (LBSL) was launched in line with NDC set targets of 2030, the scheme will contribute significantly to reducing the country’s carbon emission challenges\(^ {169}\).

According to the National Climate Change Policy 2021, Nigeria is committed to promoting the integration of science, technology, and innovation into

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\(^{165}\) [https://knoema.com/atlas/Nigeria/topics/Environment/Emissions/CO2-emissions-transport-percent]


\(^{169}\) [https://medium.com/climatewed/knowyourndcs-ndc-redefining-the-transport-system-in-nigeria-by-jameomac-cb87f1e477a0]
sustainable transport systems by tapping into technological opportunities. This is to bring about fundamental, transformative changes towards climate compatible and climate-resilient transport systems. The country’s vision for the transport sector is a fast, safe, efficient, affordable, gender-responsive, socially inclusive, integrated, and intermodal transport system for goods and people. The transport policy direction is also set to induce a modal shift which prioritizes moving freight from road to rail and inland waterways. Additionally, cost-effective mass transit alternatives for inner and inter-city passenger travel from road and air to rail and public buses will be developed to reduce GHG emissions from the sector.170

South Africa

South Africa’s transport sector is critical to its climate change mitigation and adaptation ambitions. Emissions from the transport sector account for 10.8 per cent of the country’s total greenhouse gas emissions, with road transport being responsible for 91.2 per cent of these GHG emissions171. “With an estimate of 4,859 grams of CO2 per journey, South Africa is reportedly the country producing the most carbon dioxide emissions per journey, making it and Lebanon (4,621g) the only countries to produce more than 4,500 grams of Co2 per journey”172. Should these trends continue in the absence of policies and measures, South Africa’s transport sector is projected to emit a total of 136 Gg CO₂ eq by the year 2050173.

To control this situation, the government has launched a Green Transport Strategy (GTS) for South Africa (2018-2050). The GTS seeks to address and limit the negative environmental impacts of the transport sector in South Africa, by providing a clear and distinct route for environmental policy directives and mapping out resilient climate change initiatives for the sector that include joint ventures with other spheres of government and the private sector174.

Linked with this is the National Climate Change Response Policy, which mandates the Department of Transport (DoT) to lead a Transport Flagship Programme to facilitate “the development of an enhanced public transport programme to promote lower-carbon mobility in five metros and in 10 smaller cities and create an Efficient Vehicles Programme with interventions that result in measurable

improvements in the average efficiency of the South African vehicle fleet by 2020”. This policy intervention aspires to encourage new efficient-vehicle technologies, such as electric vehicles, by setting procurement objectives for acquiring such vehicles. Furthermore, the planned rail recapitalization programme is equally an integral component of this Programme, in so far as it will facilitate both passenger modal shifts and the shift of freight from road to rail.

Uganda

Uganda’s transport system is critical to achieving its climate change ambitions. The transport system is divided into five sectors: (1) roads and road transport; (2) rail transport; (3) air transport, (4) inland water transport; and (5) other modes.

In total, the public road network, including both classified and unclassified roads, comprises more than 140,000 km. A major challenge is the huge number of vehicles on roads, something which is growing rapidly, with an average increase of more than 10 per cent per year.

On average, Uganda emits 4.9 million tons (or 0.2 tons per capita) of carbon dioxide per year. Combined, the transport and agriculture sectors represented 62 per cent of national emissions in 2000 and are projected to represent 70 per cent by 2030 under a ‘business as usual’ scenario. The government of Uganda has invested in and promoted transportation services to Ugandans through the construction of quality roads. The country further has committed to invest in electric vehicles, motorcycles and the development of a light rail.

The Urban Mass Transit System (LRT) is also proposed as one of Uganda’s mitigation measures to address high pollution in the transport sector which has worsened the impacts of climate change. Currently, Uganda is in the process of manufacturing electric vehicles by the Kiira Motors Corporation (KMC) and back in 2011, Uganda’s first electric car was produced.

Together with the above, the Ugandan government has taken a number of green initiatives one of which is the National Transport Master Plan unveiled in 2009 which has the following primary objectives: “(1) serve as a long-term reference framework for developing plans for individual transport modes; (2) provide key

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178 https://www.sgr.go.ug/light-rail-transit
input to the overall national planning process; (3) provide key input to the regional transport planning; (4) create a framework for investment decisions for both the private and public sectors; and (5) create a high-quality transport planning capability within the Ministry of Works and Transport. Across all three countries, the transport sector accounts for significant GHG emissions and urban air pollution. These pollutants from the transport sector are powered by fossil-derived gasoline, diesel and liquid coal. Transiting to a less carbon-powered transport economy will not be easy because of the prominent social and economic inequalities in each of the three countries, and in extension Africa. Ultimately to raise eco-transport ambitions, countries must not only work to improve the welfare and living conditions of citizens but also explore pathways to transport decarbonization that recognizes local needs, realities and purchasing power. A true decarbonization of the transport sector in these three countries must be able to offer finance and access to low-cost electric or solar vehicles to the populace.

In both Nigeria and Uganda, motorcycles and cheap public vehicles are very popular means of transport and sources of livelihood for many individuals. To replace these transport means with sustainable systems, authorities, investors and economic players must find a way to ease the initial cost of buy-in for people, most importantly, at this period when prices are still high in the energy sector. A good example of this approach is in Uganda where Startups such as Zembo offer a lease-to-own model to motorcycle riders, and Stima Mobility offers battery swapping services where riders benefit from a pay-go-system where they swap used electric motorcycle batteries for already charged batteries.

(5) NET ZERO

Simply put, Net Zero is the balance between the amount of GHG produced and the amount removed from the atmosphere. Net zero is arrived at when the amount of GHG added is no more than the amount taken away. The IPCC 2018 report demonstrates that net emissions must be reduced to zero to stabilize global temperatures. The report also states that any scenario that does not involve a reduction to zero will not stop climate change. This objective has been ratified by Switzerland, the EU, and many other countries, under the Paris Agreement. The COP26 in Glasgow provided the participating countries an opportunity to announce their commitments to achieving net zero.

180 https://techcabal.com/2021/04/12/electric-mobility-in-africa-could-be-the-next-big-thing-for-global-investors/
Nigeria

Nigeria’s 2021 Climate Change Act provides an ambitious framework for mainstreaming climate actions in line with national development priorities and sets a net-zero target for 2050-2070. The Act codifies national climate actions by mandating the Ministry of Environment to among other actions, set a carbon budget. It further approves the formulation of a National Climate Change Action Plan every five-year cycle to ensure that the national emission profile is consistent with the carbon budget goals and prescribes measures for identifying actions for climate adaptation and mitigation.¹⁸¹

South Africa

South Africa’s Low-Emission Development Strategy and Just Transition Framework envisions a net zero GHG emissions by 2050. But given the country’s heavy reliance on coal plus its triple challenge of inequality, poverty and unemployment, this may drag. To leverage the process, South Africa must invest in deploying renewables on a massive scale to displace fossil fuels such as coal as its primary energy carrier, stimulate the emergence of more climate-friendly investments, and adoption of cleaner energies.

Uganda

Despite the various ambitions stated in Uganda’s NDC and other climate action documents to invest in and expand renewable energy infrastructure, there is no clear pathway in Uganda towards achieving net zero in the nearest future. This is because the government is currently investing in oil and gas developments like the Tilenga, Kingfisher and EACOP projects at a time when countries are phasing out the development of new oil and gas projects in order to achieve the goals of the Paris Agreement.

With fossil fuels still taking up 84 per cent¹⁸² of the world’s energy mix, and the universal use of clean energy sources still in its infancy, upon commencement of production in 2025, Uganda’s oil will have a ready market for a period of at least 40 years. The current global energy demand indicates that oil and gas will continue to play a leading role in the world's energy mix and will remain the largest source of fuel needed to meet the 2040 global demand. Uganda's oil and gas developments surely undermine the Paris Agreement and net zero emissions by 2050 given that the consumption of fossil fuels is the greatest contributor to global GHG emissions.

¹⁸² https://allafrica.com/stories/202109150441.html
(6) MITIGATION AND ADAPTATION

Climate Change Mitigation and Adaptation are the two paths to addressing the impacts of the climate crisis. Mitigation refers to efforts to reduce or prevent the emission of greenhouse gases. Adaptation on the other hand is about adapting to life in a changing climate. The goal is to reduce risks from the harmful effects of climate change such as sea-level rise, extreme weather events, or food insecurity.

Nigeria

The revised National Policy on Climate Change offers a holistic framework to guide the country’s response to the development challenge of climate change. As a framework document, it prescribes strategic sectoral and cross-sectoral actions for the management of climate change within the country. The Government of Nigeria recognizes that responding to climate change through adaptation initiatives would require concerted effort and strategic exploration of opportunities to build a climate-resilient society that is able to withstand or recover quickly from difficult conditions caused by the adverse effects of climate change, including climate-related hazards and disasters.

Thus, Nigeria’s policy direction in adaptation is to reduce the vulnerabilities of its people to the impacts of climate change by promoting community and ecosystem resilience while also ensuring that women, girls and other vulnerable groups are engaged and involved in planning and implementing long-term climate change adaptation interventions.

In Agriculture, Nigeria is promoting efficient, gender-responsive, socially inclusive and climate-smart crop production, fishery and livestock development practices. It is also supporting effective research and knowledge development and management to connect farmers, policymakers, businesses and researchers to adapt to dynamic current and future climates scenarios, develop and apply improved production and risk management technologies in agriculture.

In forestry, there is massive investment in the management of forest resources, and the facilitating of sustainable regulatory frameworks and incentives, as well as financial mechanisms for the implementation of the REDD+ Strategy and the Great Green Wall Initiative. Other measures are to enhance forest capacity for adaptation by reducing ecosystem vulnerability and reducing exposure of the ecosystems to extreme events.

In the energy sector, there is considerable investment in protective energy infrastructures aimed at reducing loss and damage caused by climate-related
extreme events, there is also the promotion of decentralized energy systems to increase resilience, with emphasis on mini grids and stand-alone systems that will improve access to energy, particularly in rural areas.

South Africa

South Africa’s climate priorities consist of climate adaptation and mitigation measures. In line with this, the South African Cabinet has approved key climate actions including “the creation of a Presidential Climate Change Coordinating Commission, South Africa’s Low Emissions Development Strategy, a National Climate Change Adaptation Strategy, and a carbon tax.

To ensure the economy can benefit from green economy technologies and industries, the National Employment Vulnerability Assessment and Sector Job Resilience Plans is focused on five value chains: coal, metals, petroleum-based transport, agriculture, and tourism”183. Likewise for mitigation, the government of South Africa has identified key sectors and they are: energy, waste, industrial processes and product use, and agriculture, forestry, and other land use184.

The country’s Department of environmental affairs and tourism proposes that climate change mitigation interventions should be informed by, and monitored and measured against “the following “peak, plateau and decline” emission trajectory – (a) Greenhouse gas emissions stop growing (start of plateau) in 2020-25 at 550 Mt CO2-eq, (b) Greenhouse gas emissions begin declining in absolute terms (end of plateau) in 2030-35, and (c) Long-term greenhouse gas emission level reduces to levels required by science by 2050-60"185.

Uganda

Uganda’s updated NDC maintains adaptation as the priority response measure to addressing climate change. The country will continue to address adaptation in key vulnerable sectors and build adaptive capacity at all levels, address loss and damage, and increase resilience at the grassroots level.

Priority mitigation measures and targets will cut across electricity generation, transport, energy, agriculture, forestry and other land uses, wetlands and peatlands, solid waste, wastewater, mineral, and industrial processes and product use. The AFOLU sector is the greatest contributor to Uganda’s GHG

emissions, especially due to deforestation for various reasons including energy use, agriculture and logging. Priority mitigation policies and measures in the AFOLU sector are from REDD+ activities, based on the National REDD+ Strategy and Action Plan published in 2017 (MWE, 2017).

(7) FOREST AND LAND DEGRADATION

Forest Policy can be defined as a plan of action designed to indicate what proportions of a nation’s land area should be allocated or allotted. It consists of those principles which govern the actions of the people with respect to forest reserves. It is adopted to avoid scarcity of forest resources and to prevent abuse of forest land\(^\text{186}\). On the other hand, land degradation is a negative trend in land conditions, “caused by direct or indirect human-induced processes including anthropogenic climate change, expressed as long-term reduction or loss of biological productivity, ecological integrity or value to humans”\(^\text{187}\).

The United Nations General Assembly “has declared the years 2021 through 2030 the UN Decade on Ecosystem Restoration. Led by the United Nations Environment Programme and the Food and Agriculture Organization (FAO), the UN Decade is designed to prevent, halt and reverse the degradation of ecosystems worldwide. This global call to action was launched on 5 June, World Environment Day. It will draw together political support, scientific research and financial muscle to scale up restoration with the goal of reviving millions of hectares of terrestrial and aquatic ecosystems”\(^\text{188}\).

Nigeria

Nigeria is known for the highest rate of deforestation in the world. Due to climate change, the country had between 50 per cent and 75 per cent of its land mass in 11 states in its northern region affected by desertification in 2015\(^\text{189}\). Equally, Nigeria suffers extreme land degradation that manifests in the formation of gullies and ravines, particularly in southeastern parts of the country. Furthermore, Nigeria has lost about 351,000 hectares of land to desert encroachment, which is advancing southwards at a rate of about 0.6 kilometers per year, say news reports\(^\text{190}\).

\(^{186}\)http://unaab.edu.ng/lunaab-ocw/opencourseware/Forest%20Policy,%20Law%20And%20Administration.pdf
Launched in April 2022, Nigeria’s Forest Policy contains relevant strategies in line with globally accepted priority areas of sustainable forest management which includes forest resources, biodiversity, forest health and vitality, protection functions of forests, etc. Guided by a vision of sustainable management of forest ecosystems, socio-economic growth, environmental sustainability, and provision of goods and services for domestic purposes and export for the benefit of the nation, “the revised 2022 National Forest Policy sets out strategies for growing the sector further and addressing emerging environmental issues like climate change resulting from increased population with its attendant pressure on the forests and its resources”. 191

To mitigate the effect of land degradation, the government has funded and executed several drought and desertification control projects across the country, especially in vulnerable frontline states. This includes afforestation programmes, development of teak and erosion-resistant species and establishing green belts.192

South Africa

According to the United Nations FAO, 7.6 percent or about 9,241,000 ha of South Africa is forested. “Of this 10.2 percent (947,000) is classified as primary forest, the most biodiverse and carbon-dense form of forest. South Africa has 1,763,000 ha of planted forest. South Africa's forests contain 807 million metric tons of carbon in living forest biomass”193. According to figures from the World Conservation Monitoring Centre, South Africa has some 1632 known species of amphibians, birds, mammals, and reptiles. Of these, “13.4 percent are endemic, meaning they exist in no other country, and 6.5 percent are threatened”194.

Also in South Africa, land degradation is a significant issue where nearly 60 percent of the land is degraded195. Before apartheid ended in 1994, nearly 3.5 million African people were resettled in South African ‘homelands’, now called the communal areas, where enforced high densities of people and livestock have resulted in rangeland degradation. Closely linked to this is the phenomenon of woody plant encroachment caused by climate change, overgrazing and unsustainable land management practices arising from a high population-to-land ratio, complicated land tenure systems stemming from the apartheid era amongst other factors196.

193 https://rainforests.mongabay.com/deforestation/2000/South_Africa.htm
194 Ibid
196 Ibid
Various contemporary policies of South African government departments have the potential to address climate change and woody encroachment issues. For instance, South Africa is a signatory to the United Nations Convention to Combat Desertification and is aiming to achieve “land degradation neutrality” by 2030. Also, the South African National Terrestrial Carbon Sink Assessment focuses on biomass energy “for climate mitigation by using invasive alien species and species causing bush encroachment”\textsuperscript{197}.

**Uganda**

Uganda faces serious challenges of deforestation and has one of the highest global deforestation rates, majorly due to its poor energy supply. With only about 10 per cent having access to electricity, the rest of its population is forced to rely on other sources for energy. Unfortunately, this means that many people encroach on Uganda’s forests and cut down trees for fuel. In 2001, members of the country’s Parliament called on the government to address the increasing deforestation across the country following reports of rampant tree cutting for charcoal burning and timber.

In response, Uganda’s Minister of Environment, Beatrice Anywar, informed legislators that her Ministry had been carrying out operations in certain districts to arrest problems of rampant tree cutting and charcoal burners. She also pledged to “expeditiously process the National Forestry and Tree Planting Act to strengthen the protection of trees and forests”\textsuperscript{198}. Although Uganda has a number of notable policies that aim to preserve its forests, the implementation of provisions contained in the law is weak.

**8) GREEN ECONOMY**

A green economy is one in which growth is driven by public and private investment in economic activities, infrastructure, and assets that reduce carbon emissions and pollution, and enhance conservation, energy and resource efficiency, biodiversity, and the ecosystem. A green economy inspires economies to become more sustainable and low-carbon and guarantees that natural assets continue to provide the resources and environmental services for the continued well-being of man and the ecosystem.

\textsuperscript{197} https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/pan3.10260
\textsuperscript{198} Parliament.go.ug/news/5034/use-tougher-means-stop-deforestation-mps
Nigeria

To deliver the green economic switch as envisaged by Nigeria’s NDCs, the Nigerian government issued the first sovereign green bond in Africa in 2017 and a second green bond series in 2019. In doing so, the country raised NGN 10.69 billion and NGN 15 billion in 2017 and 2019 respectively to finance energy and land-use projects, among others.\textsuperscript{199} Recently, Nigeria launched a Green Energy Project that is meant to stimulate sustainable climate-smart agriculture and renewable energy and create jobs for economic growth as well as help Nigeria’s diversification efforts. The $1.35 billion Team Europe (TEI), and the EU Initiative will try to assist Nigeria to achieve low carbon, resource-efficient and climate-resilient development. It will create jobs for the youth and stimulate economic growth, focusing on climate-smart agriculture, circular and digital economy and improving the competitive advantage of Nigeria’s agriculture across the agricultural and energy sectors value chain.

In line with the EU’s Green Deal, the Green Economy Initiative will support the Nigerian government’s efforts to diversify the economy by combining support to enhance access to renewable energy for productive uses and boosting the development of the agricultural sector while integrating circular economy principles in the development models. Collectively, the actions will help Nigeria attain its SDGs and put the country on a sustainable development path.\textsuperscript{200} It is one of the many policies that made up the 2021 – 2030 National Climate Change Policy for Nigeria.

South Africa

South Africa views the green economy as a sustainable development path that will address the interdependence between economic growth, social protection and the natural ecosystem. A green economy in the South African context implies the decoupling of resource use and environmental impacts from economic growth, and it is characterized by substantially increased investment in green sectors, supported by enabling policy reforms.\textsuperscript{201} Overall, the South African approach is to ensure that green economy programmes are reinforced by practical and implementable action plans. South Africa’s prioritization of a green economy is mainstreamed in a series of policies some of which are listed below:

- 2009 framework response to the international economic crisis
- Medium Term Strategic Framework 2009- 2014

\textsuperscript{199} https://ng.boell.org/en/2022/02/09/nigerias-green-bond-programme
\textsuperscript{200} https://www.esi-africa.com/renewable-energy/game-changing-1-3bn-funding-for-nigerian-green-energy-project-launched/
\textsuperscript{201} https://www.dffe.gov.za/projectsprogrammes/greeneconomy/introduction
Uganda

Uganda has significantly increased investments in green economy alternatives as a measure to address climate change and environmental challenges in the country. The country’s vision 2040 aspires to pursue economic development and socioeconomic transformation premised on the principles of a green economy such as equity, environmental sustainability, resource efficiency, climate change adaptation and mitigation and inclusiveness. The Ugandan government has also developed a Green Growth Development Strategy to operationalize green growth principles and stimulate economic growth while creating new opportunities for decent employment.

(9) RENEWABLE ENERGY INFRASTRUCTURE

Renewable energy infrastructures are systems for the delivery of usable energy collected from renewable and naturally replenishing resources like sunlight, wind, rain, rivers, tides, ocean waves and geothermal heat. Renewable energy infrastructures range from rooftop solar, large offshore or onshore wind farms, large scale batteries, geothermal energy, large solar farms, green hydrogen energy, home batteries or battery to grid vehicles, pumped hydro and hydro, plus smaller community energy projects, micro-grids, and potentially small-scale nuclear reactors

Nigeria

Nigeria has an installed capacity of 12,500 megawatts of electricity but is only able to dispatch around 4,000 MW, which is insufficient for its population of about 200 million people. Power generation in Nigeria is largely dependent on natural gas, at 87.5 per cent of the on-grid energy supply mix. Due to perennial challenges with grid infrastructure and other well-documented constraints to reliable power supply, a large proportion of the economy is reliant on off-grid, captive energy generation, which is, for the most part, powered by petrol and diesel.

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202 Ibid
203 https://theregenerators.org/action-areas/rethink-energy/build-a-scalable-renewable-energy-infrastructure/
In recent years, the focus on renewables has become stronger and it is growing to become a focus of the Federal Government of Nigeria’s (FGN)’s electricity policy. This has resulted in the introduction of policy and regulatory instruments geared towards stimulating investment in the renewables sector. In 2015, the country’s Federal Executive Council approved the National Renewable Energy and Energy Efficiency Policy (NREEEP) which is broadly geared at removing barriers that put renewable energy and energy efficiency at economic, regulatory, or institutional disadvantages and providing a conducive political environment that will attract investments in the renewable energy and energy efficiency arena.

Riding on this federal policy mandate, Nigerian Bulk Electricity Trading Limited (NBET), the government-owned utility which serves as a central counterparty between generators and retail distributors, executed power purchase agreements with 14 solar photovoltaic IPP developers, demonstrating a drive to adopt renewable energy sources as viable electricity generating sources. Also in 2015, NERC issued the Regulations on Feed-In-Tariff for Renewable Energy Sourced Electricity in Nigeria (REFIT). This applies to energy generated and supplied through the national grid and orders that NBET and electricity distribution companies shall, as a matter of priority, purchase 50 per cent of the renewable energy electricity capacity limit established by the regulations.

In line with the policy’s priority of diversifying Nigeria’s on-grid energy mix, REFIT also provides a special tariff framework for renewables, in the form of feed-in-tariffs which were designed to be attractive to private investors. Nigeria continues to seek ways to reduce its carbon footprints and transition to renewable energy sources. It is imperative that the country sets the pace by meeting the global Sustainable Development Goals. Environmental, social and governance-related issues are becoming increasingly more critical for providers of capital, and renewable energy tends to be an important element of this, particularly in countries such as Nigeria, where energy asset development represents a large proportion of infrastructure investment.

There are also a number of clean energy initiatives in the country. This includes the four billion naira 10MW Federal Government/Kano solar power project in Kumbotso Local Government of Kano state. When completed, the new solar power plant is projected to bridge energy supply gap to industries in Kano, while making the state one of a few in the country that will have several photovoltaic installations for the supply of electricity.

There is also the Energizing Economies Initiative (EEI) implemented through the Rural Electrification Agency (REA) which involves the deployment of solar
infrastructures to provide clean, affordable, and efficient off-grid power to Micro, Small, and Medium Enterprises (MSMEs) in 340 economic clusters across the country. Some of these clusters are: Iponri Shopping Complex and Sura Shopping complex both in Lagos state, Ariara market in Abia State, Edaiken market in Edo state, Ita Osun market in Ogun state, NEPA 1, NEPA 2 markets and Isinkan markets in Ondo state, and Kanti Kwari in Kano State. The aim of these projects is to reduce energy costs, boost the ease of doing business and as well help Nigeria fulfil its commitment to the Paris Agreement to reduce carbon emissions. Unfortunately, five years after, traders and artisans across the clusters are complaining of tariff cost, low-quality supply which fails to power heavy appliances, and inefficiency amidst a host of challenges which have resulted in traders combining the usage of grid and fossil-burning energy source like generators alongside the solar infrastructures thereby defeating one of the objectives of the project which is to promote alternative clean solar energy in Nigeria’s informal sector.

There is little doubt that Nigeria has plenty of untapped renewable energy potential, seemingly limited over the years by various factors. However, as stated above, the public sector, industry players, investors, and other stakeholders are rapidly evolving frameworks and initiatives to encourage the sustained growth of renewables into the economy’s energy mix.

South Africa

In an attempt to mitigate CO2 emissions and provide reliable electricity for its people, South Africa is gradually developing its renewable energy sector. In 2003, South Africa released a white paper detailing how the country will generate 10 TWh of electricity from Renewable Energy sources e.g., biomass, wind, solar and small-scale hydro. This policy document serves as the basis for Renewable Energy technologies development in South Africa to date.

In 2009, the government began exploring feed-in tariffs (FITs) for renewable energy, but these were later rejected in favor of competitive tenders. The resulting program is known as the Renewable Energy Independent Power Producer Procurement Program (REIPPPP) - an ambitious initiative for Renewable Energy generation in South Africa which has three (3) main themes that are centered around the reduction of CO2 emissions; improvement in generating capacity and finally, an avenue for economic development.

The initiative has since been successful with the diversification of energy generation to over 60 power producers and has led to the steady increase in the Renewable Energy capacity in South Africa\textsuperscript{205}. It has also successfully channeled substantial private sector expertise and investment into grid-connected renewable energy in South Africa at competitive prices\textsuperscript{206}.

To date, a total of 64 projects have been awarded to the private sector, and the first projects are already online. Private sector investment totaling US$14 billion has been committed, and these projects will generate 3922 megawatts (MW) of renewable power. Prices have dropped over the three bidding phases with average solar photovoltaic (PV) tariffs decreasing by 68 per cent and wind dropping by 42 per cent, in nominal terms. Most impressively, these achievements all occurred over a two-and-a-half-year period\textsuperscript{208}.

Another notable project is the ZAR 11.6 billion Redstone concentrated solar power (CSP) project. Located in the Northern Cape Province of South Africa, the Redstone project will be equipped with a 12-hour thermal storage system that will deliver clean and reliable electricity to nearly 200,000 households round the clock. The Redstone CSP will also “offset an estimated 440 metric tons of CO2 emissions per year while also providing value-adding ancillary services to Eskom, and it is the first renewable energy project to offer ancillary services in the country.

\textsuperscript{205} Ibid.
\textsuperscript{206} https://openknowledge.worldbank.org/handle/10986/20039
\textsuperscript{207} Ibid.
\textsuperscript{208} Ibid.
The project is certified under the Climate Bonds Standard and Certification Scheme and aligned with the goals of the Paris Climate Agreement which seeks to limit global warming to under 2 degrees Celsius. Indubitably, renewable energy sources as an alternative energy source in South Africa can seriously reduce the over-reliance on coal which is a finite and environmentally unfriendly resource. This is aside from its job-creating opportunities thereby improving the South African economy. Additionally, due to the geographical location and human population of South Africa, several renewable energy sources have significant potential in the country thereby potentially positioning the country as a leader in the carbon-free future.

Uganda

Uganda has many renewable energy resources that can be used for energy production and the provision of energy services. They include bioenergy, biomass and biogas, water/hydro, solar, geothermal and wind energy potential. The country’s physical energy resource potential includes an estimated 2,000MW of hydroelectric power, 450MW of geothermal energy, 1,650MW of biomass cogeneration (often at sugar manufacturing plants), 460 million tons of biomass in stock with a sustainable annual output of 50 million tons, an average of 5.1kWh/m2/day of solar energy, and about 250 million tons of peat (800MW). The total potential of renewable energy power generation is estimated at 5,300MW.

However, this energy potential has yet to be fully utilized. Around 50 per cent of the country’s population have access to any form of electricity and about 24 per cent have access to electricity for more than 4 hours per day. Uganda’s renewable energy infrastructure consists of the following:

1. **Hydro:** Uganda’s current hydropower sector is the country’s largest source of renewable electric energy. The country’s electricity sub-sector has rapidly expanded since 2001, from just three generation plants to over 40 plants and still increasing in 2021. The total installed generation capacity started at 60 MW in 1954, and increased to 400MW in 2000, 800MW in 2013, and about 2,000MW in mid-2021. Most of the country’s electricity generation comes from hydro plants owned by the state-run Uganda Electricity Generation Company (UEGCL), with the largest located along the River Nile.

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210 https://www.sciencedirect.com/science/article/pii/S111001682100295#b0080
212 Ibid.
(2) **Bioenergy:** Biomass and biogas, are the most used sources of energy in Uganda, accounting for up to 94 per cent of the country’s total energy consumption. The total standing biomass stock is 284.1 million tons per year with a potential sustainable biomass supply of 45 million tons per year. However, the accessible sustainable wood biomass supply stands at 26 million tons per year. This amount meets 59 per cent of the total demand of 44 million tons per year.

The remaining 41 per cent is met by the biomass supply according to representatives of the Uganda National Renewable Energy and Energy Efficiency Alliance (UNREEA).

(3) **Solar:** Solar energy in Uganda has the highest adoption rate among all renewable energy options. The average solar radiation is 5.1kWh/m²/day, with the current solar data showing that solar energy is high throughout the year with a variation (minimum month/maximum month) of only about 20 per cent maximum.

(4) **Geothermal:** Geothermal energy potential in Uganda is estimated at 450MW. Katwe-Kikorongo, Buranga and Kibiro are three suitable locations which have been identified and singled out for exploration as their temperature levels (150°C–200°C) are adequate for electricity generation. Micro-grid systems and off-grid systems provide a solution in the rural areas and villages of the country where the electrification rate is very low at around 38 per cent. Particularly solar energy solutions have been featured in the country’s strategy to scale-up energy access.

With the help of the German Agency for International Cooperation, Uganda is building capacity through the development of high-level vocational training curricula for experienced solar technicians and the country’s educational institutions. Other policies include tax breaks and consumer subsidies as well as rural electrification projects to promote solar energy. Currently, more than 200 companies, including foreign investors, are active in the Ugandan PV and solar thermal field.

“In 2020, the independent power producer Amea Power signed an agreement in Uganda to develop a wind farm with a capacity of 120 MW and a solar PV plant of 10 MWp. Amea Power specializes in the acquisition, development, ownership and operation of power projects.”

Latest policies, programmes and legislations guiding Uganda’s renewable energy infrastructures are (1) Sustainable Energy Response Plan for Refugees and Host Communities in Uganda, (2) Uganda Biofuels Blending Mandate, (3) Global Energy Transfer Feed-in Tariff (GET FIT) Programme Uganda, (4) Double-capped tubular fluorescent lamps - MEPS, and (5) Renewable Energy feed-in tariff\(^{14}\).

\(^{14}\) [https://www.irena.org/IRENADocuments/Statistical_Profiles/Africa/Uganda_Africa_RE_SP.pdf](https://www.irena.org/IRENADocuments/Statistical_Profiles/Africa/Uganda_Africa_RE_SP.pdf)
CHAPTER FIVE

PRIORITY ACTIONS FOR SCALING UP AFRICA’S CLIMATE AMBITIONS

In the preceding chapters, the character and scope of Africa’s energy transition and climate change ambitions have been outlined using three countries in the continent as case studies - one in the West, one in the South, and the other in the East of Africa. Amidst several climate change-related interventions at sectoral and other levels, the updated NDCs of Nigeria, South Africa, and Uganda demonstrate Africa’s enthusiastic commitment towards meeting the global goal of 1.5 degrees Celsius by 2030 despite the continent’s low contributions to carbon emissions.

While multifaceted challenges exist that hamper the climate ambitions of all three countries under study, the progress already made signposts confidence for the future. They show that African countries can take ownership of their own destiny in a united fashion while working in concert at the global level with other partners to drive climate goals. As the continent prepares for COP27, a similar synergy of efforts will be needed from activists, frontline communities, institutions, governments, and the team of African negotiators.

More than ever before, Africa’s voices need to be strengthened and a bold case made at COP 27 for the continent’s climate ambitions on issues of climate financing, carbon credit, loss and damage, and just transition. But COP27 can only be a moment in the long-term campaign for climate justice in Africa. Therefore, we present the following key proposals and recommendations as priority Actions for scaling up Africa’s climate ambitions towards COP27 and beyond.

AFRICAN LEADERS MUST:

1. **Leverage Green Economic Opportunities:** As the world begins to transit to renewables, increased demands for electric vehicles, solar panels, batteries, etc. which are produced with critical minerals some of which are sourced from Africa places the continent at a vantage point to renegotiate its position on the global stage while stimulating inclusive economic growth.
This would require the government of African countries to take the lead and establish an enabling environment for attracting investment in renewables while taking care to avoid re-establishing the exploitative, anti-development, and environmentally damaging character of fossil fuel extractivism of the past decades.

2. **Remove Barriers to Renewable Energy Technologies in Africa Such as Import Tariffs**: This is necessary to make renewable energy accessible and affordable to a majority of the energy-poor African population. For instance, Nigeria still imposes import tariffs on renewable energy components. A zero tax on renewable components alongside other incentives will go a long way to speed up the process towards improved energy access in the country and Africa.

3. **Withdraw Support for Heavy-Carbon Project**: Such projects like Dangote refineries and petrochemicals, EACOP in Uganda are targeted at locking Africa into fossil fuel dependency. African governments must withdraw all support for such projects.

4. **Frame Just transition in an African Context**: There is a need to draw up a Just Transition Agenda for Africa which frames the understanding of an energy transition from an African context in order to take care of the “one-size fits all” conception of the subject in mainstream conversation which fails to account for Africa’s peculiarities. A just transition in an African context must be equitable, inclusive, gender-sensitive, and respect the language, cultural and religious rights of peoples, including acknowledging local realities, expectations, and concerns of communities while also offering space for social dialogue.

5. **Protect Workers and Communities**: Every transition comes with a price, and sometimes pain. However, with the right policy and social protection, employees in heavy-carbon industries and communities can be protected. We need programmes to re-train and relocate skills from fossil fuel industries to renewables, and remedial measures to upgrade fossil-fuel communities (Niger delta in Nigeria, coal-dependent communities in South Africa, etc.) with a view to protect lives and livelihood.

6. **Harness Capacity to Secure Funding Support to Finance Africa’s Climate Ambition**: The Africa Group of Negotiators has called for $1.3 trillion a year in climate finance to be made available from 2025. There is a need to utilize the global stage afforded by COP 27 to campaign and secure commitment to this as well as a strategy to follow up and net in the commitments after the conference.
7. **Ensure inter-ministerial synergy and policy harmony to drive climate goals:** Disharmony and misalignment within government bureaucracies is a major factor hampering Africa’s climate change aspirations. In some cases, climate change ambitions are antithetical to overall economic and growth imperatives. Hence the need to ensure inter-ministerial synergy and policy harmony to drive the implementation of climate goals.

8. **Drop False Solutions:** Prevailing conversation which puts forward carbon market, trading schemes, and gas as a transition fuel as a pathway towards carbon emission reduction begs the question. They are false capitalist solutions that do not move the needle on climate goals but are intended to make the big polluters avoid reckoning and perpetuate fossil fuel burning. The only pathway towards climate justice, carbon neutrality, and just transition is by stopping fossil fuel burning, transitioning to renewables and green energy, making the polluters pay for loss and damage, and by transforming societies towards economic and political paradigms that promote inclusive growth and development.

8. **Increase Climate Change Education and Awareness:** While many people in Nigeria, South Africa, and Uganda are noticing the effects of climate change around them, they are starved of real-time information on what exactly it is or what must be done to address these changes especially as climate change is fueled by human activities and interactions with the environment. Successful national adaptation and mitigation responses to climate change must be fair, inclusive, and generate broad public support. Accordingly, there is a need to raise public awareness of the causes and conditions of climate change in order to influence voluntary actions toward mitigating climate change impacts on society.

9. **Ensure Human Rights Protection:** Mainstream human rights protection into climate change mitigation and adaptation actions while encouraging social dialogue with communities, media, and civil society to negotiate Africa’s energy transition imperatives.

10. **Build Capacity for Emergencies:** The recent flood in Nigeria shows that while early warning systems have improved, Nigeria continues to lack effective response mechanisms for weather emergencies like well-trained and equipped firefighters, police and civil defense units, well-equipped hospitals and field clinics, public shelter, manned and unmanned aerial surveillance, etc. Building capacity in this regard will save lives while providing protection and succour to affected communities.
THE GLOBAL COMMUNITY MUST:

1. **Pay for Loss and Damage:** It is time for the global north to pay up loss and damage for historical losses suffered by individuals and communities on the frontline of the climate crisis in Africa. This demand has been a prominent component of the African agenda at COP and other conversations on climate change.

2. **Cancel the Debt:** Africa’s economies need a breather through debt cancellation and forgiveness in order to better focus on climate change mitigation and adaptation ambition.

3. **Withdraw Support for Heavy-Carbon Projects in Africa:** European governments, banks, and financial consortiums must stop funding heavy-carbon projects in Africa.

4. **Stop fossil Fuel Burning:** The most contribution to global warming comes from the industrialized world. False solutions like carbon trading will continue to create a false sense of progress while global temperature continues to rise. We need a concerted effort to stop fossil fuel burning and move towards the use of renewables to accelerate the reduction of GHG emissions and global warming.

5. **Drop False Solutions:** The turn by American and European economies towards Africa for new sources of natural gas supply in view of the unfolding energy crisis caused by Russian invasion of Ukraine is a false solution that risks locking Africa in fossil fuel dependency while undermining global climate goals including the 2030 GHG emission target of 1.5°C.

This decision which is being driven by Big Oil which hopes to benefit is rather unfortunate as it exposes the hypocrisy of the leaders of the Global North who all the while had opposed Africa’s proposal to use gas as transition energy but are quick to abandon their support for the global climate goals once their economies were hit by the energy crisis. He who comes to equity must come with clean hands.
The leaders of the West cannot on one hand, exhort African countries which are already overwhelmed by hunger, unemployment, and energy poverty to demonstrate fidelity to climate goals while they, on the other hand, abandon it at the first sign of trouble. As the world marches towards COP27, the leaders of the West must retrace their steps and begin immediate investment in renewable projects that can help to gradually erect an adequate green energy architecture to replace fossil fuel.

6. **Channel Finance and Technical Support:** International financiers need to contribute to the development of renewable energy infrastructure in Africa in adherence to a just energy transition.
BIBLIOGRAPHY


53. AU/ACMEN 2009


55. Loss and Damage Financing: CAPPA Engages Proceedings from BONN Climate Change Intersessional. (2022, June 18). CAPPA - Corporate Accountability and Public


76. https://climateactiontracker.org/countries/nigeria/policies-action/


129. https://nema.go.ug/content/uganda-first-earn-215155-climate-change-mitigation-program


144. https://www.sgr.go.ug/light-rail-transit


166. https://openknowledge.worldbank.org/handle/10986/20039


