

# NIGERIA'S NATIONALLY DETERMINED CONTRIBUTION (NNDCC), 2015

Submitted by:  
The Federal Republic of Nigeria

Being a Requirement by Conference of Parties to the United Nations Framework Convention on Climate Change (COP-UNFCCC)

Prepared by The Ministry of Environment, Abuja



## Simplified Summary

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## EXECUTIVE SUMMARY

Nigeria's Nationally Determined Contribution (NDC) shows its global commitment towards embracing sustainable development measures that limit the rate of global warming and negative impacts of climate change. It shows the country's climate targets and measures to be adopted in actualizing them.

This Guide provides a simplified summary of Nigeria's NDC -- primarily for off-grid renewable energy stakeholders. It provides a context to the NDC, key aspects, summary of targets, mitigation and adaptation measures, key stakeholders, strategy, and update on current implementation status.



## CONTEXT

In 2015, 196 countries came together under the Paris Agreement to transform their development trajectories and set the world on a course towards sustainable development, aiming at limiting global warming to 1.5 to 2 degrees Celsius above pre-industrial levels.

Nationally determined contributions (NDCs) are at the heart of the Paris Agreement and the achievement of these long-term goals. They embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. Together, these climate actions determine whether the world achieves the long-term goals of the Paris Agreement and the effort it needs to put in place to get there.

Nigeria is one of the ten most vulnerable countries to climate change in the world according to the 2014 World Climate Change Vulnerability Index.

Nigeria's Intended Nationally Determined Contribution (INDC) which it submitted as a requirement to the Paris Agreement became its NDC in March 2017 after ratification of the Paris Agreement by the Federal Government.<sup>1</sup>

The NDC builds on the **2012 Nigeria Climate Change Policy Response and Strategy** which aims to foster low-carbon, high growth economic development and build a climate resilient society. It seeks to promote sustainable development with policies and measures seeking to deliver immediate development benefits that do not compromise sustainable growth.

The federal government faces the challenge of sustained and coordinated implementation of various policies and measures across a whole range of sectors. The NDC aims to be instrumental in making progress in this regard.



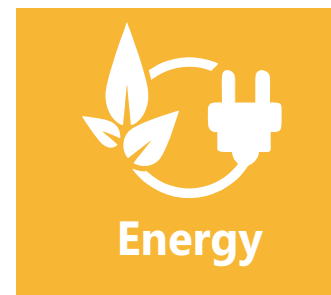
<sup>1</sup> Odogwu, G. (2017) Contradictions in Nigeria's Nationally Determined Contributions. Punch Newspapers.

## LEGAL FOUNDATION

Nigeria's NDC is a **voluntary climate action** based on its national circumstances and priorities, and is not legally binding. However some components have legally binding obligations such as regularly communicating and maintaining the NDC, pursuing domestic mitigation measures, and regularly providing information on the country's national inventory of emissions. The achievement of the NDC is not a legally binding obligation, but necessary for the implementation of the Paris Agreement.



## CLIMATE CHANGE IMPACT



## SUMMARY OF KEY ASPECTS OF NIGERIA'S NDC

Aspect	Detail	Aspect	Detail
<b>Type of Objective</b>	Reduction from Business as Usual (BAU)	<b>Emissions Per US\$ (Real) GDP</b>	0.873kg CO <sub>2</sub> e (2015) 0.491kg CO <sub>2</sub> e (2030)
<b>Target Year</b>	2030	<b>GDP Per Capita (US \$)</b>	2,950 (2014) 3,964 (2030; real 2015 US\$)
<b>Implementation Period</b>	2015-2030	<b>Estimated Emissions Per Capita</b>	Current: around 2 tonnes CO <sub>2</sub> e 2030 BAU: around 3.4 tonnes CO <sub>2</sub> e 2030 Conditional: around 2 tonnes Co <sub>2</sub> e
<b>Base Data Period</b>	2010-2014	<b>Global Warming Potentials Used</b>	IPPC Fourth Assessment Report
<b>Summary of Objective</b>	Economic and social development: grow economy 5% per year improve standard of living, electricity access	<b>Cost Estimate Data</b>	National Cost = \$142b; National Benefits = \$304b (World Bank report "Low Carbon Development Opportunities for Nigeria" (2013))
<b>Unconditional and conditional mitigation objectives</b>	20% unconditional 45% conditional	<b>Gases Covered</b>	CO <sub>2</sub> , N <sub>2</sub> O, Ch <sub>4</sub>
<b>Energy Related Key Measures</b>	<ul style="list-style-type: none"> <li>• Work towards ending gas flaring by 2030</li> <li>• Work towards off-grid solar PV of 13GW (13,000MW)</li> <li>• Efficient gas generators</li> <li>• 2% per year increase in energy efficiency (30% by 2030)</li> <li>• Improve electricity grid</li> </ul>	<b>Emissions As % of Global Total</b>	< 1% (2010)
		<b>Historical Emissions (1850-2010)</b>	2,564.02 million Tonnes



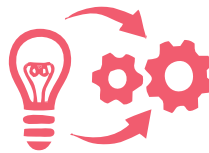
### Key Mitigation measures

Measure	Potential GHG reduction (million tonnes per year in 2030)
Economy-wide energy efficiency	179
Efficient gas power stations	102
Work toward ending of gas flaring	64
Reduce transmission losses	26
Renewable Energy	31

### Key Sectors

Agriculture (Crops and Livestock)	Freshwater Resources, Coastal Water Resources and Fisheries
Forest	Biodiversity
Health & Sanitation	Human Settlement and Housing
Energy	Transportation & Communication
Industry & Commerce	Disaster, Migration & Security
Livelihoods	Vulnerable Groups & Education

## STRATEGIES FOR ENERGY



- Include increased protective margins in construction and placement of energy infrastructure (i.e. higher standards and specifications).
- Undertake risk assessment & risk reduction measures to increase resilience of the energy

- Strengthen existing energy infrastructure, in part through early efforts to identify and implement all possible 'no regrets' actions.
- Develop and diversify secure energy backup systems to ensure both civil society and security forces have access to emergency energy supply.
- Expand sustainable energy sources and decentralize transmission in order to reduce vulnerability of energy infrastructure to climate impacts.

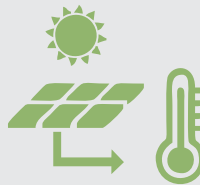
## MITIGATION CONTRIBUTIONS SUMMARY

### Business as Usual (BAU) Emissions Projections



Developed following careful review of the re-based GDP data for 2010-2014 and official population projections. The BAU scenario assumes an economic growth at 5%, population growth of 2.5% per year, 100% access to electricity (both on- and off-grid), and industry triples its size by 2030. Emissions are projected to grow 114% by 2030 to around 900 million tonnes – around 3.4 tonnes for every Nigerian. Under a high growth scenario, with economic growth at 7%, this climbs to over one billion tonnes.

### Mitigation Potential Assessment



- Reducing air pollution
- Innovation in "clean" technologies
- Fiscal reform
- Qualitative policies and measures have been identified

### Potential mitigation actions considerations



- Cost effectiveness
- Mitigation potential
- Poverty alleviation and job creation
- Feasibility of implementation
- Gender and social inclusion
- Health and air quality
- Land (degradation) and water quality including deforestation

### Identified mitigation measures specific to energy



#### Energy

- Renewable energy, particularly decentralized
- Multi-cycle power stations
- Scalable power stations of 20-50MW
- Enforced energy efficiency
- Use of natural gas rather than liquid fuels

## KEY ASPECTS OF THE NDC



Timeframe base period  
data 2010-2014



Projections  
2015 – 2030



Scope of gases CO<sub>2</sub>,  
CH<sub>4</sub> & N<sub>2</sub>O  
(other gases  
assumed to be  
negligible)



IPCC guidelines and  
definitions were used  
for all sectors.

<sup>2</sup> Vanguard (2017) Nigeria needs \$142bn to meet NDC's target – FG.



# NDC IMPLEMENTATION MECHANISM SPECIFIC TO THE ENERGY SECTOR

## Finance



- International finance and investment, technology and capacity-building required to achieve the intended contribution
- Determination of total investment required including domestic share of the full contribution. The NDC is estimated to cost \$142 billion or \$10 billion per annum by 2030<sub>2</sub>

## Strategy



- Review of mitigation potential identified in NDC preparation against the Strategic Framework for Voluntary Nationally Appropriate Mitigation Action.
- Coordination will be managed by the Department of Climate Change with the appropriate line ministries and agencies carrying out specific activities
- Community mobilization for climate change adaptation actions
- Development of a full GHG inventory and accompanying MRV system
- Reduction of climate change impacts on key sectors such as energy and vulnerable communities
- Development of a strategic plan to guide NDC

## Capacity Building



- Training and capacity building, including simplified user-friendly tools for analysis.
- Specification of the required technical support and capacity building to achieve the NDC.
- Integration of climate change adaptation into national, sectoral, state and local government planning and into the plans of universities, research and educational organizations, civil society organizations, the private sector and the media.

<sup>2</sup> Vanguard (2017) Nigeria needs \$142bn to meet NDC's target – FG.

## IMPLEMENTATION PROGRESS

- Nigeria is the first African nation to issue a Sovereign Green Bond and the fourth nation in globally to do so. Nigeria is also the first country to issue the first Climate Bond Certified Sovereign Bond. This fund has been allocated to finance three government renewable energy projects – the Renewable Energy Micro-Utilities Programme, the Re-Energizing Education Programme, and the Afforestation Programme. It comprises a 5-year N10.6 billion (\$25 million) facility with coupon rate of 13.48%.
- The Nigeria Debt Management Office has listed the country's Sovereign Green Bond on the Nigerian Stock Exchange.
- The Federal Government has also set up the Inter-Ministerial Committee on Climate Change to coordinate appropriate line ministries and agencies to carry out activities, with two subcommittees namely: technical and ministerial subcommittees.
- The Federal Ministry of Environment has also developed the National Climate Change Strategy and Action Plan (2018 – 2022);

the High Level Roadmap on Implementation of the Intended Nationally Determined Contributions (August 2016); and sectoral action plans of the agriculture and forest, industry, oil and gas, power and transport sectors. It is also driving the passing of the Climate Change Bill at the National Assembly.<sup>3</sup>

- The Federal Government through the Ministry of Environment is currently in the process of revising and updating Nigeria's NDC in line with UNFCCC requirements that countries update and communicate their NDC every five years with the next update due in 2020.
- The Federal Ministry of Environment is currently in the process of aligning Nigeria's NDC with the Economic Recovery and Growth Plan (ERGP) of the Federal Government.
- The Federal Ministry of Environment has developed an NDC Sectoral Action Plan and is currently awaiting approval from the Federal Executive Council (FEC).

## RELATED REGULATORY AND POLICY DOCUMENTS

- UN Framework Convention on Climate Change (UNFCCC), 1994
- Kyoto Protocol, 2004
- National Water Policy, 2004
- National Water Policy, 2006
- National Policy on Erosion and Flood Control, 2006
- National Adaptation Strategy and Plan for Action for Climate Change Nigeria (NASPA-CCN), 2011
- Agricultural Transformation Agenda (ATA), 2011
- Strategic Framework for Voluntary Nationally Appropriate Mitigation Action (NAMA), 2011
- Transformation Agenda 2011-2015

- Nigeria Climate Change Policy Response and Strategy (NCCPRS), 2012
- The Lima Call to Climate Action, 2014
- The National Agricultural and Resilience Framework (NARF), 2014
- Nigeria's Agricultural Promotion Policy, 2016
- National Renewable Energy Action Plan, 2016
- National Energy Efficiency Action Plan, 2016
- Nigeria's Drought Preparedness Plan, 2016
- National Health Policy, 2017
- National Policy on Environment, 2017 (formulated in 1991 with previous revision in 1999)
- Vision 2020



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