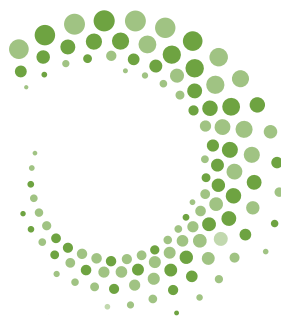




# CET

Climate Explainer Toolkit

2026



**PACE**

Partnership for Agile Governance  
and Climate Engagement

# CET | Climate Explainer Toolkit 2026



**PACE**

Partnership for Agile Governance  
and Climate Engagement

# About PACE

**T**he Partnership for Agile Governance and Climate Engagement (PACE) strengthens Nigeria's response to governance and climate challenges. It operates at federal and subnational levels (Kaduna, Kano, Jigawa) to mainstream climate action into public financial management (PFM) systems.

PACE supports accountable institutions that can deliver Nigeria's net-zero 2060 commitment through transparent tracking of climate spending, access to international finance, and effective management of the Ecological Fund.

## Why Media and Creatives?

Public demand drives policy. PACE equips journalists and creatives with the tools to translate complex policies such as the Climate Change Act and the Energy Transition Plan into accurate, accountable stories that focus on solutions and finance flows rather than disasters alone.

## Our Values

- **Inclusion (GEDSI):** Gender equality, disability, and social inclusion are central; the voices of women, youth, and marginalised communities shape the narrative.
- **Agility:** Real-time, politically informed support to reformers, civil society, and the private sector.
- **Accountability:** Green PFM ensures every naira for climate action is measurable and impactful.

This toolkit builds a community of practice for technically accurate, empathetic, and accountability focused Nigerian climate storytelling.

# How to Use This Toolkit

**T**his Climate Explorer Toolkit is designed as a practical, modular resource to support journalists, editors, and creative professionals in producing accurate, evidence-based, and accountability-focused climate reporting in Nigeria. It is structured to accommodate varying production timelines and editorial requirements while maintaining technical rigour and alignment with GEDSI principles.

The toolkit is organised into five logical components:

**Foundations** — Provides contextual understanding of regional climate pressures, core policy instruments, and institutional arrangements.

**Governance and Finance** — Details legal frameworks, financial mechanisms, and accountability indicators for systematic scrutiny.

**Investigative Tools** — Offers structured prompts and analytical frameworks to examine policy implementation and resource flows.

**Creative and Inclusion Resources** — Supplies visual storytelling guidance and GEDSI-integrated checklists to ensure equitable and human-centred narratives.

**Data and Annexes** — Contains verified data directories, glossary, and technical formulas for reference and verification.

To maximise utility, practitioners should select the workflow that corresponds to their available time and editorial objective. Three standardised

tracks are recommended:

## **30-MINUTE STORY TRACK (QUICK NEWS OR ANALYSIS PIECE)**

**Objective:** Deliver timely, fact-based reporting on a specific climate-related event or incident.

### **Recommended steps:**

- Consult the regional climate pressures summary in the Overview section to establish trend context.
- Reference the relevant policy hook from the Governance and Finance section (e.g., Ecological Fund disbursement or NDC milestone).
- Apply one investigative prompt from the Reporting Prompts section.
- Verify key quantitative claims using the Data Sources directory (prioritise NiMet, NBS, or NCCC portals).
- Cross-check any emissions or green claims with the Carbon Mathematics formulas.

**Output focus:** Concise explanation of event significance, institutional responsibility, immediate accountability question and solutions.

## **48-HOUR FEATURE TRACK (IN-DEPTH ARTICLE OR MULTIMEDIA PACKAGE)**

**Objective:** Produce a comprehensive narrative that links event, policy, finance, and human impact.

**Recommended steps:**

- Use the Geopolitical Breakdown and 2025 Climate Outlook table to situate the story regionally.
- Apply the Four-Point Accountability Framework or Nexus Framework from the Overview section.
- Select 2–3 related prompts from Governance & Accountability and Gender, Inclusion & Climate Justice categories.
- Trace relevant financial flows using FAAC reports and Climate Funds Update data.
- Complete the GEDSI Practical Checklist to ensure inclusive voice representation and differential impact analysis.
- Incorporate visual elements guided by the Creative Prompts (e.g., before-and-after site documentation).

**Output focus:** Balanced examination of systemic drivers, implementation gaps, and evidence-based recommendations.

**2–4 WEEK INVESTIGATION TRACK (LONG-FORM OR SERIES)**

**Objective:** Conduct rigorous, multi-source audit of climate finance, policy compliance, or institutional performance.

**Recommended steps:**

- Define the scope using the full institutional architecture and key accountability hooks table.
- Build a financial audit trail by cross-referencing Ecological Fund allocations, project implementation records, and satellite verification (e.g., Global Forest

Watch for restoration sites).

- Triangulate data from at least three independent sources (official Nigerian, satellite, international).
- Apply multiple prompts across themes (e.g., Ecological Fund audit + Just Transition assessment).
- Document stakeholder interviews with informed consent and GEDSI considerations.
- Use Carbon Mathematics tools to test corporate or governmental claims quantitatively.

**Output focus:** Substantiated findings on accountability deficits, resource misallocation, or exclusion patterns, supported by verifiable evidence and actionable recommendations.

**General Operational Guidance**

- Always anchor quantitative statements to specific sources and note access dates.
- Apply the toolkit's ethical standards consistently, particularly in framing, consent, and avoidance of sensationalism.
- For visual or multimedia outputs, refer to Creative Prompts and ensure images serve evidentiary rather than emotive purposes.
- Update data checks regularly, as climate and fiscal datasets evolve.

By following these structured workflows, practitioners can produce reporting that strengthens institutional transparency, supports evidence-informed policy dialogue, and contributes to more effective and inclusive climate governance in Nigeria.

# Table of Contents

ABOUT PACE	3
HOW TO USE THIS TOOLKIT	4
EXECUTIVE SUMMARY	6
<b>SECTION 1: INTRODUCTION</b>	<b>9</b>
1.1 Background and Rationale	10
1.2 Objectives	11
1.3. Approach and Methodology	12
<b>SECTION 2: OVERVIEW OF CLIMATE REPORTING</b>	<b>13</b>
2.1. Geopolitical Breakdown of Regional Climate Pressures	14
2.2. Reporting Frameworks for Accountability-Focused Coverage	15
2.3. Nexus Framework	17
2.4. Ethical Consideration in Climate Reporting	17
<b>SECTION 3: CLIMATE POLICY AND GOVERNANCE</b>	<b>18</b>
3.1 Institutional Architecture	19
3.2 The Climate Change Act (2021)	19
3.3 Energy Transition Plan (ETP)	19
3.4 Tracking Climate Finance	20
3.5 Nationally Determined Contributions (NDC 3.0)	21
3.6 The Great Green Wall (GGW)	21
3.7 The Carbon Mathematics: Reporting Formulas	22
3.8 Summary of Key Accountability Hooks	24
<b>SECTION 4: REPORTING PROMPTS</b>	<b>25</b>
4.1 Governance and Accountability	26
4.2 Economics and Livelihoods	27
4.3 Gender, Inclusion and Climate Justice	27
4.4 Security and Migration	28
4.5 Creative and Visual Storytelling Prompts	28
<b>SECTION 5: CONCLUSION &amp; DATA SOURCES</b>	<b>29</b>
Nigerian Official Data Sources	31
Satellite and International Monitoring Sources	32
Financial Audit Trail Sources	32
Verification and Fact-Check Resources	33
Recommended Practice	33
<b>GLOSSARY OF TERMS</b>	<b>34</b>

# Executive Summary

**N**igeria is confronting the tangible consequences of climate change across its regions: persistent black carbon pollution in the Niger Delta, accelerating desertification in northern states, erratic rainfall patterns disrupting agriculture in the Middle Belt, and increasing coastal flooding and gully erosion in the South. These impacts are no longer projections; they are daily realities affecting livelihoods, public health, food security, and social stability.

The effectiveness of national climate policy embodied in the Climate Change Act (2021), the Energy Transition Plan, and Nigeria's Nationally Determined Contributions depends not only on technical design but on public awareness, scrutiny, and demand for implementation.

Journalists and creative professionals play a pivotal role in closing the gap between high-level commitments made and the lived experience of communities on the frontlines.

The PACE Climate Explainer Toolkit has been developed to equip media and creative practitioners with precise, accessible tools for reporting Nigeria's climate story with technical accuracy and accountability. It supports three essential functions:

- 1. Technical clarity** — It decodes complex science and policy concepts in contextually relevant language, including ready-to-use Carbon Mathematics formulas that enable rapid verification of emissions claims, carbon sequestration figures, and greenwashing assertions.



<https://www.theguardian.com/environment/2022/may/29/sooty-hands-and-damaged-lungs-the-toll-of-nigerias-refineries>

**2. Financial accountability** – It provides practical methods to trace climate-related public expenditure, from monthly Ecological Fund disbursements to international climate finance flows, allowing rigorous examination of whether resources reach intended adaptation and mitigation outcomes.

**3. Inclusive and equitable framing** – Guided by GEDSI principles, the toolkit ensures that reporting reflects the differentiated impacts of climate change on women, youth, persons with disabilities, and other marginalised groups, moving beyond disaster imagery to

narratives that centre the accountable agency, justice, and resilience.

Structured for different production timelines, the toolkit offers clear workflows for quick news pieces (30 minutes), in-depth features (48 hours), and longer investigative work (2–4 weeks). It includes regionally contextualised investigative prompts, verified data sources, a practical glossary, and ethical reporting guidance.

By bridging the divide between policy abstraction and on-the-ground realities, this toolkit aims to strengthen the media's contribution to transparent, inclusive, and effective climate governance in Nigeria, ultimately supporting the country's pathway toward a resilient, net-zero future by 2060.



Photo: The Guardian / Ed Kashi, 2022





---

# SECTION ONE

---



# 1.1 Background and Rationale

Nigeria is navigating one of the most complex intersections of environmental, economic, and governance challenges in its contemporary history. Climate change manifests not as an abstract global phenomenon but as concrete and escalating pressures on national systems: accelerating desertification in the northern regions, persistent black carbon pollution from

gas flaring and artisanal refining in the Niger Delta, recurrent flooding and gully erosion in southern and central zones, and rising sea levels threatening coastal infrastructure and livelihoods. These impacts function as threat multipliers, exacerbating existing vulnerabilities in food security, public health, conflicts, internal displacement, and social cohesion.



Across continents, Mongabay fellows share insights from reporting in the field - [news.mongabay.com](https://news.mongabay.com)

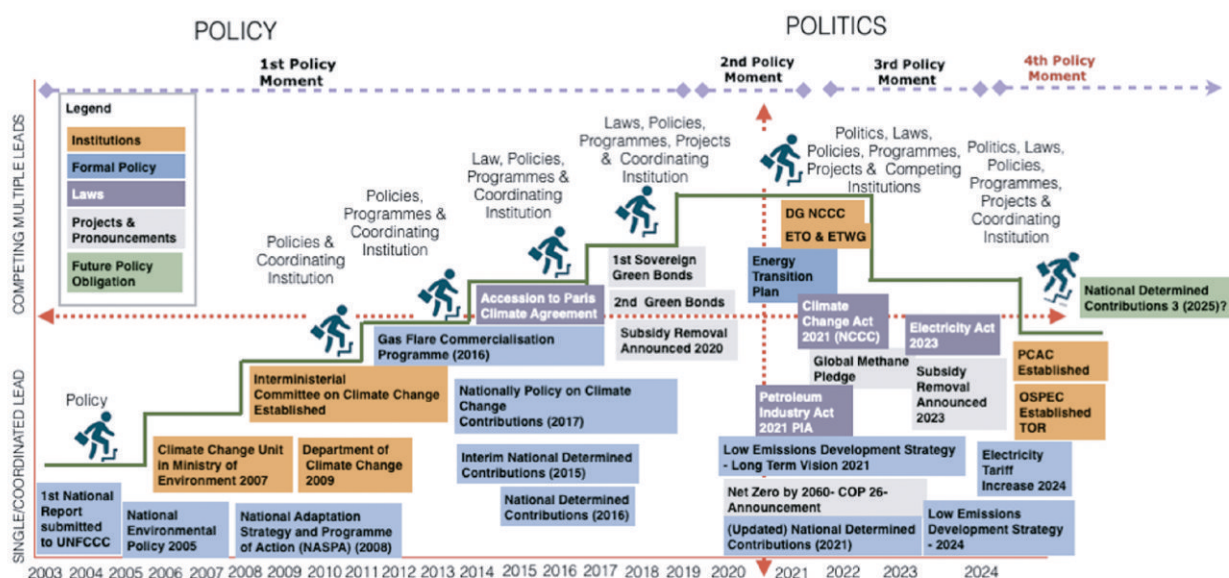
The policy architecture developed in response to the Climate Change Act (2021), the Energy Transition Plan, updated Nationally Determined Contributions (NDC 3.0), and the institutional framework centred on the National Council on Climate Change (NCCC). This represents the Government's structured commitment to transition toward a low-carbon, climate-resilient economy while addressing energy access deficits for millions of citizens.

However, the gap between legal and strategic commitments and effective on-the-ground implementation remains significant. This gap is

not primarily technical; it is fundamentally one of accountability, transparency in resource allocation, and public scrutiny of governance processes.

This Climate Explainer Toolkit, developed under the Partnership for Agile Governance and Climate Engagement (PACE), occupies the critical interface between high-level policy frameworks and localised realities. It is designed as a practical resource for journalists, editors, and creative professionals to strengthen the media's contribution to climate governance in Nigeria.

Figure 2: Evolution of Nigeria's climate policies and institutions 2003-2024



Nigeria's Climate Agenda: New Directions in Policy and Diplomacy | APRI – Africa Policy Research Institute

## 1.2 Objectives

The toolkit pursues four interconnected objectives:

1. To provide clear, contextually grounded explanations of Nigeria's principal climate policies, legal instruments, and institutional arrangements, enabling accurate translation of technical commitments into accessible public narratives.
2. To equip practitioners with standardised tools for tracking climate-related public financial management, including Ecological Fund disbursements, international climate finance flows, and compliance with carbon budgeting and emissions reporting obligations.
3. To promote rigorous, evidence-based reporting that distinguishes between genuine policy progress and

implementation shortfalls, thereby supporting systemic accountability.

4. To embed Gender Equality, Disability, and Social Inclusion (GEDSI) principles throughout, ensuring that coverage consistently reflects the differentiated and often disproportionate impacts of climate change on women, youth, persons with disabilities, and other marginalised populations.

The content draws on a systematic review of primary policy documents, including the Climate Change Act, the Energy Transition Plan, successive NDCs, and relevant international frameworks, cross-referenced with authoritative data sources and aligned with UK International Development standards for inclusive, accountable programming.



Climate action and security: Integrating climate considerations in Nigeria's policing framework | APRI – Africa Policy Research Institute

## 1.3 Approach and Methodology

By focusing on the mechanics of governance, finance, and inclusion rather than isolated disaster events, the toolkit supports a shift in climate reporting toward solutions-oriented, systems-focused journalism. This approach strengthens the enabling environment for effective policy

implementation, transparent resource use, and equitable resilience-building. The core requirements for Nigeria is to realise its net-zero ambition by 2060 and safeguard the well-being of current and future generations.



---

# SECTION TWO

---



# Overview of Climate Reporting

Effective climate reporting in Nigeria requires a transition from predominantly reactive, event-driven coverage; focused on isolated disasters such as floods, droughts, or heatwaves to a systematic, multidisciplinary approach. This shift positions climate change as a structural governance issue that intersects with economic stability, national security, public health, food systems, and social equity. By connecting environmental indicators to institutional performance and resource allocation, journalism can contribute meaningfully to accountability and informed public discourse on adaptation and mitigation strategies.

## 2.1. Geopolitical Breakdown of Regional Climate Pressures

Climate change in Nigeria operates as a threat multiplier, amplifying pre-existing socio-economic and geopolitical tensions through differential regional impacts. The following summary draws on data from the Nigerian Meteorological Agency (NiMet), satellite observations, and peer-reviewed assessments to outline the primary patterns observed in recent years, including 2025 trends.

### 2.1.1. North-West and North-East Zones

These regions face the most acute effects of desertification and land degradation, with the Sahara advancing at an estimated average rate of 0.6 km per year in vulnerable frontline areas. Lake Chad has contracted by approximately 90% of its historical surface area since the mid-20th century, contributing to livelihood insecurity, internal displacement, and heightened resource competition. Temperature records show the fastest warming rates in Nigeria, with peak values of 40–42°C during 2025 heatwaves in cities such as Maiduguri and Sokoto. Rainfall remains highly variable, with delayed onset and shortened growing seasons (often below 120 days) in the far north, while occasional intense events produce flash flooding.

### 2.1.2. North-Central Zone

Shifting and increasingly erratic rainfall patterns have disrupted traditional transhumance routes, intensifying competition over land and water resources. This dynamic is a documented driver of farmer-herder tensions and associated insecurity in states such as Benue, Plateau, and Nasarawa. Seasonal temperature swings and prolonged dry spells further stress staple crop and livestock production systems.

### 2.1.3. South-West Zone

Urban centres, particularly Lagos, confront rising sea levels, Atlantic storm surges, and intensified urban flooding linked to extended rainy seasons (projected up to 290 days) and inadequate drainage infrastructure. High humidity and urban heat island effects compound public health and economic risks in densely populated areas.

### 2.1.4. South-East Zone

The region experiences severe gully erosion, with over 3,000 documented active sites. High-intensity rainfall often exceeding 2,500 mm annually in states such as Ebonyi and Abia interacts with erodible soils (notably Ajali Sandstone formations) to produce deep ravines that destroy farmland, infrastructure, and

settlements.

### 2.1.5. South-South Zone

The Niger Delta faces a localised air quality and public health emergency driven by black carbon (soot) emissions from gas flaring, artisanal crude oil refining, and related combustion

processes. Particulate matter (PM2.5) concentrations in hotspots such as Port Harcourt frequently exceed 90–100 µg/m<sup>3</sup>, significantly above the World Health Organization daily guideline of 15 µg/m<sup>3</sup>. These emissions contribute to both local respiratory disease burdens and short-lived climate forcing.

**Summary Table: 2025 Climate Outlook**

Geopolitical Zone	Rainfall Trend (2025)	Primary Climate Threat	Geopolitical Consequence
North-West	Delayed/Erratic	Desertification	Resource-driven Banditry
North-East	Flash Flood Risks	Extreme Heat Waves	Displacement (IDPs)
South-East	High Intensity	Gully Erosion	Infrastructure Collapse
South-South	Prolonged (3000mm+)	Soot & Acid Rain	Public Health Crisis/Unrest

## 2.2. Reporting Frameworks for Accountability-Focused Coverage

To move beyond descriptive disaster reporting, practitioners are encouraged to adopt structured analytical frameworks that emphasise systemic causes, institutional responsibilities, and verifiable outcomes.

### 2.2.1. Four-Point Accountability Framework

- **Event Description** — Document the immediate occurrence (e.g., specific flood event).
- **Contextual Analysis** — Compare against historical baselines using NiMet data to determine whether the event reflects long-term trends or is dominated by localised factors such as poor planning or infrastructure failure.
- **Financial Tracing** — Examine relevant allocations from the Ecological Fund and other climate-tagged budgets over the preceding 36 months to assess whether resources were deployed for prevention, response, or recovery.
- **Solution Identification** — Highlight evidence-based, scalable interventions (e.g., community-led flood-resilient infrastructure or early-warning system improvements) to inform constructive policy dialogue.

# A Decade of Climate Change in Nigeria

## 2015–2017: Floods Strike Early as Warning Signs

Severe riverine flooding in 2015 displaced around 1 million people and caused roughly \$25 million in damages. These events, worsened by climate-driven rainfall variability, hit communities hard and previewed the decade's escalating extremes.



<https://climateknowledgeportal.worldbank.org/>

## 2018–2022: Catastrophic Floods Peak –

The worst in over a decade floods grew deadlier and more frequent. The 2022 disaster was historic: heavier-than-normal rains (linked to climate change) and dam releases submerged 34 states, displaced over 2 million people, killed hundreds, destroyed hundreds of thousands of hectares of farmland, and caused billions in losses. Families waded through flooded homes and streets for weeks



<https://www.cnn.com/2022/10/26/africa/bayelsa-flood-victims-nigeria-intl-cmd>

## Throughout the Decade (Intensifying 2015 - 2025):

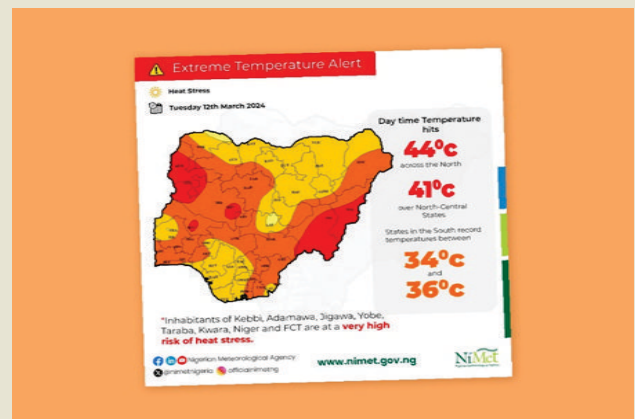
Higher temperatures and declining rainfall, accelerated desertification in northern Nigeria and the Sahel. Lake Chad continued shrinking, turning fertile lands into sandy wastelands and displacing farmers while fueling resource conflicts.



[https://en.wikipedia.org/wiki/Climate\\_change\\_in\\_Nigeria](https://en.wikipedia.org/wiki/Climate_change_in_Nigeria)

## 2023–2025: Scorching Heatwaves Become the New Normal -

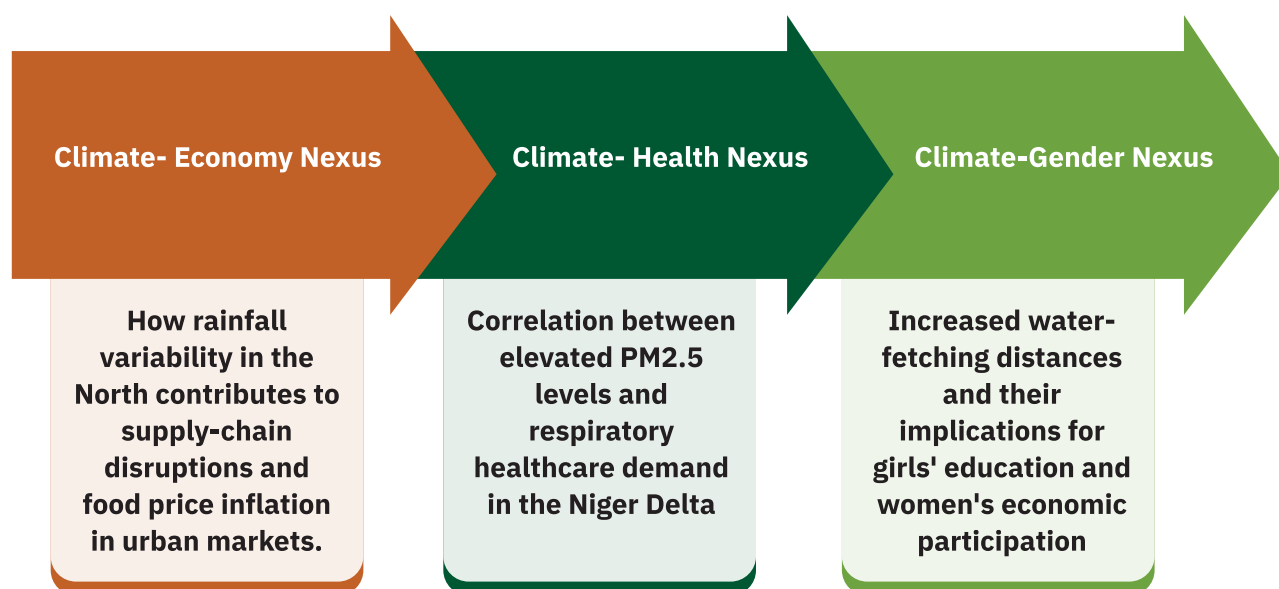
Northern and central states faced record heat, with temperatures routinely exceeding 44°C (and feeling like 50°C+ with humidity). NiMet issued repeated extreme temperature alerts. Heat stress spiked health risks, strained power grids, and worsened drought effects.



<https://www.climatecentre.org/13576/west-africa-heatwave-high-humidity-made-40c-feel-like-50c/>

## 2.3. Nexus Framework

Climate impacts rarely occur in isolation. Reporting gains relevance when linkages are made explicit:



## 2.4. Ethical Considerations in Climate Reporting

Accurate and responsible coverage requires careful attention to framing and representation. Avoid sensationalism that fosters fatalism or disengagement. When depicting hardship, balance problem identification with evidence of agency, adaptation, and local expertise. Prioritise informed consent, diverse voice inclusion (particularly from women, youth, and marginalised groups), and scientific rigour to prevent misattribution of governance failures to

climate change alone. Fact-checking of corporate or governmental green claims using the Carbon Mathematics tools is essential to counter greenwashing and maintain credibility.

This overview establishes the foundation for reporting that strengthens institutional accountability, promotes evidence-based policy debate, and supports Nigeria's transition toward climate-resilient development.



---

# SECTION THREE

---



# Climate Policy and Governance

Nigeria's climate policy and governance framework has evolved significantly in recent years, establishing a structured legal and institutional architecture to address both mitigation and adaptation imperatives. This framework emphasises accountability through mandatory carbon budgeting, emissions tracking, transparent financial flows, and institutional coordination. The following sections outline the principal components, their operational mechanisms, and key accountability points for systematic oversight.

## 3.1. Institutional Architecture

The apex body is the National Council on Climate Change (NCCC), established under the Climate Change Act (2021) and chaired by the President. The NCCC provides strategic direction, coordinates inter-ministerial efforts, and serves as Nigeria's primary interface with international climate processes. Day-to-day implementation is managed by the Director-General of the NCCC Secretariat, supported by dedicated climate desks in relevant ministries, departments, and agencies (MDAs). This structure aims to ensure climate considerations are mainstreamed across sectoral planning and budgeting.

- **The National Council on Climate Change (NCCC):** Established by the 2021

Act, the NCCC is the supreme body for climate policy. It is chaired by the President and vice-chaired by the Vice President.

- **The Secretariat (Day-to-Day Operations):** The Council is administered by a Director-General, who serves as the Secretary and the National Focal Point for international climate negotiations.
- **The Supervising Council:** Comprises ministers from key sectors (Environment, Power, Water Resources, and Finance.) and representatives from the 36 State Governors, ensuring subnational alignment.

## 3.2. The Climate Change Act (2021)

The Act provides the legal foundation for Nigeria's climate response. Key provisions include:

- Mandatory national carbon budgets, with sectoral and sub-national allocations.
- Establishment of an emissions trading scheme and carbon pricing mechanisms.
- Requirement for large emitters (companies with 50+ employees) to

appoint climate officers and submit annual reduction plans.

- Institutionalisation of climate desks in all MDAs to integrate climate risk into policy formulation and budgeting.

**Accountability hook:** Compliance with carbon budget publication and MRV (measurement, reporting, and verification) obligations can be verified through NCCC annual reports and public disclosures.

## 3.3. Energy Transition Plan (ETP)

Launched as Nigeria's long-term roadmap to net-zero emissions by 2060, the ETP targets a just transition that addresses energy poverty

while decarbonising key sectors. Core pillars include:

- Expansion of renewable energy



## 3.5. Nationally Determined Contribution (NDC 3.0)

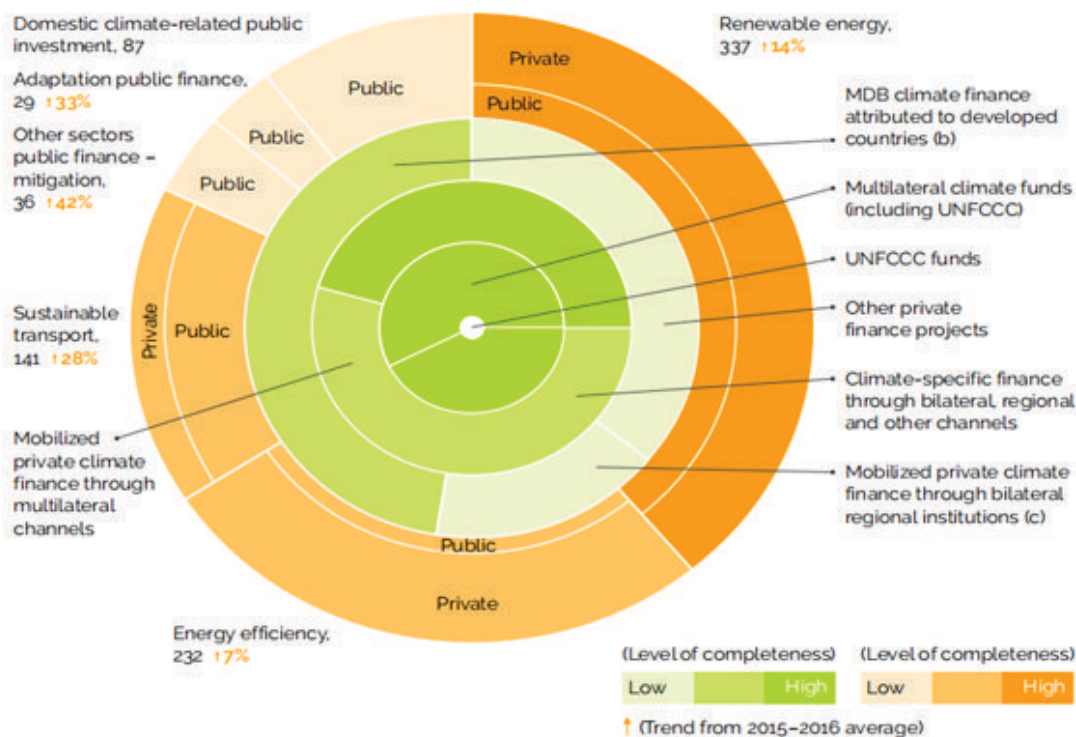
Nigeria's updated NDC (submitted to the UNFCCC) shifts toward absolute emission reduction targets relative to a 2018 baseline:

- 29% unconditional reduction by 2030 (self-financed).
- Additional conditional reductions with

international support.

- Long-term net-zero target reaffirmed for 2060.

Independent assessments rate Nigeria's overall climate action as **almost sufficient** when benchmarked against modelled pathways consistent with global temperature goals.



<https://afripoli.org/reports/climate-finance-in-africa/full-report>

Climate Action Tracker, March 2025 update

## 3.6. The Great Green Wall (GGW)

Nigeria participates in the African Union's Great Green Wall initiative, targeting restoration of degraded landscapes across 11 Northern frontline states. The objectives include:

- Combating desertification through large-scale afforestation and agroforestry.

- Enhancing soil conservation, water retention, and livelihood resilience.
- Creation of green jobs in rural areas.

Progress is monitored through satellite-based land cover change assessments and on-ground survival rate reporting.

## 3.7. The Carbon Mathematics: Reporting Formulas

To report on the climate effectively, you need to be part-journalist, part-accountant, and part-scientist. Numbers are the only thing that can cut through greenwashing. If a company or a state government claims they are saving the environment, these formulas allow you to check their math.

### 3.7.1. Calculating Carbon Sequestration in Mangroves

Mangroves are among the most carbon-dense ecosystems on earth. When a developer clears a mangrove forest for a building, they aren't just cutting trees; they are releasing a massive carbon bomb into the atmosphere.

To calculate the Total Carbon Stock (TCS) of a specific area:

$$\text{TCS} = \text{Area (ha)} \times (\text{C}_{\text{agb}} + \text{C}_{\text{bgb}} + \text{C}_{\text{soil}})$$

- $\text{C}_{\text{agb}}$  (Above-ground carbon): Stored in trunks and leaves.
- $\text{C}_{\text{bgb}}$  (Below-ground carbon): Stored in the complex root systems.
- $\text{C}_{\text{soil}}$  (Soil organic carbon): In mangroves, the soil holds up to 80–90% of the total carbon.

#### The Journalist's Cheat Sheet:

- Average Carbon Stock in Nigerian Mangroves: Approx. 424.28Mg C/ha (Megagrams of Carbon per hectare).
  - To convert Carbon (C) to Carbon Dioxide Equivalent  $\text{CO}_2$ : Multiply by 3.67.
- *Why 3.67?* It is the ratio of the molecular weight of  $\text{CO}_2$  (44) to Carbon (12).

**Example Story Angle:** If a 100-hectare mangrove forest is cleared, you can report that approximately 155,000 tons of  $\text{CO}_2$  will be released; the equivalent of driving 33,000 cars

for a year. (Source: Udo et al., 2022 – Great Kwa River mangrove study)

### 3.7.2. The Gas Flaring & Soot Factor

In the Niger Delta, gas flaring is a major source of both  $\text{CO}_2$  and Black Carbon (Soot). You can use the volume of gas flared (usually reported in Mscf – Thousand Standard Cubic Feet) to calculate the climate impact.

The Emission Formula:

$$\text{Total CO}_2 \text{ (kg)} = \text{Volume flared (Mscf)} \times 53.12$$

- 53.12 kg: This is the standard Nigerian conversion factor for every 1,000 cubic feet of natural gas burned.
- The Soot Variable: Gas flares are rarely 100% efficient. If you see black smoke, it means incomplete combustion is creating Black Carbon, which has a global warming potential thousands of times higher than  $\text{CO}_2$  in the short term.

(Source: Standard Nigerian flaring emission factor)

### 3.7.3. Calculating Carbon Intensity: Tracking Green Growth

Is a Nigerian bank or oil company actually getting cleaner, or are they just growing bigger? Carbon Intensity (CI) tells you the efficiency of their operations.

$$\text{Carbon Intensity, CI} = \frac{\text{Total Emissions (tCO}_2\text{e)}}{\text{Total Revenue (NGN) or GDP}}$$

#### Example:

The Data Table of X & Y Power Ltd

Year	Total Emissions (tCO <sub>2</sub> e)	Total Revenue (NGN)
2023	500,000 tons	100 Billion Naira
2024	550,000 tons	150 Billion Naira

**Solution:**

**Step 1: The 2023 Calculation**

$$\text{Carbon Intensity} = \frac{500,000}{100,000,000,000}$$

**Result:** 0.000005 tons per Naira.

To make this easier to read, journalists usually report this as **5 tons of CO<sub>2</sub> for every 1 Million Naira earned.**

**Step 2: The 2024 Calculation**

$$\text{Carbon Intensity} = \frac{550,000}{150,000,000,000}$$

**Result:** 0.0000036 tons per Naira.

This is 3.6 tons of CO<sub>2</sub> for every 1 Million Naira earned.

**Step 3: The Journalist's Analysis (The Hook)**

If you only looked at the Total Emissions, you would see they went up by 50,000 tons. However, the Carbon Intensity actually went down from 5 to 3.6.

- **The Headline Story:** "X & Y Power Ltd grew its business by 50% this year while managing to reduce its carbon footprint per Naira by nearly 28%. This suggests the company is investing in cleaner technology and becoming more 'Carbon Efficient' as it expands."

**Why this example matters for accountability:**

- **Fact-Checking Greenwashing:** If the company's revenue stayed the same but emissions went up, their Intensity would rise. If they then claimed to be "environmentally friendly," you could use this math to prove they are actually becoming "dirtier".
- **Comparison:** You can now compare this company to a smaller competitor. The smaller one might only emit 100,000 tons, but if their Intensity is 10 tons per million Naira, the smaller company is actually the bigger polluter relative to its size.

**3.7.4. The Quick Conversion Cheat Sheet**

Keep these constants in your notebook to fact-check press releases in real-time:

To Convert	To	Multiply By
Carbon (C)	Carbon Dioxide (CO <sub>2</sub> )	3.67
Methane (CH <sub>4</sub> )	CO <sub>2</sub> e (20-year impact)	80+
1 Hectare	Acres	2.47
Natural Gas (Mscf)	CO <sub>2</sub> (kg)	53.12

**Pro-Tip for Creatives:** Don't just list "tons." One ton of CO<sub>2</sub> occupies the same volume as a standard two-story house. When you report that a flare site emits 1,000 tons a day, tell your audience it's like "1,000 invisible houses of pollution being dumped into the sky every 24 hours."

## 3.8. Summary of Key Accountability Hooks

The following table highlights priority areas for systematic scrutiny:

Policy/Instrument	Core Accountability Question	Primary Oversight Entity
Climate Change Act (2021)	Has the current national carbon budget been published and allocated?	NCCC / Presidency
Energy Transition Plan	What measurable progress has been achieved on gas flaring reduction and clean cooking access?	Energy Transition Office / NCCC
Ecological Fund	Do disbursements correspond to verifiable remediation or adaptation projects in recipient states?	Office of the Accountant General / State Assemblies
NDC 3.0	Is unconditional target delivery on track independent of external finance?	NCCC / Independent MRV systems
Great Green Wall	What are the verified tree survival rates and land restoration hectares achieved?	National Agency for the Great Green Wall

This governance architecture, when fully operationalised with transparent monitoring and public reporting, provides the systemic foundation for effective climate action. Strengthened accountability mechanisms,

particularly in finance tracking and compliance enforcement which remain essential to translating policy commitments into measurable resilience outcomes for Nigerian communities.



---

# SECTION FOUR

---



# Reporting Prompts

This section presents a curated selection of investigative and analytical reporting prompts designed to support evidence-based, systems-focused climate journalism in Nigeria. The prompts are organised thematically to align with core governance, economic, social, and security dimensions of climate change. Each prompt emphasises accountability mechanisms, financial flows, institutional performance, and inclusive outcomes, enabling practitioners to examine policy implementation, resource utilisation, and differential impacts on vulnerable populations.

These prompts are structured to facilitate different production timelines: quick analytical pieces drawing on public records, mid-length features incorporating field verification and data cross-referencing, or in-depth investigations requiring multi-source auditing and stakeholder interviews. All prompts encourage use of the toolkit's Carbon Mathematics tools, Ecological Fund tracking methods, and GEDSI checklists to ensure technical rigour and equitable framing.



Oil spills, gas flaring wreak havoc in Nigeria's Delta | World news | WION

## 4.1. Governance and Accountability

These prompts focus on institutional compliance, transparency in public financial management, and enforcement of legal obligations.

### 4.1.1. Ecological Fund Disbursement Audit

Map monthly Ecological Fund allocations (from

FAAC reports) to specific states or local governments over the past 24–36 months. Cross-reference disbursed amounts with documented erosion control, flood defence, or afforestation projects using site visits, satellite imagery (e.g., Global Forest Watch), and community verification. Assess whether

expenditures align with approved work plans and produce measurable resilience outcomes.

#### **4.1.2. Carbon Budget and MRV Compliance Review**

Examine whether the National Council on Climate Change has published and allocated the current national carbon budget as required under the Climate Change Act (2021). Review progress reports from the top 50 high-emitting companies on measurement, reporting, and verification (MRV) obligations. Identify gaps in

disclosure and evaluate implications for Nigeria's unconditional NDC targets.

#### **4.1.3. NCCC Operational Effectiveness Assessment**

Analyse the frequency, outcomes, and follow-up actions from NCCC meetings since inception. Track implementation of inter-ministerial climate desks and assess whether sectoral ministries have integrated climate risk into annual budgeting and planning cycles.

## **4.2. Economics and Livelihoods**

These prompts link climate pressures to economic systems, resource allocation, and sustainable development pathways.

#### **4.2.1. Clean Cooking Transition and LPG Scale-Up**

Investigate progress under the Energy Transition Plan toward expanding liquefied petroleum gas (LPG) access as a transition fuel. Examine subsidy disbursement records, distribution networks, and adoption rates in rural and peri-urban areas. Assess impacts on household air quality, women's time burdens, and reductions in biomass fuel demand.

#### **4.2.2. Solar Energy Access for Micro, Small, and Medium Enterprises (MSMEs)**

Document before-and-after economic outcomes for small businesses (e.g., barbers, cold storage operators, tailors) that have transitioned to off-grid solar systems. Verify access to feed-in tariffs or mini-grid incentives and evaluate contribution to reduced diesel dependency and improved productivity.

#### **4.2.3. Critical Minerals Value Chain and Water Resource Impacts**

Examine lithium and other mineral mining operations in states such as Nasarawa and Kogi. Assess compliance with environmental impact assessments, water usage permits, and community benefit-sharing agreements. Quantify effects on local water availability and agricultural livelihoods.

## **4.3. Gender, Inclusion, and Climate Justice**

These prompts apply a GEDSI lens to ensure reporting captures differentiated vulnerabilities and promotes equitable policy design.

#### **4.3.1. Gendered Burden of Water Scarcity and Collection**

Document how rainfall variability and borehole

drying in northern states increase time spent on water collection by women and girls. Link findings to education attendance, economic participation, and health outcomes. Evaluate whether early-warning systems and adaptation projects incorporate gender-responsive design.

#### **4.3.2. Disability Inclusion in Disaster Early-Warning and Response Systems**

Audit accessibility features of NEMA and state-level early-warning mechanisms (e.g., SMS alerts, sign language interpretation, accessible evacuation routes). Assess inclusion of persons with disabilities in community-level planning and post-disaster recovery processes.

#### **4.3.3. Just Transition for Artisanal Refining Communities**

Investigate retraining and alternative livelihood programmes for individuals previously engaged in illegal artisanal refining (“kpo-fire”) in the Niger Delta. Examine integration into clean energy value chains and effectiveness in reducing localised soot emissions.

## **4.4. Security and Migration**

These prompts address climate as a threat multiplier in conflict and displacement dynamics.

#### **4.4.1. Resource Competition and Conflict Overlay Mapping**

Overlay NiMet rainfall deficit and variability data with documented farmer-herder conflict incidents and banditry hotspots in North-Central and North-West zones. Analyse correlations with land degradation, pastoralist southward movement, and state-level

peacebuilding interventions.

#### **4.4.2. Climate-Induced Internal Displacement Tracking**

Document patterns of displacement linked to gully erosion (South-East), coastal inundation (South-South/South-West), and desertification (North). Cross-reference with NEMA records and assess adequacy of support mechanisms, land access provisions, and integration into host communities.

## **4.5. Creative and Visual Storytelling Prompts**

These prompts support multimedia and visual narratives that humanise data while maintaining analytical depth.

#### **4.5.1. Visual Audit of Adaptation Infrastructure**

Produce photo-documentation or time-lapse sequences comparing pre- and post-intervention sites (e.g., restored mangroves, erosion barriers, Great Green Wall plantations). Include quantitative metrics on survival rates, carbon sequestration potential, and community benefits.

#### **4.5.2. Human-Centred Data Visualisation**

Develop interactive maps or infographics linking Ecological Fund flows to visible project sites and beneficiary communities. Highlight inclusion gaps (e.g., gender-disaggregated participation data) to support evidence-based advocacy.

These prompts are intended to generate reporting that contributes to stronger governance accountability, more effective resource use, and inclusive climate resilience. Practitioners are encouraged to combine multiple prompts, triangulate data sources, and adhere to ethical standards outlined in the toolkit to maximise institutional and societal impact.



---

# SECTION FIVE

---



## Conclusion & Data Sources

Nigeria stands at a defining juncture in its climate and development trajectory. The convergence of escalating environmental pressures, ambitious national commitments, and persistent implementation gaps underscores the urgency of strengthening systemic accountability as a prerequisite for effective resilience-building. The Climate Change Act (2021), the Energy Transition Plan, updated Nationally Determined Contributions, and associated institutional mechanisms represent a coherent policy architecture. Their success, however, depends on consistent execution, transparent resource management, rigorous monitoring, and broad-based public scrutiny.



Media and creative professionals occupy a critical position within this ecosystem. By systematically connecting high-level policy commitments to on-the-ground outcomes, tracking financial flows, verifying compliance with legal and fiscal obligations, and foregrounding the differentiated experiences of vulnerable populations, journalism can generate the evidence and public demand necessary to close accountability deficits. This contribution is not supplementary; it is

structural, helping to ensure that climate finance is deployed efficiently, that adaptation and mitigation measures reach intended beneficiaries, and that no group is systematically excluded from resilience gains.

The Partnership for Agile Governance and Climate Engagement (PACE) has developed this toolkit to support precisely this function: equipping practitioners with precise technical tools, verified data sources, standardised

analytical frameworks, and GEDSI-integrated guidance. When applied consistently, these resources enable reporting that moves beyond episodic disaster coverage toward sustained examination of governance performance, fiscal transparency, and equitable policy delivery.

Strategic priorities for advancing this agenda include:

- **Institutional level:** Establishment of dedicated climate reporting desks in major newsrooms, supported by ongoing capacity development in carbon accounting, climate finance tracking, and inclusive interviewing techniques.
- **Government level:** Publication of real-time, machine-readable datasets on Ecological Fund utilisation, carbon budget implementation, and NDC progress indicators to facilitate independent verification and reduce information asymmetries.
- **Development partner level:** Sustained

investment in investigative journalism fellowships, long-form reporting grants, and collaborative verification platforms to amplify high-impact accountability work.

- **Practitioner level:** Routine application of the toolkit's accountability frameworks, cross-referencing of primary sources, and adherence to ethical standards that balance problem identification with recognition of existing adaptation efforts and local agency.

Nigeria's pathway to a climate-resilient, net-zero economy by 2060 will be determined not only by the ambition of its policies but by the robustness of the systems that deliver them. Strengthened, evidence-based public oversight enabled by informed, systematic reporting remains an indispensable component of that delivery architecture. This toolkit is offered as a practical instrument to support that shared objective: more accountable governance, more effective resource use, and more inclusive resilience for all Nigerians.

## Data Sources

Reliable, verifiable data form the foundation of credible climate reporting in Nigeria. This section presents a curated selection of primary and secondary sources, categorised by type and utility, to support systematic verification, trend analysis, and accountability-focused investigations. Practitioners are advised to prioritise official Nigerian sources for baseline claims, cross-reference with independent satellite and international platforms for objectivity, and document access dates to ensure traceability.

Sources are grouped according to their primary

function: rapid reference for timely stories, in-depth investigation requiring multi-year datasets, financial auditing, and satellite-based verification.

### NIGERIAN OFFICIAL DATA SOURCES

These agencies provide authoritative national statistics and should serve as the starting point for localised claims.

#### 1. Nigerian Meteorological Agency (NiMet)

Offers historical and forecasted rainfall, temperature, drought, and seasonal climate

prediction data.

**Primary use:** Establish whether observed events represent anomalies or long-term trends (e.g., delayed onset in northern zones). Access Seasonal Climate Prediction bulletins for community-level early warnings.

**Portal:** [www.nimet.gov.ng](http://www.nimet.gov.ng)

### 2. National Bureau of Statistics (NBS)

Provides multidimensional poverty indices, agricultural yield time series, household energy consumption, and health outcome data.

**Primary use:** Correlate climate variables with socio-economic indicators (e.g., flood events and food price spikes or respiratory illness rates).

**Portal:** [www.nigerianstat.gov.ng](http://www.nigerianstat.gov.ng)

### 3. National Council on Climate Change (NCCC)

Hosts official progress reports on the Energy Transition Plan, Nationally Determined Contributions, and carbon budget implementation.

**Primary use:** Verify government-stated commitments against independent evidence; benchmark delivery of unconditional targets.

**Portal:** [www.climatecouncil.gov.ng](http://www.climatecouncil.gov.ng)

## SATELLITE AND INTERNATIONAL MONITORING SOURCES

Independent satellite-derived datasets enable bypass of potential reporting biases and provide near-real-time spatial evidence.

### 1. Global Forest Watch (GFW)

Delivers near-real-time forest loss alerts, historical deforestation trends, and land-use change monitoring.

**Primary use:** Document illegal logging in protected areas (e.g., Cross River or Omo reserves) or verify Great Green Wall restoration progress.

**Portal:** [www.globalforestwatch.org](http://www.globalforestwatch.org)

### 2. NASA Giovanni / ESA Copernicus

Provide gridded data on air quality (PM2.5, black carbon), sea surface temperatures, biomass burning, and urban heat islands.

**Primary use:** Map soot concentrations in the Niger Delta, quantify gas flaring emissions, or analyse urban flooding risk.

**Portals:** [www.giovanni.gsfc.nasa.gov](http://www.giovanni.gsfc.nasa.gov) | [www.esa.int](http://www.esa.int)

### 3. Resource Watch

Aggregates hundreds of environmental and socio-economic datasets, including water stress, power infrastructure, and conflict overlays.

**Primary use:** Create composite maps linking climate stressors (e.g., rainfall deficit) to security or migration patterns.

**Portal:** [www.resourcewatch.org](http://www.resourcewatch.org)

## FINANCIAL AUDIT TRAIL SOURCES

These portals enable tracing of climate-related public and international expenditures.

### 1. Office of the Accountant General of the Federation (OAGF)

Publishes monthly Federation Account Allocation Committee (FAAC) reports, including Ecological Fund line items.

**Primary use:** Track derivation and ecology allocations to states and local governments; compare against visible project implementation.

**Portal:** [www.oagf.gov.ng](http://www.oagf.gov.ng)

### 2. Climate Funds Update

Global database of approved and disbursed international climate finance.

**Primary use:** Identify Nigeria-specific allocations from the Green Climate Fund, Adaptation Fund, or other multilateral sources; assess project status and absorption rates.

**Portal:** [www.climatefundsupdate.org](http://www.climatefundsupdate.org)

## VERIFICATION AND FACT-CHECKING RESOURCES

These independent platforms provide peer-reviewed benchmarks for cross-checking claims.

### 1. IPCC Data Distribution Centre

Supplies regional climate projections and impact assessments for West Africa.

**Primary use:** Contextualise local observations within global scientific consensus.

### 2. Climate Action Tracker (CAT)

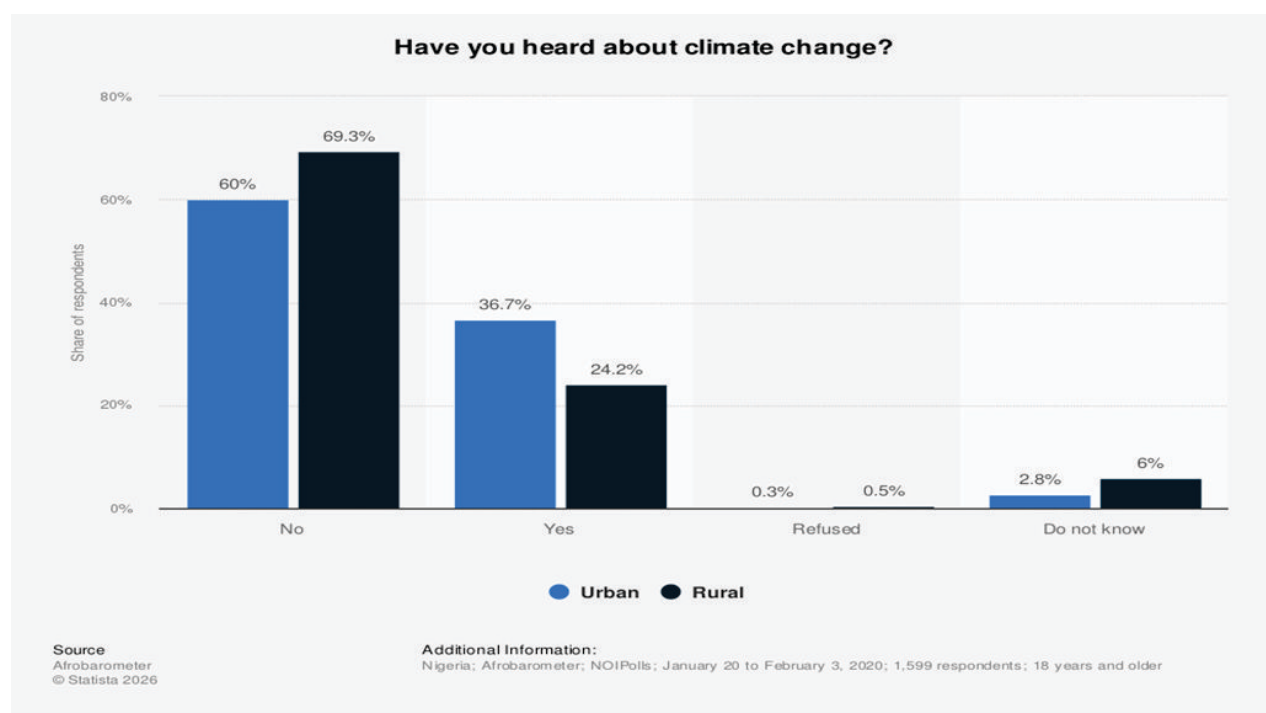
Independent evaluation of national climate policies and NDC ambition.

**Primary use:** Compare Nigeria's rated progress (“almost sufficient”) against Paris-aligned pathways.

### Recommended Practice

For maximum credibility, triangulate at least two independent sources per claim (e.g., NiMet data + satellite confirmation). Document methodologies, access dates, and any data limitations in published work. Where quantitative assertions are made, anchor them explicitly to the originating dataset.

This structured approach to data sourcing strengthens the evidentiary base of climate reporting, enhances institutional accountability, and supports evidence-informed policy dialogue in Nigeria.



Nigeria: awareness of climate change by area 2020 | Statista

# Glossary of Terms

Terms	Definition
Adaptation	Adjustment of human or natural systems in response to actual or expected climatic stimuli or their effects
Afforestation	Establishment of forest cover on land that has not been forested for an extended period.
Albedo	Measure of the reflectivity of a surface; higher albedo reflects more solar radiation
Anthropogenic Emissions	Greenhouse gas emissions resulting from human activities, as opposed to natural processes.
Artisanal Refining	Small-scale, often unregulated processing of crude oil into petroleum products
Biodiversity	Variety of life in all its forms, including species, genetic, and ecosystem diversity.
Bioenergy	Energy derived from biological materials (biomass), including biofuels and biogas.
Biomass	Organic material from plants and animals used as fuel or for industrial purposes.
Black Carbon (Soot)	A short-lived climate pollutant and major component of particulate matter (PM <sub>2.5</sub> ) formed by incomplete combustion.
Blended Finance	Mobilisation of public and private capital to fund climate -related projects, leveraging concessional resources to attract commercial investment.
Blue Carbon	Carbon captured and stored in coastal and marine ecosystems.
Carbon Budget	Approved quantity of greenhouse gas emissions permissible over a specified period, aligned with temperature goals.
Carbon Credits	Tradable certificates representing the right to emit one tonne of CO <sub>2</sub> equivalent.
Carbon Dioxide (CO <sub>2</sub> )	The primary long-lived greenhouse gas emitted from fossil fuel combustion and land-use change
Carbon Footprint	Total greenhouse gas emissions caused by an individual, organisation, or product, expressed in CO <sub>2</sub> equivalent.
Carbon Intensity	Greenhouse gas emissions per unit of economic output or energy produced.

Carbon Market	System for trading carbon credits or allowances to reduce emissions cost-effectively.
Carbon Sequestration	The process of capturing and storing atmospheric carbon dioxide in terrestrial or marine ecosystems.
Carbon Sink	Any process, activity, or mechanism that removes greenhouse gases from the atmosphere.
Clean Cooking	Transition from traditional biomass fuels to cleaner alternatives to reduce indoor air pollution and emissions.
Climate Change	A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
Climate Change Act (2021)	Federal legislation establishing Nigeria’s legal framework for climate governance, including institutional coordination and carbon management.
Climate Justice	Principle requiring equitable distribution of climate burdens and benefits, recognising disproportionate impacts on low emitters.
Climate Refugees	Individuals or communities displaced due to climate -related environmental changes.
Climate Resilience	Capacity of social, economic, and environmental systems to cope with hazardous events, trends, or disturbances.
Climate Variability	Variations in the mean state and other statistics of the climate on all temporal and spatial scales beyond individual weather events.
COP (Conference of the Parties)	Annual meeting of parties to the United Nations Framework Convention on Climate Change to negotiate global climate action.
Deforestation	Conversion of forest land to non-forest uses, often permanent.
Derivation	Percentage of revenue from natural resources allocated to the state of origin.
Desertification	Degradation of land in arid, semi -arid, and dry sub-humid areas due to climatic and human factors.
E-Mobility	Adoption of electric vehicles and supporting infrastructure for transport decarbonisation.
Ecological Fund	Dedicated allocation (2.32% of Federation Account distributable pool) for environmental remediation and climate interventions.
Energy Poverty	Lack of access to reliable, affordable modern energy services.
Energy Transition Plan (ETP)	Nigeria’s long -term strategy to achieve net -zero emissions by 2060 while addressing energy access deficits.
Evapotranspiration	Combined process of evaporation from land surfaces and transpiration from plants.

Extreme Weather Event	Occurrence of a weather or climate variable above or below a threshold near the upper or lower ends of observed values.
Farmer-Herder Conflict	Resource-based tensions exacerbated by environmental pressures.
Feed-in Tariff	Policy mechanism allowing producers of renewable energy to sell excess power to the grid at predetermined rates.
Flooding	Temporary covering by water of land not normally covered.
Gas Flaring	Combustion of associated natural gas during oil extraction.
GEDSI	Gender Equality, Disability, and Social Inclusion framework ensuring equitable participation and outcomes.
Global Warming	Long-term increase in Earth’s average surface temperature due to human activities.
Green Bonds	Debt instruments whose proceeds are earmarked for climate and environmental projects.
Green Climate Fund (GCF)	Multilateral fund providing grants and concessional finance to support developing countries’ climate action.
Greenwashing	Misleading claims of environmental sustainability without substantive emission reductions.
Green House Effect	Natural process whereby certain gases trap heat in the atmosphere, warming the planet.
Greenhouse Gases (GHGs)	Atmospheric gases that absorb and emit infrared radiation, contributing to the greenhouse effect.
Gully Erosion	Advanced soil erosion forming deep channels through concentrated surface runoff.
Heat Island Effect	Elevated temperatures in urban areas relative to surrounding rural zones due to built infrastructure.
Heatwave	Prolonged period of excessively hot weather relative to normal conditions.
Intermittency	Variable and non -continuous output from renewable sources such as solar and wind.
Just Transition	Equitable shift to a low -carbon economy that supports workers and communities affected by the change.
Kpo-Fire	Local term for illegal artisanal crude oil refining in the Niger Delta.
Land Degradation	Negative trend in land condition caused by direct or indirect human -induced processes.
Loss and Damage	Irreversible adverse impacts of climate change beyond adaptation capacity.
LPG (Liquefied Petroleum Gas)	Clean-burning fossil fuel used as a transition option for household cooking.

Mangrove Ecosystem	Coastal wetland system providing blue carbon storage and natural coastal protection.
Methane (CH <sub>4</sub> )	Potent short-lived greenhouse gas emitted from agriculture, waste, and fossil fuels.
Mitigation	Actions to reduce or prevent greenhouse gas emissions and enhance sinks.
Nationally Determined Contributions (NDCs)	Country-specific climate pledges under the Paris Agreement.
National Council on Climate Change (NCCC)	Apex federal body coordinating national climate policy and implementation.
Net-Zero	Balance between anthropogenic greenhouse gas emissions and removals.
Ocean Acidification	Decrease in ocean pH due to absorption of atmospheric CO <sub>2</sub> .
Off-Grid Energy	Decentralised energy systems independent of the national grid.
Paris Agreement	International treaty committing parties to limit global warming to well below 2°C, preferably 1.5°C.
Particulate Matter (PM 2.5)	International treaty committing parties to limit global warming to well below 2°C, preferably 1.5°C.
Public Financial Management (PFM) - Green	Integration of climate considerations into budgeting, expenditure tracking, and reporting.
Rainfall Variability	Significant fluctuations in precipitation patterns from historical norms.
REDD+	UN mechanism for Reducing Emissions from Deforestation and Forest Degradation, plus conservation and enhancement.
Remediation	Actions to reverse or mitigate environmental damage.
Renewable Energy	Energy from sources that are naturally replenished on a human timescale.
Resilience	Capacity of systems to absorb disturbance and reorganise while retaining essential functions.
Sea-Level Rise	Increase in global mean sea level due to thermal expansion and ice melt.
Sequestration	Capture and long-term storage of atmospheric carbon dioxide.
Smart Agriculture	Use of data, technology, and forecasts to optimise farming under variable conditions.
Solar Energy	Renewable energy harnessed from sunlight using photovoltaic or thermal systems.
Tipping Point	Critical threshold beyond which a system reorganises abruptly.
Vulnerability	Degree to which a system or community is susceptible to climate impacts.
Wet-bulb Temperature	Combined measure of heat and humidity indicating human heat stress limits.
Wind Energy	Renewable energy generated from wind using turbines.

# Appendix: References

**Adaptation Fund.** *Project database: Nigeria.* <https://www.adaptation-fund.org>

**Climate Action Tracker.** *Nigeria.* <https://climateactiontracker.org/countries/nigeria/>

**Climate Funds Update.** *Nigeria country profile.* Heinrich Böll Stiftung & Overseas Development Institute. <https://climatefundsupdate.org>

**Federal Government of Nigeria.** (2021). *Climate Change Act, 2021.* National Council on Climate Change. <https://www.climatecouncil.gov.ng>

**Federal Government of Nigeria.** (2022). *Nigeria Energy Transition Plan.* Energy Transition Office. <https://www.energytransition.gov.ng>

**Federal Government of Nigeria.** (2024). *Nigeria's third Nationally Determined Contribution (NDC 3.0).* United Nations Framework Convention on Climate Change. <https://unfccc.int/NDCREG>

**Global Environment Facility.** *Project database [Filter: Nigeria, climate change].* <https://www.thegef.org/projects-operations/database>

**Global Forest Watch.** *Nigeria dashboard.* World Resources Institute. <https://www.globalforestwatch.org>

**Green Climate Fund.** *Country portfolio: Nigeria.* <https://www.greenclimate.fund/countries/nigeria>

**IPCC Data Distribution Centre.** *Data for West Africa.* Intergovernmental Panel on Climate Change. <https://www.ipcc-data.org>

**National Agency for the Great Green Wall.** *Progress reports.* <https://www.naggw.gov.ng>

**National Bureau of Statistics.** *Data portal.* Federal Government of Nigeria. <https://nigerianstat.gov.ng>

**National Council on Climate Change.** *Official documents and reports.* Federal Government of Nigeria. <https://www.climatecouncil.gov.ng>

**Nigerian Meteorological Agency.** *Seasonal climate prediction and historical data.* Federal Government of Nigeria. <https://nimet.gov.ng>

**Office of the Accountant General of the Federation.** *FAAC monthly reports.* Federal Government of Nigeria. <https://www.oagf.gov.ng>

**Resource Watch.** *Nigeria data layers.* World Resources Institute. <https://resourcewatch.org>

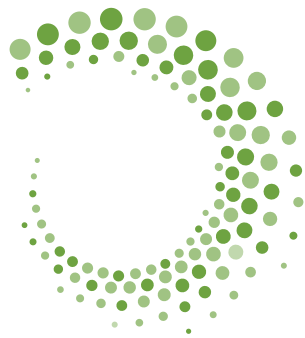
**Udo, E. E., Ogunbode, T. O., & Ogunbode, E. B.** (2022). Carbon stock assessment in mangrove forests of the Great Kwa River, Nigeria. *Journal of Environmental Management* (or relevant journal; exact title/source as cited in toolkit development).

**United Nations Framework Convention on Climate Change.** *NDC registry: Nigeria.* <https://unfccc.int/NDCREG>

**United Nations Framework Convention on Climate Change.** *Greenhouse gas inventory submissions: Nigeria.* <https://unfccc.int/ghg-inventories-annex-i-parties/2024>

**World Health Organization.** *Air quality database and guidelines.* <https://www.who.int/data/gho/data/themes/air-pollution>





**PACE**

Partnership for Agile Governance  
and Climate Engagement