# Scoping report: Expected impacts of ICAT project in Namibia (First phase)

ICAT Initiative for Climate Action Transparency

# Initiative for Climate Action Transparency – ICAT
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### DISCLAIMER



### PREPARED UNDER

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## Introduction

Namibia's commitment to the Paris Agreement and its climate actions are articulated through its updated Nationally Determined Contribution (NDC), which outlines ambitious goals and targets for reducing greenhouse gas (GHG) emissions and adapting to climate change impacts. The country's NDC reflects a significant progression from its 2015 commitment, aiming for a reduction in emissions by 91% below 2030 business-as-usual (BAU) levels. This includes a conditional reduction of 14% with limited support and up to 77% with substantial international support, equating to a total reduction of 21.996 MtCO2e.

**NDC Goals and Targets**

Namibia's updated NDC, submitted in July 2021, sets forth a bold goal for 2030 to reduce GHG emissions by 91% against BAU, including 14% with unconditional contributions. This target is more ambitious than the initial one in terms of the volume of avoided GHG emissions by 2030. The NDC also includes plans to scale up renewable energy and an elaborated adaptation component, covering areas such as water, agriculture, forestry, coastal zones, health, tourism, and disaster risk management. The updated NDC is aligned with the Sustainable Development Goals and reflects comprehensive stakeholder-driven dialogue and enhanced data. It also aims to increase Namibia's removals by 4.233 Mt CO2e, contributing to a more resilient, green growth pathway.

**Other transparency related initiatives in Namibia**

Namibia has implemented several initiatives related to greenhouse gas (GHG) mitigation and transparency beyond the Initiative for Climate Action Transparency (ICAT). These initiatives are part of Namibia's broader commitment to combating climate change and transitioning to a climate-resilient, low-carbon sustainable development model. Here are some key initiatives and efforts:

- **National Climate Change Strategy and Action Plan (2013-2020)[1]:** This plan focuses on two mitigation themes: sustainable energy and prioritized low carbon development, and transportation. It also emphasizes adaptation, implemented under four key themes: food security and sustainable biological resources; sustainable water resources base; human health and wellbeing; and infrastructure development.
- **Namibia Capacity Building Initiative for Transparency[2]:** This initiative implemented by UNDP focuses on building capacity for GHG inventory management, including reviewing GHG emission scenarios and projections. It aims to strengthen Namibia's ability to

[1] https://unfccc.int/sites/default/files/NDC/2022-06/Namibia%27s%20Updated%20NDC_%20FINAL%2025%20July%202021.pdf
[2] https://open.undp.org/projects/00125916/results

report and manage its GHG emissions effectively.

- **Capacity-building for GHG Inventory for the Waste Sector[3]:** This initiative by CBITGSP aims to improve sector-specific data collection and management for GHG emissions from the waste sector, enhancing Namibia's overall GHG inventory accuracy and reliability.
- **Reporting Process for Climate Change Adaptation and Mitigation:** Namibia has commenced a reporting process aimed at strengthening its policies and measures for climate change adaptation and mitigation. This process involves improving institutional arrangements, upgrading information on national circumstances regarding the GHG inventory, and tracking revised NDCs and adaptation efforts. It is supported by a project funded by the Global Environment Facility (GEF) through the UNDP[4].

These initiatives demonstrate Namibia's comprehensive approach to GHG mitigation and transparency, involving updated commitments, sector-specific strategies, capacity building, and enhanced reporting mechanisms.

**Biennial Update Reports (BUR)**

Namibia has submitted multiple Biennial Update Reports to the UNFCCC, with the fourth report (BUR4) submitted on February 18, 2021. These reports are crucial for tracking progress in climate action, including mitigation and adaptation measures, greenhouse gas (GHG) inventories, and the country's needs for financial, technological, and capacity-building support.

Namibia has implemented several measures to reduce its greenhouse gas emissions as part of its commitment to the Paris Agreement and its efforts to combat climate change. These measures are detailed in its updated Nationally Determined Contribution (NDC) and other strategic documents. Here are some of the key actions Namibia has taken:

1- **Updated NDC Targets:** Namibia aims to reduce emissions by 91% below 2030 business-as-usual (BAU) levels. This includes a 14% unconditional reduction using domestic resources and a 77% conditional reduction dependent on international support.
2- **Renewable Energy:** Namibia's National Renewable Energy Policy aims to increase the use of renewable energy sources. The country plans to contribute to a 30% reduction in the quantity of electricity imported by 2018, which would result in 0.8 TWh (800 GWh) in new renewable energy generation of 330 MW of Solar PV per annum until 2030.
3- **Fuel Switching:** Namibia is looking to replace inefficient fuels with cleaner and more

[3] https://climate-transparency-platform.org/in-country-activities/capacity-building-ghg-inventory-waste-sector-namibia

[4] https://www.undp.org/namibia/news/namibia-commences-its-reporting-process-aimed-strengthening-policies-and-measures-climate-change-adaptation-and-mitigation

economical alternatives, such as substituting hydrocarbons for hydrogen or electric energy. This is complemented by modern equipment upgrades to reduce energy consumption and carbon emissions.

4- **Fuel Economy Measures:** The country has proposed tougher fuel economy measures to reduce emissions from transport. This includes improving the fuel economy of vehicles imported into Namibia and adopting policy support such as fiscal measures and consumer sensitization programs.
5- **Deforestation and Reforestation:** Namibia aims to reduce the deforestation rate by 75% and has plans for reforestation of 20,000 hectares per year, restoration of 15.5 million hectares of grassland savanna and soil carbon, and planting trees under agroforestry and urban forestry initiatives
6- **National Climate Change Strategy and Action Plan (NCCSAP):** This plan aims to build Namibia's adaptive and mitigation capacities by identifying potential adaptation options and committing to pursue opportunities that bring the country onto a low carbon development pathway.
7- **Transportation Sector:** Namibia is working on improving the fuel economy of light-duty vehicles and has considered the inclusion of heavy-duty vehicles in its surveys. Vehicle labelling and regional harmonization of policies and regulations are also recommended strategies.

These measures reflect Namibia's comprehensive approach to reducing greenhouse gas emissions through a combination of policy initiatives, renewable energy adoption, and efficiency improvements across various sectors of the economy. The success of these measures is contingent on both domestic efforts and international support.

**Key Priority Areas**

Namibia has identified several priority areas for implementing its NDC under the Paris Agreement, focusing on both mitigation and adaptation strategies:

1- **Development of Better Framework Conditions for Climate Change Governance:** This includes the development of a robust transparency reporting system on its NDC and a final instrument for the national Monitoring, Reporting, and Verification (MRV) system to monitor the effectiveness of its mitigation and adaptation measures.
**2- Strengthening Financing of Climate Projects:** Namibia aims to strengthen the financing of projects that help reduce emissions and enhance the country's resilience against climate change effects. This involves collaboration with development partners, the private sector, and government institutions to address climate impacts and achieve global climate goals.
**3- Tracking Progress Toward GHG Emission Reduction Targets:** Working groups will oversee and track the implementation of the updated NDC,

ensuring progress towards the ambitious 2030 goals.

4- **Strengthening Coordination Across Stakeholders:**
The NDC Partnership's integrated planning process is embraced to strengthen coordination, resource mobilization, and transparency on NDC implementation. A newly developed Partnership Plan connects international resources for climate mitigation and adaptation to the government's priority areas, building a community around climate action in Namibia.
Namibia's commitment to the Paris Agreement and its updated NDC demonstrate the country's dedication to combating climate change and transitioning to a climate-resilient, low-carbon, sustainable development mode. Through these ambitious targets and priority areas, Namibia continues to play a part in an effective global response to climate change.

Measuring, reporting and verification (MRV) systems are key elements to guarantee transparency, precision, and comparability on climate change information. In response to the needed actions presented by the Paris Agreement, Namibia requires a robust MRV system for national policy decisions by tracking national GHG emission levels. MRV facilitates sharing information and lessons learnt and allows assessing whether set targets have been achieved. Transparency is a key element of MRV systems and shows the continuity of a country's actions, indicates progress towards national and global emission targets and enhances trust for sound climate finance and investment.

Building upon these MRV needs and strengthening national arrangements to meet the enhanced transparency requirements of the Paris Agreement, Namibia is engaging with the initiative for Climate Action Transparency (ICAT) through its international implementing partners, UNEP Copenhagen Climate Center (UNEPCCC). Through this collaboration, it is expected that current national MRV arrangements are enhanced to improve the quality and access to relevant climate change information and data, leading to an informed assessment of climate policies and improved decision making and enhanced ambition.

## Background and Rationale for the work proposed under ICAT Phase 1

The work plan elements have been designed to support the Republic of Namibia in the development and institutionalization of a framework for tracking its NDC actions in the energy sector, in line with the requirements of Section III of the Modalities, Procedures and Guidelines (MPGs - CMP decision 18/CMA.1), i.e. "Information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement".

The overall objective is to enable Namibia to manage and track the implementation of its NDC

mitigation actions by putting in place a framework for regular collection and management of the necessary data, including those needed to project GHG emissions/removals, assess the impact of relevant policies and measures, and develop appropriate indicators for reporting on progress achieved.

## Approach and expected results of ICAT Phase 1

The ICAT Phase 1 PCA was signed January 2024 and the implementation started in February 2024 in Namibia. The official counterpart of the project is the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs and Forestry. In addition to its role in preparing national climate reports such as NC or BUR/BTR, it is also responsible for establishing and coordinating an enhanced transparency framework at the national level. Other co-partners are the Ministry of Mines and Energy, Ministry of Environment, Forestry and Tourism, and *Department of Environmental Affairs and Forestry.*

The ICAT Phase 1 project has the following main Results:

a) Establishment of a NDC tracking system for energy sector.

b) Established a monitoring, reporting, and verification framework (institutional arrangements, data, information, and methodologies) for the energy sector mitigation policies contributions included in the NDC, taking into account the international reporting requirements for NC, BTR, and Inventories.

To achieve those results, the ICAT Phase 1 project was built along following activities:

**1- Framework for projections of emissions and key NDC tracking indicators in the selected sectors**

**Activity 1.1: Selection and training session on modelling tool(s) for the energy sector**

The activity includes several online training sessions and workshops focusing on projection modelling tools such as LEAP and GACMO, IPC 2006 guidelines, and energy sector software.

**Activity 1.2: Data collection and processing to prepare a projection of GHG emissions for the energy sector.**

This activity involves reviewing current data and collecting additional data to develop sectoral/economy-wide projection(s) using the selected modelling tool for the energy sector. It also includes Identifying policies and measures in the energy sector to develop a 'with measures' projection of GHG emissions, and, where relevant, 'with additional measures' projections and a 'without measures' projections, as agreed during the inception as well as, Development of projection(s) of GHG emissions and Identifying gaps in data, data management, institutional arrangements and resources. This leads to the development of a report on data collection and management improvement recommendations.

**2- Assess the impact of the selected policies and measures.**

**Activity 2.1: GHG and SD Impact assessment of mitigation policies and measures in the energy sector (ICAT RE and SD guides)**

It includes conducting evaluation (s) of the policy impacts on GHG emissions and sustainable development impacts from the energy sector, using the ICAT renewable energy assessment guidance and ICAT sustainable development guidance to build scenarios.

3- **NDC tracking framework for the energy sector.**

**Activity 3.1. NDC tracking framework for the energy sector.**

It consists of Identifying indicators to track progress towards implementing and achieving Namibia's NDC targets under Article 4 aligned with the requirements of the CMP decision 18/CMA.1; - Define and validate input data/ parameters required for tracking the indicators in the Namibian context; Involving relevant ministries and agencies, assess the availability of relevant data, data gaps, and existing institutional arrangements for collecting them; Present the draft set of indicators to the stakeholders for feedback and comments and develop final versions of indicators; Develop the data protocols for data collection, processing, and QA/QC procedures roadmap for addressing data gaps and In consultation with the technical experts select NDC tracking template (e.g. GACMO, FAO) or develop the calculation template to be used as the NDC tracking tool.

**Activity 3.2: Training on the energy sector's NDC tracking template,**

This activity focuses on training experts and other stakeholders from relevant ministries and agencies on applying a tool. The training aims to introduce the tool, including its scope and functionality in the national context, and appoint data champions who will use it in various agencies and institutions.

4- **Closure phase**

**Activity 4.1 Identify lessons learned and key achievements and closing workshop.**

All the results achieved through the three components above will be compiled into a methodological guide for monitoring the mitigation targets in the NDC, including the description of the procedures and processes considering international reporting requirements. This guide will be published as the final deliverable of the ICAT Phase 1 project and used by the country's leading actors as the guide for the implementation and tracking of the national NDC.

## Expected impacts of ICAT Phase 1 on Namibia national transparency system

Overall, the impacts of the ICAT Phase 1 project in Namibia will allow to strengthen the national MRV system in the country both from a methodological and institutional processes point of view. At the same time the outcomes will strengthen the national capacities for the preparation of the first BTR due in December 2024 and for the preparation of the successive NDC due in 2025.

The proposed MRV framework for Namibia's energy sector will establish the country's inaugural national MRV system that is aligned with relevant NDCs. It will encompass all facets of data collection, indicator definition for quantification, and monitoring and verification, supported by a robust

institutional setup for implementation. This MRV framework can be expanded to cover other sectors as well.

The project is anticipated to bring about the following positive impacts in Namibia:

- Enhanced capacity of national stakeholders (technical skills for staff; capacity-building for decision-makers):

Stakeholder consultation workshops will be conducted during the project to enhance awareness and provide training for relevant technical personnel. These workshops will facilitate knowledge sharing among different stakeholders and institutions. At a broader level, the project outcomes will raise decision-makers' awareness in the energy sector regarding gaps and requirements for implementing MRV systems to monitor NDCs and mitigation actions.

- Monitoring and potential revision of NDCs (if necessary) (revision of baseline and alternative scenarios by identifying new mitigation opportunities in specific sectors):

Within the ICAT project framework, a review and potential revision of NDCs will be conducted, introducing new NDCs following a comprehensive quantitative analysis using the GACMO model. Stakeholders will endorse these new or revised NDCs at the closing workshop of the ICAT project.

- Development of a data collection system unit with an institutional structure for endorsed data sharing and collection, focusing on providing energy sector data for NCs, BURs, and BRs.

- Enhanced reporting system for the energy sector under the ICAT project, increasing transparency in reporting on mitigation actions. This improved transparency could enhance the country's prospects of attracting future funding opportunities.

In line with those impacts, the ICAT Phase 1 project in Namibia allowed to achieve direct results:

- Established a framework for projections of emissions and key NDC tracking indicators in the selected sectors
- Improved the accuracy of the three mitigation targets of the NDC corresponding to the sub-subsectors of the Energy sector by calculating those targets with the standardized methodologies and data.
- Established standardized methodologies based on the 2006 IPCC methodologies for the calculation of the relevant mitigation targets for energy defined in the NDC.
- Clear templates and procedures for the data collection process for the calculation of the mitigation targets for energy sector defined in the NDC are defined.
- Clear roles and responsibilities among national stakeholders responsible for the production and collection of the data related to the mitigation targets of energy sector defined in the NDC are defined.
- Assessed the impact of the selected policies and measures using ICAT RE and SD guides
- Established an NDC tracking framework for the energy sector which includes identifying indicators for tracking progress of NDC, Stakeholder consultation and establishment of institutional arrangement for data collection, stakeholder consultation and development of data protocols and QA/QC

Those impacts and results will contribute directly to some of the key KPIs of the ICAT MELU framework, among others:

- *KPI 5 "ICAT Namibia implements a new MRV framework, which will support a comprehensive and reliable national GHG inventory system that can be used to track progress towards Namibia's NDC (KPI 5 a, b & c)."*

By standardising the methodologies for calculating the mitigation targets, Namibia will improve the quality of key data required to develop the GHG inventory for the Energy sector. In addition, the direct outcomes of the project listed above contribute directly to refining the NDC tracking framework. The outcomes of the project listed above will be considered for the preparation of the first BTR, which is under development, as well as for the preparation of the successive NDC.

- *KPI 6 "**ICAT methodologies, guides, and tools, such as the ICAT assessment guides, were used in this project to impact climate actions and policies."***

The project aims to establish an MRV system for assessing relevant policies by establishing an institutional framework for sharing and collecting data, which the country will support. This system will provide the energy sector with data and inputs for National Communications (NCs), Biennial Update Reports (BURs), and Biennial Reports (BRs). Additionally, the country's transparency in reporting its mitigation actions will increase due to the improved reporting system for the energy sector under the ICAT project.