Final summary report of ICAT Zimbabwe Project Phase I – Outcomes and Lessons Learned.

ICAT Initiative for Climate Action Transparency

Initiative for Climate Action Transparency – ICAT
Summary report of Zimbabwe Project Phase I

AUTHORS

Jingjing Gao, UNEP Copenhagen Climate Centre

Daniela Romano, ISPRA

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List of Acronyms

AFOLU	Agriculture, Forestry and Land Use
BTR	Biennial Transparency Report
ETF	Enhanced Transparency Framework
GACMO	Greenhouse Gas Abatement Cost Model
GCF	Green Climate Fund
GHG	Greenhouse Gas
ICAT	Initiative for Climate Action Transparency
IPCC	Intergovernmental Panel on Climate Change
IPPU	Industrial Processes and Product Use
ISPRA	Istituto Superiore per la Protezione e la Ricerca Ambientale
MPG	Modalities, Procedures and Guidelines for Article 13 of the Paris Agreement
MRV	Measuring, reporting and verification
NAP	National Adaptation Plan
NBFP	National Biofuels Policy
NCP	National Climate Policy
NCPIF	National Climate Policy Institutional Framework
NDC	Nationally Determined Contributions
NDS	National Development Strategy
NREP	National Renewable Energy Policy
RE	Renewable Energy
SD	Sustainable Development
CCMD	Climate Change Management Department
MECTHI	Ministry of Environment, Climate, Tourism and Hospitality Industry
MoEPD	Ministry of Energy and Power Development
UNEP-CCC	UNEP Copenhagen Climate Centre
UNEP DTU	UNEP DTU Partnership
UNFCCC	United Nations Framework Convention on Climate Change

Introduction

Zimbabwe joined the Initiative for Climate Action Transparency (ICAT) in mid-2020. Zimbabwe Phase I project commenced in December 2020 after a Project Cooperation Agreement (PCA) was signed by the Government of Zimbabwe and the UNEP DTU Partnership (UNEP DTU). The objective of the project is to complement Zimbabwe in its efforts to build a robust transparency system as required by the Enhanced Transparency Framework of the Paris Agreement as well as improve its capacity for climate change related policy assessment. The project ran from December 2020 to July 2022, coordinated by the Climate Change Management Department (CCMD), Ministry of Environment, Climate, Tourism and Hospitality Industry, Zimbabwe. Technical assistance was provided by UNEP-DTU (later as UNEP-CCC) and Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA). Due to COVID-19 travel restrictions, all technical support was provided remotely through online engagements.

The project activities started with an inception workshop held in February 2021. It introduced the ICAT Zimbabwe Project to stakeholders and considered their inputs before the implementation of activities commences. The main scope of the project was modelled around four objectives:

i. Conduct an in-depth study on NDC implementation tracking for Zimbabwe in order to inform institutional arrangements, proposed MRV procedures and data collection templates for all sectors;
ii. Increase the local skills base in analysis of the GHG mitigation options for Zimbabwe through the use of the Greenhouse Gas Abatement Cost Model (GACMO);
iii. Assess the GHG and Economic Impacts of the National Renewable Energy and National Bio-Fuels Policies using ICAT guidelines;
iv. Train local experts in key government institutions in GHG data verification, quality assurance and quality control with the aim of improving the country's ability to produce improved reports to the UNFCCC;

Project activities to achieve these objectives were developed. Table 1 lists the activities, outputs and expected outcomes.

This report provides a summary of the implemented activities together with lessons learned.

Table 1. ICAT Zimbabwe Phase I activities, outputs and expected outcomes

Outcomes/outputs	Activities	
ICAT Zimbabwe Project inception workshop		
Outcome 1: Nationally Determined Contributions implementation progress tracking tool operational		
Output 1.1 Study on NDC implementation tracking including stakeholder mapping, current and proposed MRV procedures and enhancement of data collection templates for all sectors	Act.1.1.1	Recruitment of a consultant to conduct a study on NDC implementation tracking including mapping exercises, procedures and templates
	Act.1.1.2	Workshop to engage relevant stakeholders at the national and sectorial level involved in the NDC MRV. Awareness of the importance of MRV, transparency and the link with data collection
	Act.1.1.3	Mapping of current institutional arrangements, procedure for data collection and management in all sectors (intra - sectorial and inter-sectorial structures) for data collection and data management
	Act.1.1.4	Consultations on and analysis of barriers to the implementation of an appropriate NDC data management system and tracking tool and proposal for improvement
	Act.1.1.5	Stakeholder consultation workshop: presentation and discussion of findings, validation of study
Output 1.2 Local GHG inventory experts trained on GACMO	Act.1.2.1	Recruitment of local consultants to train local experts on GACMO including its use for generating projections and NDC tracking
	Act.1.2.2	Hands-on training for local sector experts involved in UNFCCC transparency arrangements in the use of GACMO
	Act.1.2.3	Analysis of opportunities and barriers as well as recommendations on the use of GACMO in NDC tracking for all sectors in Zimbabwe
Outcome 2: National Renewable Energy and National Bio-Fuels Policies impact assessed and quantified for informed mitigation planning		
Output 2.1 Assessing the Greenhouse Gas and Economic Impacts of the National Renewable Energy and National Bio-Fuels Policies using ICAT guidelines	Act.2.1.1	Recruitment of consultants to undertake the ICAT Renewable Energy and Transformational Change impact assessment of the National Renewable Energy and the National Bio-Fuels Policies
	Act.2.1.2	Develop ICAT training materials customised to the Zimbabwean situation
	Act.2.1.3	Conduct training for ICAT Assessment Tools for experts and government officials
	Act.2.1.4	Stakeholder consultations and data collection and analysis to assess theoretical potential, sustainable development potential, economic potential and market potential of the Renewable Energy and Bio-Fuels policies
	Act.2.1.5	Compile Renewable Energy and Bio-Fuels Policies Impact Assessment Report including policy and strategy recommendations
Outcome 3: Verified, Quality controlled and Quality Assured GHG database		

Output 3.1 Local experts in key government institutions trained in GHG data verification, quality assurance and quality control	Act.3.1.1	Recruitment of local database and GHG QA/QC consultant
	Act.3.1.2	Development of documented GHG QA/QC procedure
	Act.3.1.3	Training workshop on key stakeholders on GHG data verification, quality assurance and quality control
ICAT Zimbabwe Project closure workshop		

Approach and key results of Phase 1

ICAT Zimbabwe Phase I ran from late 2020 through mid-2022, where the COVID pandemic heavily affected the implementation of project activities due to lockdowns in Zimbabwe and international travel restrictions. As a result, project activities had to be conducted either virtually or in a hybrid manner. All technical support from UNEP DTU and ISPRA were provided remotely.

Furthermore, project activities were carried out in four work packages, reflecting the four objectives/outputs. Under the national coordination by CCMD, the project contracted four external national experts/consulting team to support the four work packages. Table 2. Provides an overview of the contracted national experts/consulting team.

Table 2. National experts (individuals/consulting team) and the outputs they supported to

External national individual experts /consulting team	Outputs/work packages
Mr Desire Nemashakwe	**Output 1.1** NDC implementation tracking
Comprehensive Energy Solutions (Pvt) Ltd (Mr Tendayi Marowa and Dr Walter Svinurai)	**Output 1.2** GACMO training for GHG inventory
Mr Lewis Makurumure	**Output 2.1** Policy assessment and ICAT guides training
Mr Albert Mhanda	**Output 3.1** GHG data QA/QC training

To achieve the expected outcomes, each work package/output was carried out with activities in various formats of desk studies, consultations, trainings and validation. Table 3. lists the workshops and trainings conducted under Phase I. In the following this report will summarize how each of the work package's activities were implemented.

Table 3. Workshops and training conducted by ICAT Zimbabwe Phase I

Date	Workshops/Trainings	Format
19 February 2021	Project Inception Workshop	Virtual
12-13 August 2021	Stakeholder Consultative Workshop on NDC Tracking	Hybrid
19-20 August 2021	Training Workshop on the GACMO tool	Hybrid
23-24 August 2021	Training Workshop on ICAT Policy Impact Assessment Guidance (RE)	Hybrid
30 September - 01 October 2021	Training Workshop on the National GHG Inventory Database Quality Control and Quality Assurance Procedures	Hybrid
24-25 January 2022	Training Workshop on ICAT Policy Impact Assessment Guidance (SD)	Hybrid
26 January 2022	Validation Workshop on Policy Impact assessment of National Renewable Energy Policy & Biofuels Policy	Hybrid
27-28 January 2022	Stakeholder Validation Workshop on NDC Tracking	

Output 1.1: Study on NDC implementation tracking including stakeholder mapping, current and proposed MRV procedures and enhancement of data collection templates for all sectors

Zimbabwe submitted its intended NDC (iNDC) to the UNFCCC in 2015 and was finalising the first NDC while the ICAT Zimbabwe Phase I was being implemented (Zimbabwe's first NDC was submitted in September 2021). It was recognized that assessing progress in the implementation of the revised NDC will require a tracking tool that is suited to Zimbabwe's NDC, institutional arrangements and national circumstances. ICAT was expected to support NDC tracking with:

i. institutional arrangements;
ii. proposed monitoring, reporting and verification (MRV) procedures; and
iii. data collection templates for all Intergovernmental Panel on Climate Change (IPCC) sectors (Energy/Industrial Processes and Product Use (IPPU)/waste/Agriculture, Forestry and Land Use (AFOLU)).

A two-day stakeholder consultative workshop was held on 12-13 August 2021, consisting of Officers in the CCMD, experts and the consultant. The workshop reviewed the NDC Implementation Tracking landscape and the current institutional arrangements for NDC tracking in Zimbabwe and collected recommendations for NDC Implementation progress indicators for the Zimbabwean context. Based on the inputs collected at this consultative workshop, a study report on NDC implementation tracking in Zimbabwe was prepared in between August 2021- January 2022. The report was validated at a two-day stakeholder validation workshop held on 27 – 28 January 2022.

Currently in Zimbabwe, the National Climate Policy (NCP) Institutional Framework (NCPIF) is the mechanism responsible for implementing the national climate policy, headed by the Cabinet Committee on Climate Change. The CCMD under MECTHI is responsible for the coordination of NDC implementation and reporting. The Green Climate Fund (GCF) Coordination Framework built upon the NCPIF provides another level of NDC implementation and tracking of climate change funds. A High-Level NDC Steering Committee, Government ministries, and NDC Technical Committees drive NDC implementation and tracking. The NDC Technical Committees are embedded in the GCF Coordination Framework to provide their technical guidance in relation to projects or priorities discussed. The upcoming Climate Act is expected to institutionalize the NDC Steering Committee.

Table 4. shows the key institutions for NDC implementation tracking in Zimbabwe. Stakeholders responsible for implementing the NDC are also responsible for tracking the implementation, with coordination from the CCMD.

Table 4. Responsible institutions for NDC implementation and tracking in Zimbabwe

Sector	Name of stakeholder	Role
Cross cutting	Ministry responsible for climate change management	Co-lead of implementing agency
	Climate Change Management Department (CCMD)	Coordination of NDC implementation and international reporting
	Ministry responsible for Finance and Economic Planning	Co-lead of implementing agency Coordination of climate actions in the national budget, projects and programmes
	ZimStat and Environmental Management Agency (EMA)	Data on NDC MRV
	Department of Social Welfare under the Ministry of Public Service, Labour and Social Welfare	Support for communities suffering from adverse impacts of climate change
	Ministry responsible for Women Affairs, Community, Small and Medium Enterprises	Promote, protect and advance gender equality in the NDC
	Zimbabwe Gender Commission	
	Ministry responsible for Youth	Ensure equitable participation of youth in NDC implementation
	Ministry of Local Government and the Provincial Development Committees	Mainstream climate change at the subnational level in line with Zimbabwe's devolution agenda
Water	Ministry responsible for Agriculture	Co-lead of implementing agency-adaptation
	Local authorities	Adaptation/mitigation data provider
Health	Ministry responsible for Health	Co-lead of implementing agency - adaptation
	Ministry responsible for Transport Services	Co-lead of implementing agency - Mitigation and Adaptation
Energy	Ministry responsible for Energy	Utility mitigation projects (large hydro -Zimbabwe Power Company), MRV data
	Zimbabwe Energy Regulatory Authority (ZERA)	Provider of Regulations, Tariffs and Activity Data (Petroleum including ethanol and bio-diesel, coal, electricity)
	Ministry responsible for Mines and Mining Development	Provider of AD (coal production and its secondary products)
	ZimStats	Data on NDC MRV
	Zimbabwe Electricity Transmission and Distribution Company	Reduction of transmission and distribution losses
	Rural Energy Fund	Provider biogas digester projects
	Ministry responsible for Transport	Mitigation projects in transport
	Ministry responsible for Local Government	Coordination of the implementation of mitigation and adaptation actions in the provincial and local authorities

IPPU	Ministry responsible for climate change management and environmental affairs	Co-lead of implementing agency Data Provider (annual production data on Non energy products and use, ODS substitutes)
	Private companies	Data providers
	Industry Associations	Data providers
	Research and Standards associations	Data providers, research and development on technologies
	Ministry responsible for Industries	Co-lead of implementing agency (Mitigation actions in industry)
AFOLU	Ministry responsible for Agriculture	Co-lead of implementing agency-Agriculture mitigation / adaptation
	Department of Research and Specialist Services (DR&SS)	Data provider and implementing agency
	Forestry Commission	Forestry and Other Land-Use (FOLU) Mitigation actions implementation
Waste	Ministry responsible for climate change management and environmental affairs	Mitigation actions and GHG activity data providers GHG activity and mitigation actions data providers
	Ministry responsible for Local Governance	
	Environment Management Agency	
	Local Authorities	
	Private Company - Zimbabwe Sunshine Group	

The project developed an NDC implementation tracking framework, taking into consideration the climate policy tracking framework designed by WRI[1], the National Adaptation Plan (NAP) in Zimbabwe which was being developed and, the potential of using GACMO as an MRV for the NDC Implementation tracking. The NDC tracking framework identifies 8 pillars for NDC implementation tracking guided by the IPCC sectors (AFOLU, IPPU, Energy and Waste). Figures 1-4 illustrate the relevant documentation in different sectors, where key policy and action plans can be identified and categorized.

[1] WRI Climate Policy Tracking Framework: 2014

Figure 1. NDC Implementation Tracking Framework in Zimbabwe (AFOLU sector)

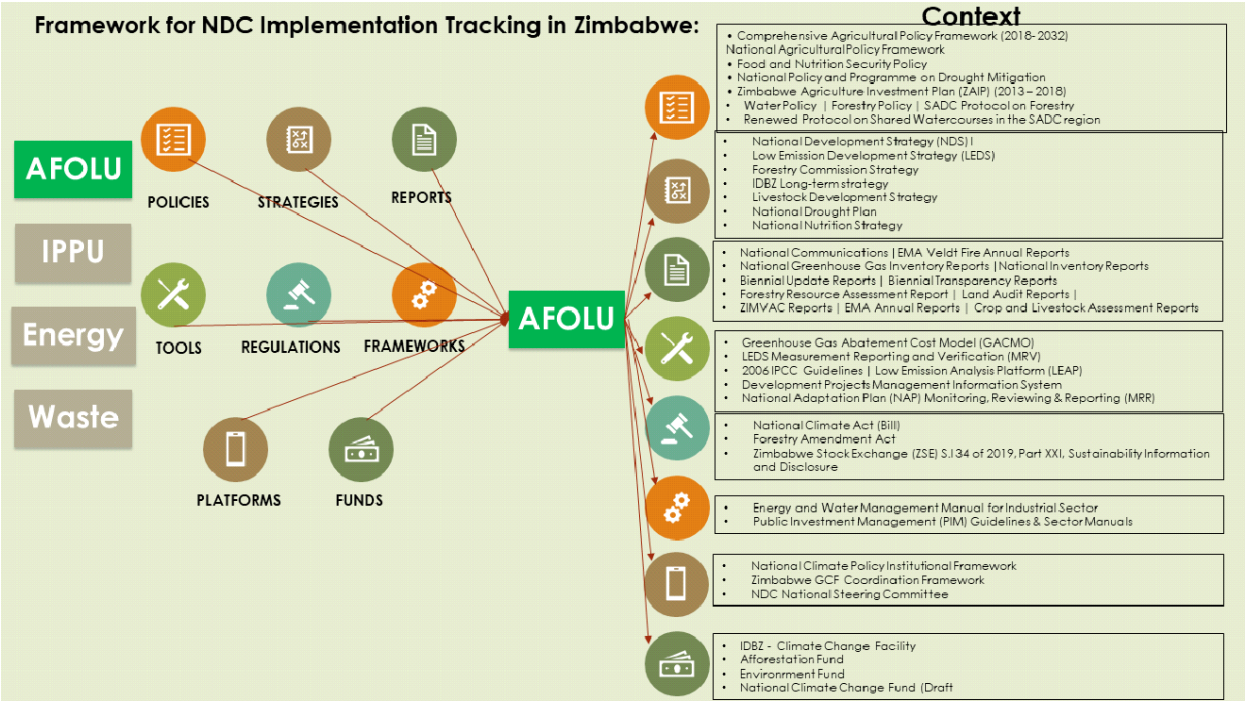


Figure 2. NDC Implementation Tracking Framework in Zimbabwe (IPPU sector)

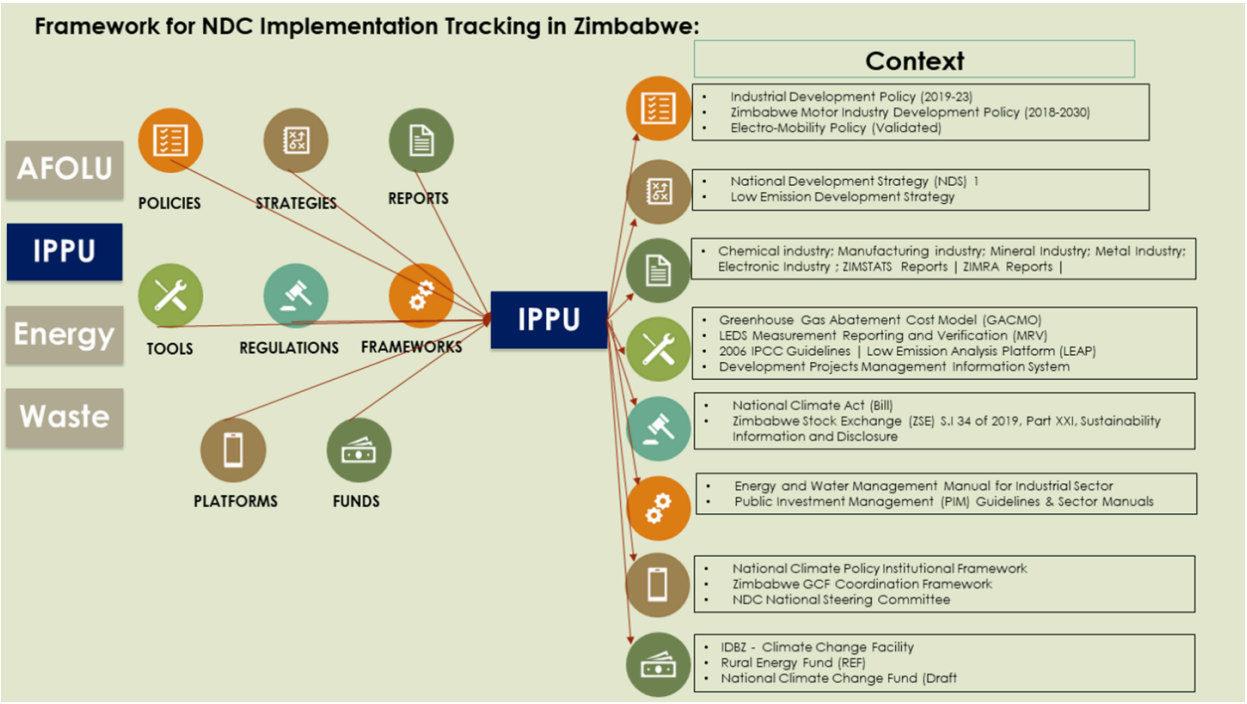


Figure 3. NDC Implementation Tracking Framework in Zimbabwe (Energy sector)

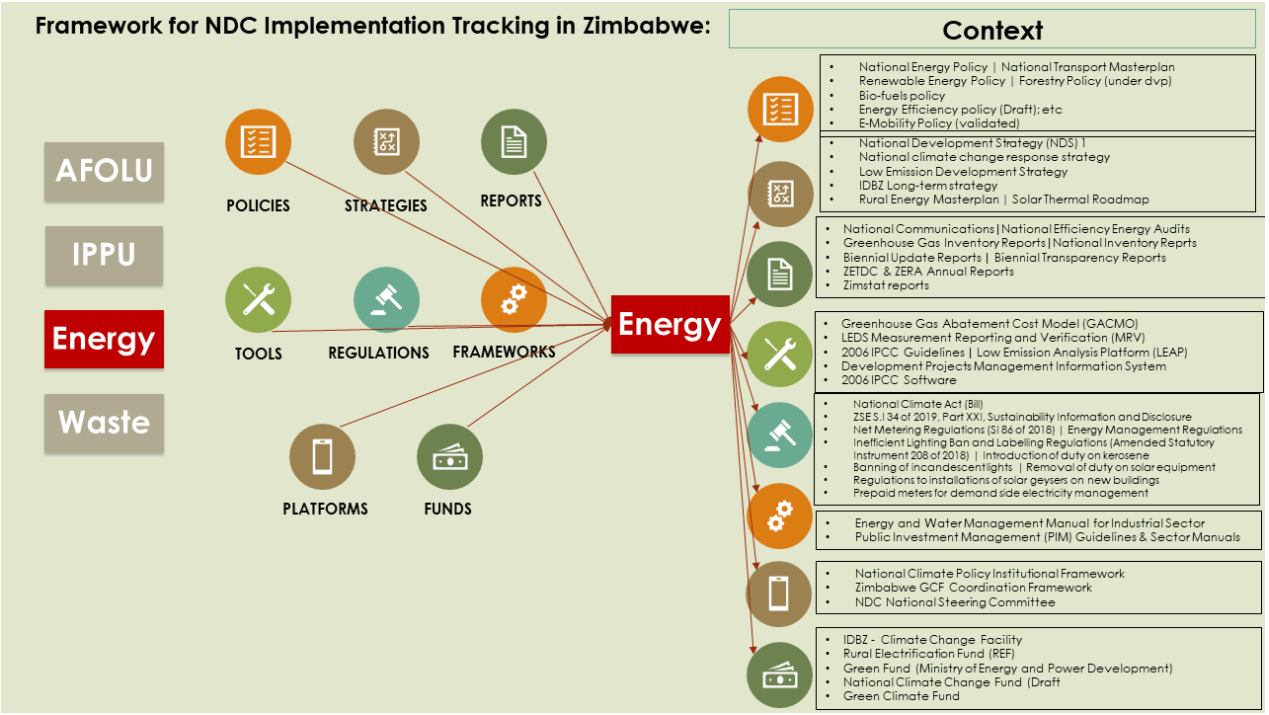
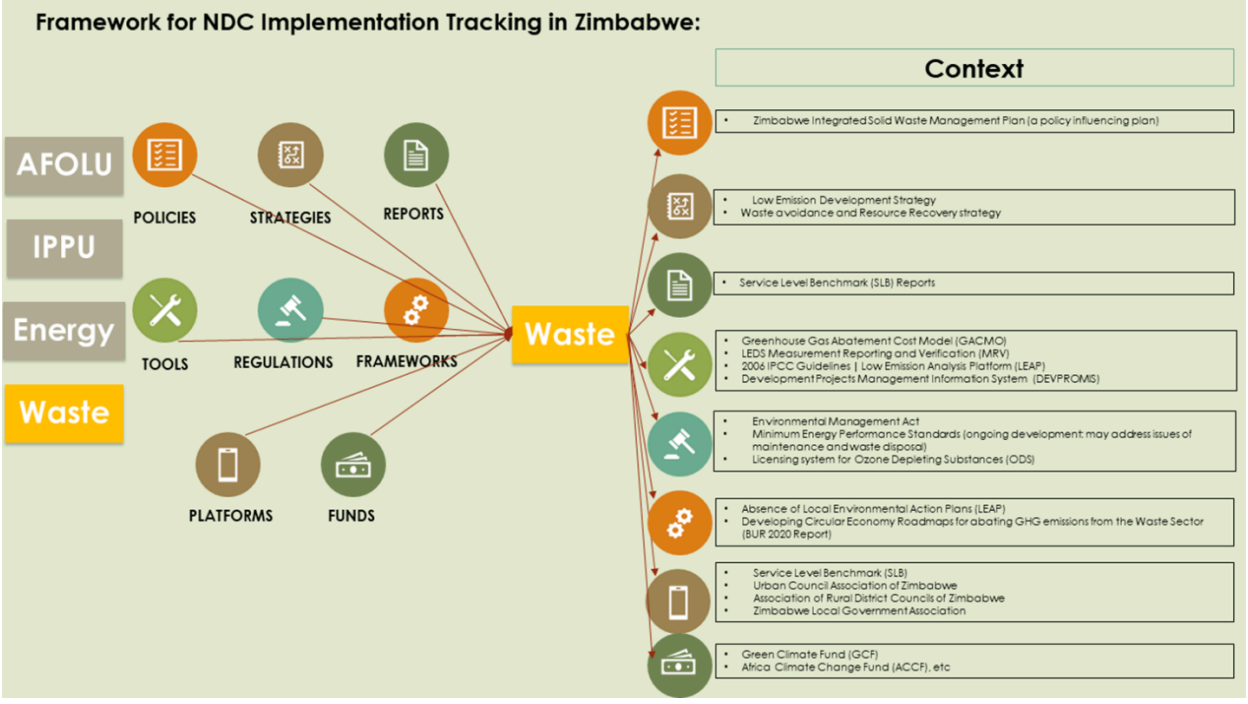


Figure 4. NDC Implementation Tracking Framework in Zimbabwe (Waste sector)



The project further gathered information from different sectors on their views regarding the opportunities and challenges in tracking and reporting on NDC implementation. Table 5. shows the challenges and opportunities existing in the tracking of NDC implementation.

Table 5. Challenges and opportunities for NDC implementation tracking for Zimbabwe

Adaptation Challenges	Mitigation Challenges
There's a lack of knowledge and skills from the recruited Monitoring and Evaluation Officers in Government.	Some policies do not have a specific mechanism that obligates, enforces or incentivizes the technological or behavioural change that will in turn mitigate GHG emissions.
The absence of data for identified NDC implementation tracking indicators in public sector statistical agencies, e.g., ZIMSTATS	Lack of proper institutional arrangements and inconsistency in implementing entities
Lack of political will to support and strengthen MRR or M&E	Lack of disaggregated data; Lack of industry data by sub-category and a lack of a standardized data collection system; and data from private sector across sectors is, largely, not forthcoming
The various MRR and M&E systems which are project or programme based, designed without consideration of NDC targets or Government priorities.	Lack of capacity to prepare the energy balance timeously to meet the NDC tracking timelines, and of BUR and National Inventory Report (NIR)
Coordination of the climate change agenda lacks adequate coverage at subnational and community levels as there are no resource persons to monitor work on a continuous basis	Lack of capacity to manage waste-to-energy projects (Poor tariff system; poor financial position of the off-taker; and viability challenges because of currency exchange rate issues, affecting investment interest.
Limited capacity towards institutional strengthening because of a limited human resource base	Lack of regulations in biodiesel production, including lack of feedstock
Some policies do not have a specific mechanism that obligates or incentivizes the technological or behavioural change that will in turn advance adaptation actions.	Lack of fuel efficiency, awareness raising, road infrastructure, and lack of cycle tracks
Opportunities	
Supports future iterations/review in NDCs	
Raises the profile of the NAP and the LEDS to create domestic and international buy-in	
Provides a leverage for prioritization of adaptation and mitigation priorities, and access to climate finance	
Strengthens streamlining of Transparency, Accuracy, Consistency, Comparability and Completeness (TACCC) principles	
Identification of sources of data and information towards enhancing MRR and MRV on the implementation of NDCs	
Existence of an institutional structure used to drive the climate change agenda through the National Climate Policy Institutional Framework	
The Government of Zimbabwe is currently recruiting Monitoring and Evaluation (M&E) Officers into various ministries towards strengthening compliance of public sector projects and programmes against set targets and priorities.	
Zimbabwe has strong climate change policy frameworks, and continues to make strides to improve the current aspect through the ongoing development of a Climate Act (at the Bill stage) and the National Climate Change Fund (NCCF)	

Finally, the project proposed the following recommendations towards strengthening NDC implementation tracking in Zimbabwe:

i. The need to strengthen key Government ministries, departments, and agencies (MDAs) towards NDC implementation tracking
ii. Continuous capacity building of climate change issues is essential towards strengthening Climate Change Focal Points and IPCC sector-specific stakeholders for NDC implementation tracking at national, sub-national, and private sector levels

iii. Pursuing awareness raising and regulatory measures across all sectors to increase confidence in stakeholders regarding data access, ownership, and disclosure.
iv. Policymakers and Political Leaders are an important vehicle towards strengthening adaptation monitoring, reporting and reviewing
v. The National Climate Policy Institutional Framework should be activated towards NDC implementation tracking since it is where Focal Points should derive.
vi. Priority should be invested in the alignment of indicators and MRR/M&E frameworks of major donors with those of the NDCs adaptation component
vii. Develop South-to-South cooperation towards strengthening NDC implementation tracking
viii. Strengthen existing national reports to include climate change indicators e.g., ZimVAC and ZIMSTATS
ix. Policies, strategies, and frameworks must provide mitigation and adaptation indicators to improve trackability
x. There must be a balance of climate finance to equally support adaptation projects, providing flexible packages for uptake
xi. Activation and strengthening of key legal instruments such as the Climate Change Bill and Zimbabwe Stock Exchange, Statutory Instrument (S.I) 134 will become key building blocks towards NDC implementation tracking
xii. Global climate finance windows must be fully utilized for the country to tap into available and accessible climate funds
xiii. The need to create incentives for private sector participation, focusing on maintenance and replacement of equipment used to monitor mitigation abatement interventions to reduce the cost and increase the appetite from private sector
xiv. Iterative processes are the initial steps towards developing strong policies, strategies, etc culminating in projects that align with IPCC sector priorities
xv. Completion of transitions or understanding of roles of key adaptation and mitigation interventions between ministries, departments and agencies is important towards the sustainability of NDC implementation tracking
xvi. Records are not readily available and most of the data provided is based on estimation. For example, records on refrigeration sub-sector trade statistics are not available, and ZIMSTAT based on estimates. The National Ozone Office, in the CCMD compiles records on sales of chemical species imported, but not the destination product they'll be used for.

Output 1.2: Local GHG inventory experts trained on GACMO

The Greenhouse Gas Abatement Cost Model (GACMO) aims to provide countries with a tool that allows them to carry out rapid but accurate evaluations of the GHG impact of a variety of mitigation options. ICAT Zimbabwe Phase I aimed to increase the number of experts with in-depth knowledge of GACMO and to explore the possibility of using the tool to track the NDC implementation.

Training on the use of GACMO was conducted in two steps. First, three "train the trainer" sessions were held on 27th May, 8th June and 11th June 2021 respectively. Through the three sessions, training on applying GACMO in the Zimbabwean context was offered by UNEP DTU Partnership experts (Dr Jørgen Villy Fenhann and Dr Jingjing Gao) to national GACMO experts (Mr Tendayi Marowa and Mr Walter Svinurai). The sessions also offered opportunities for UNEP DTU Partnership experts to better understand the GHG data landscape in Zimbabwe and how the model could be customized accordingly to suit its text. Based on the three sessions, the national GACMO experts developed the training materials towards Zimbabwean domestic users to ensure that the users understand how the GACMO works. The CCMD officials and UNEP DTU experts were consulted in the development of the training

topics and the content. Second, on 19-20 August 2021, a training workshop towards local experts on GACMO including its use for NDC implementation tracking in Zimbabwe was held. The training sessions were led jointly by the UNEP DTU Partnership experts (through online participation) and the national GACMO experts (on-site participation).

At the same training workshop, the suitability of the GACMO as a tracking tool for Zimbabwe's NDC implementation was also discussed by the workshop participants sector by sector. it was concluded that GACMO has positive and negative attributes (in the four sectors Energy, IPPU, AFOLU and Waste) that can be considered when investigating the suitability of the tool in tracking the NDC implementation in Zimbabwe. If chosen as the country's NDC implementation tracking tool, it is recommended that the negative attributes shall be well addressed. It was also suggested that further consultations with more experts and stakeholders are required to ascertain the model use. Table 6. Summarize the barriers and opportunities for using GACMO in NDC tracking.

Table 6. Barriers and opportunities for using GACMO in NDC tracking for Zimbabwe

Mitigation Assessment component	Gaps & Barriers in using GACMO	Opportunities for using GACMO
Historical emissions trending	Energy sector: • GACMO does not calculate non-CO2 emissions, but imports them from other tools • It does not give a trend of historical emissions as it caters for one year (Start Year) IPPU • GACMO does not calculate emissions but imports them in GgCO2eq. Emissions are imported as total and not disaggregated by sub-categories. AFOLU • Forestry emissions, like IPPU, are imported to GACMO as totals, and not disaggregated according to IPCC sub categories Waste • GACMO does not calculate emissions from the waste sector but imports emissions from liquid and solid waste for the Start Year, while the Waste sector categories are Solid Waste Disposal, Biological Treatment of solid waste, Incineration and open burning of waste, and Wastewater Treatment and Discharge.	Energy sector: • GACMO uses the Energy balance and follows the 2006 IPCC guidelines to estimate CO2 emissions from combustion for the Start Year, and these CO2 emissions can be compared with the Reference Approach emissions of the BUR and with those of the IEA. AFOLU • Emissions from Agriculture and Forestry are imported to the Start Year by category • Overall emissions are calculated with and without forestry, in line with the national GHG inventory
Baseline Projection Scenarios	Energy sector: • GACMO is not flexible enough to give project BAU emissions and mitigation	Energy sector: • The tool allows the importing of historical emissions (though for one year -the Start Year) and baseline or BAU emissions for the

	potential on an annual basis (gives emissions every five years, up to 2030) • The GACMO generates, with the aid of growth rates, baseline or BAU emissions for the years 2020, 2025, 2030 and 2050. IPPU • GACMO does not disaggregate emissions by category, making projections inaccurate because of the use of a single growth rate to represent all emissions from the various categories AFOLU • A single growth rate is used to project emissions from the AFOLU into the future and is not also applied by category; a single growth rate is used	years 2020, 2025, 2030 and 2050. Most countries give their emissions reduction targets for the years 2025 and 2030. • Economic growth rates are applied to activity data instead of emissions, making it relatively more accurate than methods based on emissions. AFOLU • A growth rate is used to project emissions into the future for each category Waste • GACMO produces BAU projections for the years 2020, 2025, 2030 and 2050 by applying growth rates on imported liquid and solid waste emissions for the Start Year.
Technical mitigation assessment		Energy sector: • GACMO gives cumulative emissions reductions, as a percentage, for each reported year AFOLU • The GACMO has some mitigation projects of various technologies which help, with proper scaling up or down, give the units penetrating, investment costs, annual costs, annual emissions reductions, and abatement costs Waste • The GACMO has some mitigation options of various technologies which help, with proper scaling up or down, given the units penetrating, investment costs, annual costs, annual emissions reductions, and abatement costs
Economic analysis		Energy sector: • The GACMO has numerous mitigation options of various technologies which help, with proper scaling up or down, given the units penetrating, investment costs, annual costs, annual emissions reductions, and abatement costs. • GACMO gives the results of an economic analysis in both graphical (Marginal Abatement Revenue Curve) and tabular formats and gives flexibility to exclude some projects from the graph
MRV	Energy sector: • On tracking implementation of mitigation measures the GACMO MRV tracks only units penetrating; it does not track the emissions per se.	Energy sector: • GACMO keeps track of what has been planned (in units penetrating) and has provision for recording actual units penetrating per year. Comparing the actual units penetrating against the planned units is actually performance tracking.

Output 2.1: Assessing the Greenhouse Gas and Economic Impacts of the National Renewable Energy and National Bio-Fuels Policies using ICAT guidelines

The ICAT Policy Assessment Guides were developed to provide policymakers support to assess the impacts of their climate policies and actions and support greater transparency, effectiveness trust and ambition in climate policies worldwide. ICAT Guides are flexible enabling users to apply them within the context of their own objectives and circumstances at any level of government, in any sector and for policies at various stages of implementation. ICAT Zimbabwe Phase I aimed to support the country in assessing national policy with selected ICAT Guides, and this was expected to achieve through:

i. Conduct training of government officials and experts on ICAT Renewable Energy (RE) Guide and Sustainable Development (SD) Guide
ii. Contextualise the application of the ICAT Renewable Energy Guide to assess the National Renewable Energy Policy, 2019 (NREP 2019) and the National Biofuels Policy of Zimbabwe, 2019 (NBFP 2019)

For the first objective, training were carried out in two steps. First, three "train the trainer" sessions were provided by UNEP DTU Partnership experts to the national expert (Mr. Lewis Makurumure):

i. 8th July 2021, training on ICAT RE Guide, by Dr. Jyoti Prasad Painuly and Dr. Jingjing Gao
ii. 20th July 201, training on ICAT RE Guide, by Dr. Jyoti Prasad Painuly and Dr. Jingjing Gao
iii. 18th November 2021, training on ICAT SD Guide, by Dr. Jingjing Gao

With support from the UNEP DTU Partnership, the national expert developed training materials on the two Guides which was used for training workshop towards national experts and government officials. The workshops were held in two periods: a two-day workshop for training on ICAT RE Guide on 23 - 24 August 2021 and a two-day workshop for training on ICAT SD Guide on 24-25 January 2022. Both workshops provided a step by step training in utilizing the Guides. On the August workshop, consultations with sector experts on applying the RE Guide in assessing the two national policies were conducted during the training sessions (and continued through the impact assessment process later). In the January workshop, participants discussed the Ministry of Energy and Power Development (MoEPD) Monitoring and Evaluation Framework for the National Renewable Energy and National Biofuels Policies against the ICAT SD Methodology. The workshop further recommended a strengthened M&E framework for consideration by the MoEPD.

For the second objective, the impact assessment of the NREP and NBFP used two ICAT Guides, where the RE Guide was the primary assessment methodology and the SD Guide was selected as a secondary guideline. The two Guides covered the key sectors targeted by the policy according to the IPCC categories as both policies are in the energy sector, and they took into consideration national priorities specifically the National Development Strategy 1 (NDS1), which focuses on the achievement of sustainable development goals.

The assessment of the two policies were led by the national expert with support from the UNEP DTU Partnership in customizing the RE Guide to the Zimbabwean context. A stepwise ex-ante approach was adopted for estimating the effects of the entire package of policies for the period of 2020-2030. Data collection and expert analysis were done in consultation with

the above stakeholders from August - December 2021 where government officials from various departments provided data and expert judgment in the impact analysis.

The assessment results showed the NREP will contribute 1056 MW to renewable energy by 2030, reaching 52% of the policy targeted and consequently contributing to the emission reduction potential. The 1056 MW is within the revised NDC target of 300 MW from RE addition to the Electricity Grid. The NBFP will reach approximately 23% of the target potential due to the limited resources and seasonal nature of raw material supply for ethanol blending. This means that the policy targets will most likely not be reached by 2030, hence as the policies are set to be reviewed the identified barriers in 2024 to meet the policy objectives need to be addressed. In the meantime, it concluded that the polices can contribute significantly to the country's NDC targets hence a potential for the country to meet its emission reduction commitment under the Paris Agreement. Furthermore, the NREP and NPF have a positive impact on sustainable development goals (SDG): SDG 3 (Good health and Wellbeing), SDG7 (Affordable and Clean Energy), SDG8 (Decent Work and Economic Growth) and SDG 13 (Climate Action). It also recommended developing an implementation tracking framework to MRV the policy implementation.

To discuss and validate the policy impact assessment, a validation workshop was held on 26 January 2022. National stakeholders from relevant departments participated and validated the findings from the assessment, and further recommended further work:

i. CCMD was urged to come up with policy briefs on the assessment to be shared with the Ministries of Energy and Transport as well as other relevant stakeholders in order to inform broader policy and planning within the government.
ii. The Ministry of Energy and Power Development was urged to ensure that its monitoring and evaluation framework for the NREP includes parameters that have to do with broader sustainability beyond the provision of power and emissions reductions.
iii. The Ministry of Transport indicated the NBFP was in its early stages of implementation and would require a few years for its impacts to be felt and for the policy target to be met. It was highlighted that the Ministry needs to provide further data and information on the impacts of the bio-diesel project on local communities from where the feedstock will be obtained.
iv. Participants indicated that the impact assessment exercise should be extended to other policy frameworks as it assists in policy review and the identification of barriers to success.

With inputs received in the validation workshop, the "Impact Assessment Report on National Renewable Energy and Biofuels Policies Zimbabwe" was revised and finalized.

Output 3.1: Local experts in key government institutions trained in GHG data verification, quality assurance and quality control

The need to have robust GHG inventories is more and more stringent with the next reporting cycle under the Enhanced Transparency Framework (ETF). Institutional arrangements have to be set up to ensure periodic data collection to apply methods for emission estimations and projections. In this context, quality control, assurance and verification activities are integral parts of the whole process from data collection to reporting. To this end, the development of a QA/QC manual was part of the ICAT activities.

ISPRA shared its experiences in conducting quality control checks and quality assurance procedures as well as verification activities on GHG inventory; the Italian QA/QC procedure

manual was shared together with the QA/QC plan annually developed during the annual inventory compilation.
Based on this material, the national expert developed a quality assurance quality control manual describing general and specific checks to be carried out during the different steps of the inventory compilation. The manual was developed to be used by government officials for the compilation phases of the National GHG Inventory. In addition to this document, and with the aim to provide capacity building to the experts from the different institutions on the use of a database which could guide inventory compilation for the different IPCC sectors, a two-day workshop was held on 30 September and 1 October 2021 to deliver the training but also receive feedback on the tool and its implementation. The workshop involved about 20 participants from the CCMD, Ministry of Energy, Ministry of Transport, Environmental Management Agency, Ministry of Industry and Ministry of Agriculture, the main institutions in charge of data collection and emission inventory estimates.
Although the training was conducted with a collaborative response from the public, additional time would be needed to test the tool and provide training on the IPCC methodologies to estimate emissions from the different sectors and at a different level of detail.

With all the planned project activities being implemented, the ICAT Zimbabwe project Phase I was concluded at a closure workshop held on 21 March 2022. The workshop brought together officials and experts who participated in the project activities as well as other key stakeholders, where the results from each of the four outputs were presented by the project team consisting of the CCMD team, the national experts and the international experts from UNEP Copenhagen Climate Centre (UNEP-CCC) and ISPRA. The closure workshop also provided a platform where participants discussed the need to improve the climate-related legislative and policy framework and indicated the importance of technical capacities amongst other stakeholders. It was also highlighted the importance of the requirements of the NDC implementation tracking and inclusion of main stakeholders. The way forward was for continued close future collaboration with ICAT, as well as with other ongoing transparency activities such as the CBIT project and the National Communications.

Reflections

Lessons and reflections

i. COVID has heavily affected the project implementation in the following aspects:
   - Due to travel restrictions, the scoping mission was not feasible, hence the collaboration between the international technical supporting team (UNEP DTU Partnership and ISPRA) and the national coordinating team, and particularly the national stakeholders during the scoping phase was limited in many aspects, e.g., designing works scope, understanding the context and needs etc.
   - It was experienced that there were difficulties in delivering remote training especially those sessions which involved applying computer-based model. Explaining details of modelling and demonstrating the application through online engagement was very challenging and might not be received by the trainees as well as through on-site training.
   - Restrictions on local gatherings and travel also significantly limited the number of participants per workshop, further affecting field activities like data collecting and expert judgments throughout the policy impact assessment.
   - Due to both technical and economic reasons, limited access to internet connectivity limited the involvement of stakeholders through virtual links.

ii. There was unbalanced gender distribution among male and female participants in most training workshops as well as consultation and validation workshops. This needs to be improved in future projects.

iii. Although a good response, additional efforts are still needed to fulfill all the requirements under the new ETF in terms of capacity building of personnel and sharing knowledge.

iv. It was suggested that specific workshops/training on GHG inventory may help.

v. ICAT Policy Impact Assessment Guides could be more practical in providing assessment methods. For example, the ICAT SD Guide provides a useful framework for impact assessment, however when comes to the assessment methodology, the Guides could provide more specific methods with step-by-step examples.

vi. It is important to ensure the continuity of the activities, and the practical manual and tracking tool may also need more time to be tested and implemented.

Good practice

i. Despite practical challenges in holding workshops, good feedback from the consultants, and plenary sessions were well-attended

ii. Country partner
   - organised and professional coordination
   - awareness of the country's needs and can translate these needs into technical support request
   - smooth and quick reactions to the development of activities

iii. Bottom-up motivation is the key to having meaningful outcomes

iv. Experience sharing
   - Facilitate peer learning and experience sharing among countries in similar contexts