

Terms of Reference

Revision and consolidation of the NDC to integrate the new GHG emission and mitigation of the three sectors

NDC Revision Firm TOR

PROJECT BACKGROUND

the Government of the Republic of Zambia signed the Paris Agreement on 20th September 2016 and then ratified it on 10th November 2016. The Paris Agreement seeks to hold the increase in the global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above preindustrial levels. In addition, Zambia in 2015 submitted its Nationally Determined Contribution (NDC) to the UNFCCC. The NDC is considered as a strategic document with an overall objective of putting the country on a low carbon climate resilient pathway and also aimed at assisting the country to contribute towards the achievement of the global temperature goal contained in the Paris Agreement. The NDC is implemented in the frameworks of the National Climate Change Policy for Zambia.

The NDC targets to reduce an estimated 38,000 Gg CO_{2eq} of Zambia's emissions from forestry, agriculture and energy by the end of 2030 with international support. An estimated 20,000 Gg CO_{2eq} under the domestic efforts with limited international support could be mitigated. This translates into a reduction potential of 25% and 47% against 2010 as the base year for the domestic efforts with limited international support and domestic efforts with substantial international support respectively. The emissions reduction targets for the initial NDC were based on three sectors only namely; agriculture, forestry and energy.

Recently, Zambia has experienced an increase in vehicle population from 168,638 vehicles in 2005 to 782,136 vehicles in 2018¹. The increase in vehicle population has a corresponding bearing on fossil fuel consumption (of the total number of vehicles in 2018, 14% are Diesel, 70% gasoline (leaded), 15% gasoline (unleaded) and 0.01% electric) and hence greenhouse gas emissions.

Due to population increase, Zambia has increased the generation of liquid waste through centralized and decentralized wastewater treatment facilities. Households not connected to the sewer network utilise either septic tanks or pit latrines. Coal is an emerging key Category especially with the scaling up of the Maamba coal power plant to 600MW and increasing consumption from industrial activity. Cement factories are also considering installation of coal power plants at their factories so as to lower the cost of electricity.

Estimating emissions in this regard would be very useful in understanding the current trend of emissions and overall contribution to national inventory. This information will be useful in designing mitigation interventions and hence contribution to the NDC target. It is for this reason, that the government through Ministry of Lands and Natural Resources wishes to revise the NDC by increase sectoral coverage to include transport and waste sectors.

¹ Source: Road Traffic and Safety Agency (RATSA)

PURPOSE OF THIS CONSULTANCY

The purpose of this consultancy is to develop 'mini-GHG inventories' in the 3 sectors (transport, liquid waste, and coal [i.e. mining, handling and consumption]), and this work will include characterizing activities in these sectors that cause emissions, identifying emitted pollutants and emitted quantities, impacted geographic regions and relevant time periods.

SCOPE OF WORK

The Service Provider will receive from the national team the data available (activity data and parameters) together with a description of the source, procedures and arrangements made to collect the data. The assessment of the data should include: Analysis of the arrangements made to ensure archiving and the improvement of the data; Assumptions and criteria for the selection of activity data and emission factors; Assessment of the datasets and methodologies used and identify data gaps in the time series; Integrate an adequate QC for the data and data assessment; and Provide technical advice on the most appropriate inventory method (tier system).

METHODOLOGY

Data Collection and reporting

The following methodologies can be utilized, but should not be limited to:

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PRODUCTS (KEY DELIVERABLES)

DELIVERABLES (1): INCEPTION REPORT

The survey firm shall submit an electronic copy of the inception report to UNDP which should include a detailed methodology including tools to be used to gather data/information, quality assurance, mechanism of data /information collection and roles and responsibility of team members and key milestone. The inception report should also detail the fieldwork plan in collaboration with Climate Change Department at Ministry of Lands and Natural Resource Protection to including the following:

- Final Workplan with Gantt Chart taking into account the comments from stakeholders
- Detailed methodology on data collection
- Expected tasks, responsibilities, and schedule of delivery of each member of the team

DELIVERABLE (2) DRAFT REPORT OF COMPREHENSIVE MITIGATION ANALYSIS FOR TRANSPORT AND LIQUID WASTE SECTOR

Provide draft comprehensive report with mitigation analysis for Transport, coal production and/use and liquid waste.

DELIVERABLE (3) DRAFT REVISED NDC REPORT

Draft revised NDC report integrating the new mitigation analysis for Transport and Waste sector as well as include gender, youth actions and the SDGs

DELIVERABLE (4) STAKEHOLDER VALIDATION MEETING

Conduct stakeholder validation meeting to solicit feedback on the revised NDC thereafter integrate the comments from stakeholder in the final Report

DELIVERABLE (5) REVISED NDC REPORT

Approved NDC report to be submitted to UNFCCC

TEAM COMPOSITION AND REQUIRED COMPETENCIES

Qualifications for the Lead Consultant

The Mitigation Assessment Lead Consultant should have the following qualifications and experience:

- a) A MSc degree in a climate change-related field or relevant to the study; a PhD in the relevant field is an added advantage;

Other consulting team members

In addition to the Lead consultant, the team should consist of specialized team members. The Lead consultant or a firm should provide detailed curriculum vitae of experts in the following fields:

- a) Energy Sector
- b) Waste Sector
- c) Transport Sector

REQUIRED SKILLS/ EXPERIENCE

The firm must meet the following minimum requirements:

- Legal status recognized by the Government of the Republic of Zambia, enabling the organization to perform the above-mentioned tasks under the laws of Zambia.
- A minimum of 10 years working experience in the area relevant to Climate Change Mitigation;
- Experience in GHG inventory preparation using IPCC 2006 Guidelines
- Demonstrable working knowledge of IPCC 2006 software and IPCC 2006 Guidelines;
- Participation in inventory preparation for national Communication or Biennial Update Report will be an added advantage

- Demonstrated understanding of climate change mitigation analysis and sustainable development issues;
- Demonstrated ability to undertake analytical work and prepare reports;
- Demonstrable knowledge of key mitigation Assessment methods and tools;
- Demonstrable scientific expertise on climate change research relevant to different sectors.
- Knowledgeable in computer databases and analysis, excel and other applications;
- Excellent oral and written communication skills in English;
- Demonstrable understanding of estimates in GHG emissions

ETHICAL CLEARANCE DOCUMENTATION

The consultancy Firm is responsible for acquiring all permissions necessary for conducting the assignment. Where required, this may include relevant permissions from national and/or local authorities, and Institutional Review Board (Protection of Human Subjects) permissions. The Firm is also responsible for adhering to local formalities and obtaining any required permits related to the survey implementation, as well as survey team health and accident insurance, salary, taxes, and others as necessary. Through the course of obtaining ethical clearance, the survey firm should also identify and secure respondent compensation packages/gifts according to local custom.

MANAGEMENT AND IMPLEMENTATION ARRANGEMENT (REPORTING)

The consultancy firm will work under direct supervision of Director Climate Change Department Ministry of Lands and Natural Resources Protection and UNDP Environment Advisor

ESTIMATED LEVEL OF EFFORT

The level of effort required for these responsibilities is currently estimated at 60 days spread within 6 months

DELIVERABLES AND PAYMENT SCHEDULES

Outputs	Percentage	Timing	Condition for Payment Release
Inception report	10	2 Weeks upon signing of contract	Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written acceptance (i.e., not mere receipt) of the quality of the outputs; and b) Receipt of invoice from the Service Provider.
Draft Mini-GHG Inventory and Comprehensive mitigation analysis Report	20	3 Months upon signing of contract	
Draft revised NDC report	20	4 Months upon signing of contract	
Final Report	50	6 Months	

		upon signing of contract	

EVALUATION CRITERIA

Submission of the technical proposal and financial proposal will be required for this process. Technical proposals will be opened and compared prior to the financial proposal. The financial proposal will be opened only for submissions that passed the minimum technical score of 70% of the obtainable score of 70 points in the evaluation of the technical proposals. The technical proposal is evaluated on the basis of its responsiveness to the Term of Reference.

The financial proposal of all bidders, who have attained a minimum 70% score in the technical evaluation will be compared. The short-listed bidding agencies may be asked for a presentation prior to the final selection if necessary. The contract will be awarded to the successful bidder following completion of all evaluations. The successful bidder will have to sign a contract to undertake the assignment.

Technical Evaluation Criteria:

SEQ.	CRITERIA	OBTAINABLE POINTS
QUALIFICATION, CAPACITY AND EXPERIENCE		
1.1	10 years working experience in climate change	5
1.2	Experience in GHG inventory preparation using IPCC 2006 Guidelines	10
1.3	Demonstrated ability of analytical and drafting work;	3
1.4	Demonstrable working knowledge of IPCC 2006 software and IPCC 2006 Guidelines	12
1.5	Relevance of Experience of Team Members:	
1.5a	Specialised Knowledge	5
1.5b	Experience on similar projects	5
1.5c	Experience in the region	3
	Sub-total: bidder's qualification and experience	
SECTION 2. PROPOSED METHODOLOGY, APPROACH AND IMPLEMENTATION PLAN		
2.1	To what degree does the Proposer understand the task?	5
2.2	Have the important aspects of the task been addressed in sufficient detail?	5
2.3	Is the conceptual framework adopted appropriate for the task?	5

2.4	Is the scope of the task well defined and does it correspond to the TOR	5
2.5	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project indicating time frame?	5
	Sub-total Methodology	
SECTION 3. MANAGEMENT STRUCTURE AND KEY PERSONNEL		
3.1	Lead Consultant	
3.11	MSC degree in environmental science or engineering degree	10
3.12	Participation in Inventory preparation for national Communication or Biennial Update Report will be an added advantage	10
3.13	Demonstrable knowledge of key mitigation Assessment methods and tools	5
3.14	Experience in supervising and managing teams	2
3.15	Demonstrable understanding of estimates in GHG emissions	5

Estimated Schedule

This consultancy is estimated to run from 15th June to 30th December 2020

Management and Logistical Support

The consultant will report directly to the Director Climate Change Department and UNDP Environment Advisor

Payment

The assignment will be remunerated upon delivery of the agreed outputs, at the agreed fee rate and the agreed number of days of professional fees chargeable, as per the normal procedures of the UNDP. Specifically requested among other financial proposal elements is to state the cost of unit per questionnaire administration in the financial proposal.