

**TERMS OF REFERENCE (TOR)**

**ETHIOPIA**

1. **General Information**

**Services/Work Description:** Conducting emission reduction impact assessment of CRGE policies and actions within the energy sector (for measures referring to reduced electricity demand through uses of efficient renewable energy & energy efficiency technologies), including:

* collect data on baseline and policy implementation,
* conducting assessment according to the adapted methodologies,
* and build capacity with MRV staff in national institutions, in close cooperation with UNEP DTU Partnership (UDP) and the Ethiopia Environment, Forest, and Climate Change Commission, and Italian National Institute for Environmental Protection and Research (ISPRA).

.**Project/Program Title:** The Initiative for Climate Action Transparency (ICAT)

**Duty Station:** Addis Ababa

**Type of the Contract:** International orNational Consulting Firm

**Duration:** August – December 2021

**Expected Start Date:** Immediately after concluding the contract agreement

1. **Background / Rationale**

The Government of Ethiopia conducted an assessment of the Climate Resilient Green Economy (CRGE) implementation. The assessment focuses on mitigation and adaptation actions and policies, as well as climate finance tracking and institutional arrangements. It revealed that numerous activities related to CRGE had taken place, and both flagship projects and smaller projects have been implemented. Within adaptation, the majority of activities are within agriculture, while some mitigation forestry activities led to adaptation co-benefits. Within mitigation, investments within transport and energy are prominent, together with the forestry REDD+ engagement. However, most activities did not set clear climate change targets, did not establish a baseline, so the climate change effect is not fully known. Thus, the assessment verified whether CRGE related actions and policies were implemented but did not assess the actual mitigation or adaptation impact, e.g., CO2 emissions reductions, from these. Consistent tracking of climate finance is likewise absent, though the assessment tries to assess the finance spent and resulting gap, compared to the needs expressed at the onset of CRGE. The assessment finds that the CRGE warrants an update due to the past ten years of developments in Ethiopia. It suggests that a new national and sectoral GHG inventory is conducted (baseline), as well as projections established. The same goes for climate change risks and vulnerability. It also suggests that future investments and interventions are explicitly conceptualised and aligned to the climate change ambitions and that a finance tracking system with coding is established. The next step is the update of the NDC, which is conducted over the coming half a year, with support from the World Bank. The ambition is to elaborate the NDC in more detail and include new features (compared to the earlier versions) such as quantifiable targets and indicators, a split between conditional and unconditional, requirements for engagement in carbon markets, etc.

ICAT support will lead to improved MRV capacity of government experts involved in MRV, especially in the institutions with responsibility for the CRGE policies and actions. Energy is one of the sectors of ICAT focus. Thus the MRV experts of the Commission and the Ministry will be capacitated on the Enhanced Transparency Framework of the Paris Agreement and the procedures and methodologies required to regularly produce reporting that meets basic quality principles of the UNFCCC reporting guideline, which are: Completeness, Accuracy, Transparency, Consistency, and Comparability. ICAT support will furthermore contribute to inform the government of Ethiopia about the GHG mitigation impacts of the selected CRGE policies/action, and thereby inform the government on how to improve the overall quality of the mitigation actions, e.g., in relation to the updated NDC.

1. **Overall objectives**

The overall objectives of the assignment are:

* Providing the government information on the mitigation effects of selected mitigation policies and actions in the country's energy sector till 2020 and 2030, which will be an important basis for future mitigation policy making, target setting, and action planning;
* To improve the country's capacity in complying with the international rules on climate action transparency through targeted training for the country's inventory preparation and MRV team for the energy sector.

**III. Specific Objectives**

Specific objectives:

1. To map the implementation status of the selected policies and actions from CRGE 2011 to date and the data availability in terms of the baseline and implementation details, including their direct and indirect energy saving and GHG emission reduction effects.
2. To determine the temporal and spatial boundary and select the appropriate methodology for each policy/action's mitigation impact assessment;
3. To make a quantitative assessment of the GHG emission reduction effects of the mitigation policies and actions in the energy sector, including the duration and annual and accumulated volume of their direct mitigation effects.
4. Determine outside influencing factors on the policies and actions assessed, incl. synergies and contradictions with other policies, making it challenging to attribute mitigation effects. (Often, the technology and emission levels of activity are subject to the direct and indirect influences of multiple policies and programs. In some cases, it may be difficult to attribute the change to a single policy);
5. The assessment should include a quantitative estimation of both the emission reduction impacts and social-economic impacts of the selected policies and actions.

For the energy efficiency policies and measures, one option is to base the mitigation effect estimation on the work of U4E (https://united4efficiency.org/).

1. **Scope of the Service (Work)**

The consulting firm/consultant will work closely with Ministry of Water, Irrigation and Energy (MoWIE), EFCCC, and key stakeholders: Ministry of Water (Alternative Energy Development and Promotion Center), Ethiopian Energy Authority (EEA), Ethiopian Electric Utility (EEU), Ministry of Trade and Industry Ministry - (Energy Efficiency and regulatory, related Department) and Ethiopian Electric, as well as with the technical experts of UNEP DTU Partnership (UDP) and ISPRA. The consultant/consulting firm will deliver all the steps listed in the specific objectives above, and thereby:

Identify and adapt the contemporary methodology to assess effects of the selected policies and actions, including collecting data and conducting analysis of:

* The policy of distribution of improved Cookstoves,
* The policy of introduction of Incandescent lamps by CFL and LED lamps, banning of Incandescent lamps promoting the use of LED lamps,
* The policy of Promotion of Power factor correctors, especially in large industries (high electricity consumers)
* The directives for labelling for Electric Enjera mitad, cook stoves, and other appliances
* The policy of introduction of mini-grids in rural areas for non-electrified communities.
* The policy of upgrading of transmission and distributions, reducing loss, standard implementation
* The policy of grid-connected waste to energy in the Addis area and elsewhere
* The policy on bioethanol.
* Assess the impact of promoting solar water pumping, solar home systems, solar lanterns, solar street lightings, solar water heaters, water purification technologies replacing boiling, solar refrigerators for health posts and clinics etc.
* The new initiatives with WB support, which will start now. This includes replacing biomass energy and diesel generators. The assessment will include the establishment of a baseline, the monitoring system, etc.

Throughout the consultancy, build capacity for emission assessment (ex-ante and ex-post) with the key experts in the line ministries, institutes, and agencies related to MRV within the energy, in order to enable an emissions assessment by the institutions in the future. This will be done through at least one training session and through on-the-job training and cooperation.

The Consultant will produce an inception report, a draft report for comments, and a final report and submit them in hard copy and softcopy (word, Excel, PowerPoint presentation) to MoWIE and UNEP DTU Partnership (UDP).

1. **Responsibilities of Parties**

The UDP is the contracting institution, while the Ministry of Water, Irrigation and Energy (MoWIE) will be the daily counterpart, reference point, and authority for the Consultant. The consulting firm/consultant agrees to provide the consultancy services for this particular assignment. Accordingly, the responsibilities of both parties are detailed as follows.

**A. Responsibilities of MoWIE & EFCCC**

The daily oversight and high-level coordination will be the responsibility of the MoWIE & EFCCC (Greenhouse Gas Measuring Reporting and Verification Directorate) with a day-to-day follow-up of the assignment. MoWIE shall facilitate communications, meetings, and high-level briefings across sector ministries relevant for this particular assignment. It will also facilitate the process of data collection, stakeholders meeting to enrich the draft and final products and facilitate the final quality assurance. MoWIE will inform UDP on the services and progress of the consultant/consulting firm, enable a clearance ahead of payments by UDP.

**B. Responsibilities of the Consulting Firm/Expert:**

The consulting firm will deliver on the ToR, including the objectives and scope of work. The Consultant will work in close cooperation with MoWIE and the Commission and the technical experts of UDP and ISPRA. The Consultant will consult UNEP DTU Partnership on all matters related to the formal contract. The Consultant will interact and obtain feedback and direction from the technical experts and participate in the co-creation of some elements e.g., the assessment methodology used, the training/capacity-building material, etc.

1. **Methodology / Approach of the Service (Work)**

The detailed assessment will be compiled by conducting primary and secondary data collection (and possibly field visits if necessary). Through a desk review (and interaction with technical experts in UNEP DTU Partnership and ISPRA) of existing available emission assessment international and national practice, a methodology will be defined and applied. The capacity building will be in the form of training sessions/on-job training and focus on the methodology applied and lessons learned from the application.

1. **Expected Outputs / Deliverables**

The major deliverable expected will be two-folds: The assessment of the Greenhouse Gas (GHG) emissions reduced as a result of promotion of renewable energy and energy efficiency technologies, and the capacity building and training of MRV relevant institutions. In general, the following outputs will be expected to be prepared and submitted to MoWIE and UDP by the consulting firm

**Output 1:** Inception Report, describing methodology/approach to the task and detailed work plan, including a time schedule.

**Output 2:** first draft assessment report for comments, including data and data source, methodology, and results, as well as recommendations on how to conduct similar tasks in the future. Each policy assessment should include a detailed description of the contents of the policy intervention and specify when and where the policy interventions have been made and the geographic and temporal scope of energy-saving or GHG mitigation impact assessment. The main content needs to include the baseline scenario/ the current status and mitigation actions implemented, the methodologies used and GHG reductions achieved, challenges, and the way forward as a recommendation.

**Output 3:** final assessment report, the content requirements are the same as those for the draft assessment report.

**Output 4:** Materials for capacity-building training and a report on the capacity-building activities and their effects.

All deliverables should be handed in hard copy and soft copy (Word format, excel format, and PDF format).

1. **Required Experience and Qualifications**

* Masters or above in environmental science, energy, electrical engineering, mechanical engineering, environmental engineering natural resource management, climate change and other related fields. At least 10 years of experience working in the above topics on climate change.
* Existing experiences in energy sector consultancy.
* Specific national or international experience and expertise in quantifying GHG mitigation effects of policies and measures in energy sector intervention, GHG inventories for identified thematic area.
* Strong knowledge of government institutional framework, roles, and coordination; and the policies and strategies, e.g., CRGE, NDC, National Communications, etc. and MRV development and reporting
* Experience in conducting training on GHG mitigation actions in the energy sector and other related environmental issues and experience in facilitation of workshops and meetings;
* Strong knowledge of government policies and strategies on low emission, including the CRGE.
* Familiar with government institutions and coordination mechanism;
* Proven experience in providing consultancy services and certificate of successful fulfillment of previous related and other environmental consultancy assignments;
* Demonstrated understanding of the Paris Agreement, associated decisions, and other decisions enacted by the UNFCCC.
* Good communication skills and good English language writing and reporting skills.

Knowledge and experience on energy efficiency and renewable technologies related to the policies to be assessed, including lighting, cook stoves, mini-grid, biofuel, and waste to energy, is an advantage.

1. **Location, Timeframe, and Overall Budget of the Assignment**

**Location:** The work will be carried out mainly in Addis Ababa, with some domestic trips for data collection. All the workshops will be held in Addis Ababa.

**Timeframe:** the duration of the assignment is from July to November 2021.

**Overall budget:** a fixed budget of forty thousand US Dollars (40,000 US$), no separate reimbursement of travel costs. Once the applicant is chosen, the budget is non-negotiable.

**Terms of payment:** the payment will be made against acceptance of deliverables by the MoWIE and UDP and in three installments.

Table 1. Terms of Payment

| **No.** | **Installment of Payment/ Period** | **Deliverables or Documents to be Delivered** | **Approval should be obtained from:** | **Percentage of Payment** |
| --- | --- | --- | --- | --- |
| 1 | 1st Installment | Submission of Inception Report | UDP and MoWIE | 30% |
| 2 | 2nd Installment | Final versions of output 3 and 4 in hard and soft copies | UDP and MoWIE | 70% |

**X. Criteria for Selecting the Best Offer**

The application process requires submission of an application package, including CVs and other documents on the qualification of the expert(s), the methodology and work plan, and a budget plan.

1. **Expert qualifications**

The documents on the expert(s)' qualifications should consist of the following:

* + Recent experience on assignments of similar nature along with a letter of testimonies for the successful completion of assignments.
  + A clear description of the methodology and work plan that the consultants propose to execute the assignment, illustrated where appropriate, activities described with bar charts
  + Curriculum Vitae of individual consultants- Personal CV including experience in similar projects and at least 3 references shall be provided. In addition, a copy of certificates (such as training certificates related to the assignment) of each individual assigned to the specific tasks described above shall be provided.

If two or more consultants will participate in the assignment, roles, and responsibilities of each Consultant.

1. **The methodology and work plan**

In the methodology description, the applicant should indicate the detailed methodology of GHG emission reduction assessment for each policy intervention, including existing data source, data collection, baseline setting, source of activity and energy consumption data, and how to calculation the GHG mitigation effect.

The work plan should indicate the number of workdays and start and ending dates of each deliverable and the workload estimate for finishing each policy assessment and each output.

The Consultant's comments or suggestions, if any, on the TOR and appreciation of the assignment –the objectives, tasks, and deliverables.

1. **Budget plan**

The application should indicate the daily rate of each expert, the number of days for each policy assessment and each output, the estimate of travel and miscellaneous costs, as well as the total costs of the assignment.

1. **Evaluation criteria**

The applicant will be evaluated based on Cumulative Analysis as per Table 2.

Table 2. Evaluation criteria

|  |  |
| --- | --- |
| Criteria | Weight |
| Criterion 1: Expert Experiences and Qualifications | 60% |
| Criterion 2: Quality of work plan and methodology: the scope of work, Methodology & Approach, robust and coherent work plan. | 30% |
| Criterion 3: A appropriate budget plan that is coherent and matches the work plan. | 10% |

**XI. Logistical Support**

Access to the key stakeholders and arrangement of validation workshop and associated costs will be facilitated and managed by EFCCC.

**XII. Submission of Application**

Interested consultants are requested to submit their applications by 1/07/2021 using the following e-mail address.

E-mail at the UNEP DTU Partnership: [merped@dtu.dk](mailto:merped@dtu.dk)

E-mail at EFCCC: Benti Firdissa: [firdissabenti@yahoo.ca](mailto:firdissabenti@yahoo.ca)