

## ANNEX I



Empowered lives.  
Resilient nations.

ETHIOPIA

# TERM OF REFERENCE (ToR) FOR THE RECRUITMENT OF INDIVIDUAL CONSULTANTS (ICs)

## GENERAL INFORMATION

**Services/Work Description:** Build the capacity of three Development Sectors (namely: Component 1-Transport; Component 2-Electric Power (Energy) and Component 3-Industry) to integrate current and future climate change adaptation and mitigation measures in their respective development plans to ensure that development is climate proofed" as part of Nationally Determined Contributions (NDCs) implementation.

**Project/Program Title:** Deepening Efforts to Implement NDC in Ethiopia

**Post Title:** One National Consultant

**Consultant Level:** **Level C** (Senior Specialist)

**Duty Station:** Addis Ababa and 3 field trips/visits to selected cases studies by sectors (if there are any cases studies selected by respective sectors).  
Sectors will choose sites of their case studies for field visits

**Expected Places of Travel:** **3** project case study sites i.e. one for component 1 (Transport), one for component 2 (Electric Power/Energy) and one for Component 3 (Industry).

**Duration:** 53 days

**Expected Start Date:** Immediately after Concluding Contract Agreement

## I. BACKGROUND / PROJECT DESCRIPTION

In 2011, well before countries undertook obligations to reduce greenhouse gas (GHG) emissions and enhance climate resilience under the Paris Agreement, Ethiopia launched the Climate Resilient Green Economy Strategy (CRGE) which is an ambitious national blueprint towards reducing its emissions by 64% from a business-as-usual trajectory by 2030. The CRGE strategy anchors on key

economic development sectors (Agriculture, Forest, Industry, Transport, Energy, green city, mining etc.). The Ethiopian NDCs is fully anchored on the CRGE and GTP2 targets and reaffirms Ethiopia's continued commitment to strengthening the resilience of the country's economic sectors by enhancing sectoral contributions to NDCs for wider environment and community benefits. And hence, the Ethiopian NDCs is considered as an implementing mechanism of the CRGE strategy. The 2015 NDC<sup>1</sup> has specific aims to limit its net greenhouse gas (GHG) emissions in 2030 to 145 Mt CO<sub>2</sub>e or lower and also to undertake adaptation initiatives to reduce the vulnerability of its population, environment and economy to the adverse effects of climate change.

The transport, Energy and industry sectors are key to meet the targets of NDCs and CRGE, and their roles and relevant projects are highlighted as follows.

**Component 1-Transport:** The transport sector with its key sub sectors (road transport principally including freight, construction and passenger vehicles; Air transport) is considered as one of the four pillars in the CRGE strategy and is key for meeting the targets of NDCs. The transport sector alone accounts for about 3% of the national (i.e. about 4 MT CO<sub>2</sub>e) with 3 MT CO<sub>2</sub>e from road transport, freight, construction vehicles, and passenger vehicles<sup>2</sup>. The transport sector implements several leap frogging projects that have substantial impact on climate change mitigation; and the sector is considered as one of the four pillars in the CRGE strategy and is key for meeting the targets of NDCs. In order to mitigate climate change and increase resilience to adverse impacts of predicted climate change, the CRGE strategy highlighted four key areas of intervention, namely: fuel efficiency and fleet modification, electric rail development for freight, electric integrated public transport networks for urban passengers, fuel-switching for the for the period 2011-2019.

With regards to the implementation of Ethiopian NDCs, the transport sector NDC roadmap<sup>3</sup> was developed for implementation period between 2020 and 2030 by identifying actions prioritized in the CRGE Strategy. For the 2020-2030 transport NDC road map more than 8 project actions were planned for implementation and these include among others: improving public transit in Addis Ababa Light RailTransit /for passenger & freight; improving public transport (PT) infrastructure;

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<sup>1</sup> Federal Democratic Republic of Ethiopia, 2015. *Nationally Determined Contribution (INDC) of the Federal Democratic Republic of Ethiopia*, Addis Ababa: Federal Democratic Republic of Ethiopia.

<sup>2</sup> Federal Democratic Republic of Ethiopia, 2011. CRGE

<sup>3</sup> Ethiopia's NDC Roadmap: 2020 - 2030

encouraging the use of Hybrid and electric vehicles; integrating land use and transportation planning and development; setting emission standards for all vehicle types. These are FLAGSHIP projects/programs which enable the transport sector to discharge its responsibilities in meeting the targets of Ethiopia's NDC ROAD MAP 2020-2030.

**Component 2- Electric Power:** The electric power is under the institutional setup of **water and energy sector**. The sector is considered as one of the four pillars in the CRGE strategy and is key for meeting the targets of NDCs both in mitigation and adaptation. In contrast to the transport, agriculture and forest sectors, the water and energy sector has no domestic abatement potential due to the already low-carbon character of the sector and the absence of projected GHG increases from this area. The CRGE strategy emphasis on the water and energy sector to meet the growing energy demand by renewable, low-carbon energy, and hence to keep emissions growth in 2030 to zero. To this end, several FLAGSHIP projects/programs are being implemented for accessing potential resources of renewable energy from hydropower, geothermal, wind, and solar power. The FLAGSHIP projects that are under implementation during 2014-2019 are power generation, energy access, irrigated and industrial/commercial agriculture, access to WASH, and cross-cutting priorities.

With regards to the implementation of Ethiopian NDCs, the energy sector NDC roadmap<sup>4</sup> was developed for implementation period between 2020 and 2030 by identifying 6 project actions prioritized in the CRGE Strategy. The energy NDC road map project action plan includes mitigation projects namely: (i) generate energy from renewable sources, (ii) capturing emission from liquid waste, (iii) climate resilience wetland management, (iv) large and medium scale irrigation, (v) and (vi) reducing electricity demand through efficient light. The energy NDC road map emphasizes on estimating the GHG emissions reduction resulting from yearly annual targets (between 2020 and 2030) as well as the final 2030 emission reduction targets of the sector. However, currently existing lack of GHG-MRV capacity at organization level, individual level and enabling environment level may make difficulties for quantifying and tracking of emission reduction of the roadmap project actions. The entity responsible for implementing the energy NDC roadmap project action plan is the Ministry of Water, Irrigation, and Electricity (MOWIE).

**Component 3- Industry:** The industry sector with its sub sector the manufacturing and cement industry is considered as one of most important four pillars in the CRGE strategy. The cement industry is most

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<sup>4</sup> Ethiopia's NDC Roadmap: 2020 - 2030

important particularly for mitigation. The sector is key for meeting the targets of NDCs both in mitigation and adaptation. FLAGSHIP project interventions that focus on the cement industry are: improving energy efficiency (altering the type of kilns used, the type of coolers used, introducing computerized energy management systems, and other energy demand management measures); substituting input material (reducing clinker by increasing pumice content or fly-ash); adopting alternate combustion materials (fuel-switching by increasing the share of biomass in energy production for cement plants); and waste heat recovery (capturing some of the waste heat lost). Clinker substitution is considered as the most crucial abatement lever for meeting CRGE goals. Therefore in areas where industrial emissions arise, the focus of the country's CRGE strategy is geared to the cement industry and clinker substitution. The approach used to meet CRGE targets of the industry sector is effective implementation of Ethiopia's Green Manufacturing Strategy, Greening Ethiopian Industrial Parks Roadmap and integrating the Green Manufacturing Strategy.

With regards to adaptation, the industry sector is implementing several FLAGSHIP projects that have adaptation components related to the NAP adaptation options. This include among others the Fast Track Initiative project (FTI)- Greening of Bole Lemi Industry Park (2015-2016) which directly benefitted 740 jobless youths through employment opportunities and upskilling during the implementation period, reduced air and noise pollution; and contributed to moderating the park's microclimate and indirectly benefitted 8000 through park's employee<sup>5</sup>.

With regards to the implementation of Ethiopian NDCs, the industry sector NDC roadmap<sup>6</sup> was developed for implementation period between 2020 and 2030 by identifying 6 project actions prioritized in the CRGE Strategy. The industry NDC Roadmap project action plan includes both mitigation and adaptation projects namely: (i) clinker substitution, (ii) waste heat recovery, (iii) energy efficiency, (iv) fuel switch, (v) alternative production process and (vi) improving industrial waste management system. The entity responsible for implementing the industry NDC Roadmap project action plan is the Ministry of Industry.

With regards to ensuring development is climate proofed through integrating current and future climate change adaptation and mitigation measures of the sectors' development plan with NDCs' action plan; it is important to note that the government of Ethiopia has just launched a 10-Years Perspective Development Plan (PDP-10, i.e. 2020/21 – 2030/31), which is aligned with SDGs and aims at building prosperous community by 2030 and beyond. Institutional Capacity Building specific for NDCs need to be anchored on meeting the targets of PDP-10. Towards meeting the targeted objectives of Ethiopia's NDCs as well as PDP-10, the transport, industry and energy development sectors need to integrate current and future climate

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<sup>5</sup> Industrial Parks Development Corporation, 2016

<sup>6</sup> Ethiopia's NDC Roadmap: 2020 - 2030

change adaptation and mitigation measures in their respective development plan as part of NDCs' Roadmap implementation to ensure that development in the areas of transport, energy and industry is "climate proofed". In this regard, the industry, transport and energy sectors, which are currently key to CRGE and PDP-10 implementation, need to be strengthened to overcome the capacity constraints at systemic, institutional and individual levels for achieving the targets of NDCs set by the Ethiopian government to make sure the current and future economic development is sustainably climate proofed and resilient.

In order to support the implementation of the updated NDC of Ethiopia, UNDP developed Deepening the efforts to implement NDC in Ethiopia (DEEP DIVE). The objective of the project is to assess progress and to identify technical and capacity challenges in implementing the updated NDC and to effectively contribute to the enhancement of the 2020 NDC ambition.

## **II. SCOPE OF THE WORK**

The assignment shall be undertaken within the transport, electric power (water and energy) and industry sectors and their agencies and stakeholders. In order to effectively conduct institutional capacity need assessment and to plan institutional capacity building that will enable the transport, electric power and industry sectors and their agencies to integrate current and future climate change adaptation and mitigation measures in their PDP-10 action plans as part of the updated NDC implementation and ensure that outcomes of updated NDCs interventions and PDP-10 actions are sustainably climate proofed and resilient.

### **Component 1-Transport:**

The consultant needs to:

- ✓ Conduct in depth review and analyses of project documents, policies, strategies dedicated to CRGE/NDC and these may include but not limited to: Ethiopia's NDC Transport Roadmap: 2020 – 2030; CRGE, NDC, CRGE Strategy (2011-2019) implementation progress report on the transport sector, and FLAGSHIP projects/programs such public transit in Addis Ababa Light Rail Transit /for passenger & freight; improving public transport (PT) infrastructure.
- ✓ Provide situational analyses of the transport sector in view of achieving the targets of NDC-transport Roadmap and CRGE- Fast track projects of the transport sector;
- ✓ Undertake analyses on the progress of capacity building through 2011-2019 CRGE project initiatives as compared to the capacity status during pre-CRGE in terms of organizational

level, enabling level and individual level capacity in the transport sectors; and indicate the existing and the required capacity for NDC-transport Roadmap implementation;

- ✓ Provide quantitative data on GHG emission reduction (mitigation effect) and adaptive transport technology/system achieved by CRGE- project initiatives; and determine the level of the contribution of CRGE-transport project initiatives to the national commitment on climate change mitigation
- ✓ Produce alignment of NDC-transport roadmap project actions with PDP-10 and determine level of the contribution of NDC road map to PDP-10 and SDGs;
- ✓ Identify capacity gaps continued existing through 2011-2019 CRGE implementation project and draw actionable recommendations to bridge the gaps for meeting targets set for NDC roadmap and PDP-10;
- ✓ Prepare Institutional Capacity Development Plan for NDCs project implementation and for supporting PDP-10 implementation in each of the transport subsectors and their agencies;
- ✓ Identify key challenges, good practices (knowledge, technology, policy etc) for enhancing carbon trading benefits from mitigation projects of the transport sector,

## **Component 2- Electric Power**

The consultant needs to:

- ✓ Conduct in depth review and analyses of project documents, policies, strategies dedicated to CRGE/NDC on the transport sector; and these may include but not limited to: **Ethiopia's NDC-water and energy Roadmap: 2020 – 2030, CRGE, NDC, CRGE Strategy (2011-2019) implementation progress report, and FLAGSHIP projects/programs** that are under implementation during 2014-2019, namely: power generation, energy access, irrigated and industrial/commercial agriculture, access to WASH, and other cross-cutting project priorities.
- ✓ Provide situational analyses of the water and energy sector in view of achieving the targets of NDC electric power-roadmap and PDP-10 action plan;
- ✓ Undertake analyses on the progress of capacity building particularly on MRV, policy, institutions, finance and knowledge management through 2011-2019 CRGE-electric power project initiatives as compared to the capacity status during pre-CRGE in terms of capacity

gaps/needs at organizational level, enabling level and individual level in the electric power subsector of the water and energy sector;

- ✓ Produce alignment of NDC-water and energy and electric power-roadmap project actions with PDP-10 actions of the sector and other subsectors and determine level of the contribution of NDC electric power road map to PDP-10 targets and SDGs;
- ✓ Identify capacity gaps continued existing through 2011-2019 CRGE implementation project and draw actionable recommendations to bridge the gaps for meeting targets set for NDC roadmap and PDP-10 actions;
- ✓ Identify key capacity gaps and human development needs and prepare Institutional Capacity Development Plan at organizational level, enabling environmental level and individual level for NDCs-electric power roadmap project implementation and for supporting PDP-10 implementation,
- ✓ Provide level of gender inclusiveness of the electric power sector and social, environmental and financial benefits provided by CRGE-electric power project initiatives;
- ✓ Identify technological gaps/needs etc faced and innovative/ good practices applied for establishing climate adaptive electric power generation

### **Component 3- Industry**

- ✓ Conduct in depth review and analyses of project documents, policies, strategies dedicated to CRGE/NDC implementation in the industry sector; and these may include but not limited to: Ethiopia's NDC-industry Roadmap: 2020 – 2030; NDC, CRGE Strategy (2011-2019) and NAP implementation progress report, and FLAGSHIP projects/programs with regards to manufacturing and cement industry.
- ✓ Provide situational analyses of industry sectors in view of achieving the targets of CRGE- fast track initiatives and NDC Roadmap prepared for the Industry sector;
- ✓ Undertake analyses on the progress of capacity building through 2011-2019 CRGE fast track project initiatives as compared to the capacity status during pre-CRGE in terms of organizational level, enabling level and individual level capacity in the cement and manufacturing areas of the industry sector; and also indicate currently existing and the required capacity for NDC industry Roadmap.

- ✓ Produce alignment of NDC-industry roadmap project actions with PDP-10 and determine level of the contribution of NDC road map to PDP-10 and SDGs;
- ✓ Identify capacity gaps continued existing through 2011-2019 CRGE implementation project and draw actionable recommendations/ prepare capacity development action plan to bridge the gaps for meeting targets set for NDC roadmap and PDP-10;
- ✓ Producing empirical data, show the contribution fast track initiative project to establish climate adaptive and green industry sector by identifying mitigation and adaptation success stories/ good practices achieved so far,
- ✓ Identify constraints/challenges facing undertaking industry based GHG-MRV and current level knowledge and system in this regard,
- ✓ Document projects with good practices in providing economic, social and environmental benefits through enhancing environmental management system, climate finance etc.
- ✓ Prepare Institutional Capacity Development Plan for NDCs project implementation and for supporting PDP-10 implementation in each of the industry subsectors (manufacturing and cement industry etc).

### III. EXPECTED DELIVERABLES

Table 1. Deliverables and expected time duration to complete the Tasks

No	Deliverables/outputs	Estimated duration to complete the Tasks (effective working days)	Review and approvals required
1	Inception report	8	UNDP and EFCCC
2	Capacity Gaps Analyses and Data compilation	40	UNDP and EFCCC
3	Institutional Capacity Building Action Plan		
4	Draft report on Institutional Capacity Gaps and Institutional Capacity building action plans for each component (transport, electric power and industry) to		



	implement updated NDC and NDC-Roadmap		
5	Final report on Institutional Capacity Gaps and Institutional Capacity building action plans for transport, industry and electric power sectors to implement updated NDC	5	UNDP and EFCCC
	Total effective working days	53	

## V. INSTITUTIONAL ARRANGEMENT / REPORTING RELATIONSHIPS

The consultant will work under close supervision of the Director for Climate Change and Biodiversity Directorate of EFCCC and UNDP. The following inputs and services will be provided by UNDP to the consultant to perform the tasks of this work.

- a. Arrangement of **skype or zoom conference** for validation to minimize risk of COVID 19;
- b. **UNDP** will facilitate arranging vehicle to the field only. Other related costs such as workshop/meetings will be covered by the NC and need to make sure that these costs are considered in the financial proposal.

## VII. QUALIFICATIONS OF THE SUCCESSFUL INDIVIDUAL CONTRACTOR (IC)

**Required qualifications and Requirements:** Educational and years of experience requirements of the different expertise that would perform the institutional capacity gaps assessment and capacity building plan for NDCs in transport, industry and electric power sectors are shown below:

### a. Academic qualifications:

**MSc** and above in civil engineering specialized in energy and/or transport and or industry with specialized trainings and or background in one of the following: renewable energy, environmental and social impacts, environmental management/auditing, climate change mitigation/adaptation, GHG-MRV system or related fields.

### b. Years of Experiences:

10 years and above in this field and relevant consultancy engagement in similar works.

**C) Functional Competencies:**

- I. Practical experience or awareness in renewable energy, environmental and social impacts, environmental management/auditing, energy management, and GHG accounting in the transport, industry and water and energy sector
- II. Knowledge on different sectoral projects/ programs such as: public transit in Addis Ababa Light Rail Transit /for passenger & freight; improving public transport (PT) infrastructure; the power generation, improving energy access & efficiency, energy demand management; adopting alternate combustion materials (fuel-switching); waste heat recovery etc.
- III. Experience in capacity gap and needs assessment and capacity building plans.

**e. Language and other skills:**

- Excellent communication skill including the ability to set out a coherent argument in presentations and group interactions;
- Capacity to communicate fluently with different stakeholders (civil society, government authorities, local communities, project staff); and
- Computer skills: full command of Microsoft applications (word, excel, PowerPoint) and common internet applications will be required.

**f. Compliance of the UN Core Values:**

- Demonstrates integrity by modelling the UN's values and ethical standards
- Promotes the vision, mission, and strategic goals of UNDP;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability
- Treats all people fairly without favoritism;
- Fulfills all obligations to gender sensitivity and zero tolerance for sexual harassment.

**IIX. PAYMENT MILESTONES AND AUTHORITY**

<b>Installment of Payment/ Period</b>	<b>Deliverables or Documents to be Delivered</b>	<b>Percentage of Payment</b>
1 <sup>st</sup> Installment	First instalment payment to the consultant upon submission of Inception Report	20% of total payment
2 <sup>nd</sup> Installment	Second instalment payment to the consultant upon submission of Draft Technical Report	40% of total payment

<b>Installment of Payment/ Period</b>	<b>Deliverables or Documents to be Delivered</b>	<b>Percentage of Payment</b>
3 <sup>rd</sup> Installment	Third/Final instalment payment to the consultant upon submission of Final Technical Report	40% of total payment

## **IX CRITERIA FOR SELECTING THE BEST OFFER**

Upon the advertisement of the Procurement Notice, qualified Individual Consultant is expected to submit both the Technical and Financial Proposals. Accordingly; Individual Consultants will be evaluated based on Cumulative Analysis as per the following scenario:

- Responsive/compliant/acceptable, and
- Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation. In this regard, the respective weight of the proposals is:
  - a. Technical Criteria weight is **70%**
  - b. Financial Criteria weight is **30%**

<b>Criteria</b>	<b>Weight</b>	<b>Max. Point</b>
	70%	100
Understanding the Scope of Work (Sow); comprehensiveness of the methodology/approach; and organization & completeness of the proposal	30	
Minimum educational background as per the requirement in the ToR	10	
Minimum 10 years of experience in similar consultancy projects	10	
<b>Financial (Lower Offer/Offer*100)</b>	30%	
<b>Total Score</b>	<b>Technical Score * 70% + Financial Score * 30%</b>	

## **XI. CONFIDENTIALITY AND PROPRIETARY INTERESTS**

The Individual Consultant shall not either during the term or after termination of the assignment, disclose any proprietary or confidential information related to the consultancy service without prior written consent. Proprietary interests on all materials and documents prepared by the consultants under the assignment shall become and remain properties of UNDP.

## **XII. ANNEXES TO THE TOR**

- ❖ Existing literature or documents that will help Offerors gain a better understanding of the project situation and the work required should be provided as annex/es to the TOR, especially if such literature or documents are not confidential.
- ❖ Specific project locations per implementing sectors at regions and districts.

**This TOR is approved by:** [indicate name of Approving Manager]

**Signature:** \_\_\_\_\_

**Name and Designation:** \_\_\_\_\_

**Date of Signing:** \_\_\_\_\_