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**TERMS OF REFERENCE (TOR)**

**Title: Technology Needs Assessment and associated action plan for climate change mitigation and adaptation in Nigeria's most vulnerable economic sectors**

CTCN request reference number: 2018000020  
UNIDO Request for Proposal (RfP) No. 7000004231  
Country: Nigeria

**1 BACKGROUND INFORMATION**

The Climate Technology Centre and Network (CTCN) is the operational arm of the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism and hosted by the United Nations Environment Programme (UNEP) in collaboration with the United Nations Industrial Development Organization (UNIDO) and supported by 11 partner institutions with expertise in climate technologies. The mission of the CTCN is to promote accelerated deployment and transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate-resilient development.

These requests for Technical Assistance (TA) are being submitted to the CTCN by the National Designated Entity (NDE) of the respective country. The scope of services under these Terms of Reference shall be executed based on a restricted solicitation process. By mandate, only accepted Members of the CTC Network are eligible to submit proposals and execute the required services to implement the response.

**In case you are not a CTCN network member yet, you may bid for implementation of the technical assistance, subject to the condition that you submit your completed application for CTC Network membership before the bid closure and the same is acknowledged by the CTCN. Furthermore, the contract award – should your bid be selected – is conditional to your network membership application having been successfully approved by the Director of CTCN. Should the bidder partner with another institution to deliver the services described in these Terms of Reference, it is expected that the partner institution also joins the CTC Network.**

The budget for this contract is USD 334,100 (Total Outcome Budget + Audit Fee) and needs to be in line with the detailed budget breakdown provided in the GCF readiness proposal annexed to the TOR. A maximum 10% variation will be allowed among budget lines within outputs. Budget variation between outputs is not allowed. The bidders are free to add on activities beyond what is mentioned in the TOR to enhance the quality of the deliverables and outputs, as long as the budget lines remains the same

**It is mandatory for the implementer(s) to allocate at least 1% of the budget to integrate a gender-approach to the activities.** Please refer to the CTCN Gender Mainstreaming Tool for Response Plan Development for guidance at <https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development>.

Should the bidder be interested in the execution of other Technology Needs Assessments (TNA)-related technical assistances, UNIDO and CTCN encourage them to participate in the bidding process for the implementation of the TNA and technology action plan formulation in Gabon, Equatorial Guinea,



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Democratic Republic of the Congo, Cameroon, Syria and Iraq, also available in the UNGM (<https://www.ungm.org>) and the UNIDO Procurement page (<https://www.unido.org/resources-procurement/notices>).

## 2 CONTEXT OF THE ASSIGNMENT

Nigeria ratified the Kyoto Protocol in 2004 and is currently at the final stage of submitting its third National Communication to the UNFCCC. Nigeria is yet to develop a TNA but has quantified several climate challenges including drought, water scarcity, desertification, low agricultural yields and emerging epidemics.

National political strategies reflect a context of widespread food insecurity, drought, desertification and flood vulnerability, poor access to energy, forced migration from rural areas, negative economic impacts and high unemployment (with GDP per capita at \$2,950 in 2014).

In understanding how to best challenge these problems, Nigeria developed its NDC as a starting point for effective action on climate change. In its NDC, Nigeria clearly indicates a number of barriers, investment requirements and the strategy to acquire environmentally sound technologies. Nigeria's NDC offers a first step to implement climate technology action and constitutes a great source of information useful to plan the removal of potential barriers and create the enabling environment for technology options prioritized by Nigeria.

Nigeria's country planning process is in its infancy with a major first step being the development of its NDC and committee to guide its implementation. A key component to the country programming process involves the development of a technology needs assessment and associated action plan for mitigation and adaptation technologies.

Nigeria's NDC identifies technologies and key sectors for the fulfilment of national mitigation commitments and provides financial investors with a clear pathway for Nigeria's development. While a set of thirteen sector specific strategies, policies, programmes and measures have been prepared, Nigeria's (draft) third National Communication document prioritises sectors with the highest mitigation potential, namely (a) agriculture and land use, (b) energy, (c) industry and commerce. Under this request, the focus of attention will be on these 3 sectors and work will include further selection of mitigation and adaptation technologies for the fulfilment of Nigeria's TNA.

The methodological approach will encompass stakeholder engagement and a consultative approach that aids TNA preparation (including project inception workshops) and will reflect a country-driven, participatory approach. The approach will improve local constituents and stakeholder knowledge about project funding opportunities and enable endogenous capacities to be developed across the core Ministries involved in the process (Environment, Science and Technology, Finance, Statistics, Agriculture and Land use). This will aid the development and submission of environmentally sound, robust and bankable project ideas resulting from the technical assistance.

Throughout the NDC process, a number of enablers have been identified that are imperative for Nigeria to access climate finance for technology development. They include (a) building local capacities to enhance the ability and skills to develop coherent, robust project proposals, (b) facilitating access to funding through developing a pipeline of bankable projects eligible for funding, (c) enhancing strong private



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sector participation in technology development, and (d) engaging domestic financial institutions to optimize opportunities while creating fiduciary standards of funding entities.

The technical assistance seeks to develop a comprehensive Technology Needs Assessment and associated action plan of climate change mitigation and adaptation needs identified in Nigeria's most vulnerable economic sectors. This is to be achieved through the following three outcomes:

- Outcome 1. Institutional capacity and coordination mechanisms in place to govern and coordinate climate action and finance
- Outcome 2: Country Programming process
- Outcome 3: Climate finance strategies and project pipeline strengthened

The anticipated outcome of this TNA will present a number of strategic, long-term, participatory transformational measures across 3 identified and prioritized sectors that will drive climate resilient and low carbon growth in Nigeria.

### **3 OBJECTIVE OF THE CONTRACT**

The objective of this contract is to provide technical assistance to Nigeria to enable the development of a comprehensive Technology Needs Assessment (TNA) and action plan. The technical assistance will entail conducting a categorization and prioritization of technologies that will comply with the country's NDC and other strategies.

This work will enable Nigeria to implement its climate targets (included in the country's NDC) using the most appropriate technologies. In this context, the TNA report and Action Plan will provide the necessary guidance to evolve the prioritized technologies and address the country needs in climate change adaptation and mitigation.

The work will also be useful to the country to develop and strengthen its pipeline of projects to target the international and institutional climate finance landscape and associated opportunities for project implementation and so can act as connector between technology, policy and investor communities.

### **4 SCOPE AND ACTIVITIES OF THE PROPOSED CONTRACTED SERVICES**

To get a better understanding of the objectives of the request for technical assistance, the work elaborated beforehand by CTCN, as well as the necessary collaboration with the GCF National Designated Authority (NDA) and National Designated Entity (NDE), it is recommended that the bidder refer to the complete GCF Readiness and Support proposal approved by the Green Climate Fund (GCF) and attached to this tender.

Once this contract is signed, the CTCN will organize a kick-off call among all relevant parties involved in the request to introduce the Contractor to the NDE and NDA. This kick-off virtual meeting shall present the activities, their timeline and clarify roles and responsibilities. In general, to ensure a successful implementation and proper interaction with national counterparts and stakeholders, it is recommended that enough days be allocated on site for most of the relevant activities. It is also recommended to include regional, or preferably, national experts or organizations in the proposed implementation team.



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The Contractor shall undertake the following activities:

**Activity 0. Development of implementation planning and communication documents**

The contractor must undertake the following activities during execution of this CTCN technical assistance.

- i. Prepare a detailed work plan of all activities, deliveries, outputs, deadlines and responsible persons/organizations and detailed budget to implement the GCF Readiness and Support proposal approved by the GCF to enable all parties involved in the implementation (NDE and NDA included) to track and plan ahead their time around the project execution. The detailed work plan and budget must be based directly on the GCF approved document (in English);
- ii. Based on the work plan, prepare a monitoring and evaluation plan with specific, measurable, achievable, relevant, and time-bound indicators used to monitor and evaluate the timeliness and appropriateness of the implementation. The monitoring and evaluation plan should apply selected indicators from the Closure and Data Collection report template and enable the lead implementer to complete the CTCN Closure and Data collection report at the end of the assignment. UNIDO guidelines will be also taken into account (a template will be provided) (in English);
- iii. Prepare a one-page description of intended outcomes and impacts of the project, that considers gender dimensions, formulated in the beginning of the technical assistance and updated/revised once the technical assistance is fully delivered. This is in order for the country to have a communication document and disseminate in relevant events the objectives, anticipated impacts and alignment with INDCs and SDGs of the current project (a template will be provided) (in English);
- iv. Complete a closure and data collection report at the end of the technical assistance (a template will be provided) (in English);
- v. Prepare a GCF Interim Progress Report covering the period from 1 January to 30 June and from 1 July to 31 December during the entire duration of the technical assistance (a template will be provided).
- vi. Prepare a financial statement in accordance with consistently applied accounting standards, audited on an annual basis by registered independent auditors or audit firms.
- vii. Prepare a GCF Completion report once the technical assistance is finalized (a template will be provided) (in English).
- viii. Prepare a final audited financial report, audited by registered independent auditors or audit firms.

| <b>Deliverables</b>   | <b>Delivery date</b>   |
|---|--|
| i. Detailed work plan (English)   | 1 month after contract signing   |
| ii. Monitoring and evaluation plan (a template will be provided) (in English) | 1 month after contract signing   |
| iii. Impact description (a template will be provided) (in English)            | 1 month after contract signing<br>18 months after contract signing or once the technical assistance is |



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|  | completed   |
| iv. CTCN Closure and data collection report (a template will be provided) (in English)             | 18 months after contract signing or once the technical assistance is completed                                    |
| v. GCF progress interim report (a template will be provided) (in English)                          | Every 5 January and 5 July during the entire duration of the technical assistance                                 |
| vi. Annual audited financial statement, audited by registered independent auditors or audit firms. | 12 months after contract signing  |
| vii. GCF completion report (a template will be provided) (in English)                              | Not exceeding 18 months <sup>1</sup> after contract signing or 5 days after the technical assistance is completed |
| viii. Final audited financial report, audited by registered independent auditors or audit firms.   | Not exceeding 18 months <sup>2</sup> after contract signing or 5 days after the technical assistance is completed |

These deliverables will be budgeted from the budget assigned to outcome 1.

**Outcome 1: Institutional capacity and coordination mechanisms in place to govern and coordinate climate action and finance**

**Sub-outcome 1.1: Effective coordination mechanism between NDA and NDE for the UNFCCC Technology Mechanism and other climate finance focal points**

**Activity 1: Institutionalization of a coordination mechanism for the implementation of the TNA**

This first activity aims to engage key actors from relevant sectors (agriculture, energy and industry) to enable the prioritization of technology options and ensure success of the action plans that will derive from the TNA exercise. The TNA activity requires a range of actors, institutions and sectors. Such a matrix will consider key national/ regional representatives from private, public and academic sectors and will target stakeholders across the 3 prioritized sectors identified by the NDC. This will be a key input into delivering activities 2.2-2.4 and 3.1.

**Activity 1.1. Conduct a stakeholder's analysis**

The activity includes identifying key stakeholders (public, private and civil society) and facilitating their participation. Civil society includes engagement of the private sector, NGOs, gender focal points and academia and will be facilitated through bilateral meetings between experts/ stakeholders.

<sup>1</sup> The precise timeline to submit the completion report will be agreed upon and settled prior to contract signing.

<sup>2</sup> The precise timeline to submit the final audited financial report will be agreed upon and settled prior to contract signing.



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The three sectors that were identified for prioritization are not homogeneous and uniform. Significant effort will be required to identify various stakeholders across each of the three sectors. This stakeholder identification is especially critical and challenging for industry and energy sectors. The stakeholder input will be critical for identification of the various sub-sectors and technologies that will inform the technology fact sheets/briefs that will result in robust proposals ready for GCF support.

Key stakeholders include those directly involved in the National TNA Committee running the project, including institutions from line ministries and governmental organizations, private sectors, research organizations, key stakeholders from the three sectors identified, etc. Gender aspects will be also considered through equal representation of women and men as well as through participation of gender focal points and associations that promote gender equality and the empowerment of women (GEEW). This will be an input into Activity 1.2.

| <b>Deliverables 1.1</b>   | <b>Delivery date</b>            |
|---|---------------------------------|
| i. Report of stakeholders' consultation workshops   | 2 months after contract signing |
| ii. Stakeholder mapping report, including a work plan for stakeholders' engagement in TNA processes, highlighting stakeholder's roles |                                 |

### **Activity 1.2 Support to the establishment of a TNA Committee**

The TNA Committee and constitution in place will be responsible for appointing key stakeholder groups and ensure their participation and engagement during its execution.

The first activity is the establishment of the Committee. The TNA Committee will include representatives from the public, NGOs, private, and academic sectors and consider gender balance and appropriate representation. The roles and responsibilities of stakeholders will be defined for the TNA process, including for the review of outcomes and for providing technical input. This activity will be conducted in compliance with the TNA handbook and methodology.

Special attention will focus on the participation of vulnerable populations throughout the process of the TNA Committee formation. The targeting of such groups will aid the composition of the TNA Committee and special attention should target small farmer holders and associations, private sector organizations, disabled groups, gender specific groups and indigenous people. The objective is also to ensure equitable access to the benefits accruing from the TNA.

This activity will include:

- Institutionalize an effective coordination mechanism for the implementation of the TNA process. This committee will be in place in month 3 and formally meet every quarter to facilitate quarterly reporting on project progress.
- Coordinate with the activities conducted under the Nigerian Country Programme, especially aligning to findings of Report of the capacity gaps assessment and the capacity-building action plan for the NDA.
- Provide training on the TNA process, including quality assurance, to all stakeholders. The TNA Committee, while experts in their own fields, are not familiar with the process involved in



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development of action plans nor methodologies for prioritizing and selecting technologies based on multi-criteria analysis. The Nigerian NDA and NDE both identified a specific requirement for the TNA Committee to receive dedicated training on these aspects. Quality assurance refers to the approach to maintain the integrity of the TNA process and action planning in line with best practice approaches

- Identify the appropriate reporting and governance arrangements to enable the National Designated Entity (NDE) to report on the progress of the TNA and associated action plans and enhance communication channels with CTCN and its host organizations UNIDO/UNEP.

| <b>Deliverable 1.2:</b>   | <b>Delivery date</b>                |
|---|-------------------------------------|
| i. National TNA Committee Constitution to inform work of TNA Committee.   | 3 months after signing the contract |
| ii. Set up of management office for institutionalized coordination mechanism  | 3 months after signing contract     |
| iii. A report on the TNA training, including quality assurance delivered to the stakeholders, to include a full list of participants and photo documentations | 3 months after signing contract     |

**Activity 1.3: Development of a work plan for monitoring and oversight**

The work plan will define and schedule TNA meetings to be conducted in Abuja. Venues will be assigned by the responsible Ministry. The activity involves promoting a comprehensive participation of key stakeholders in the development of a workplan.

The TNA Committee will be engaged at all important steps of the TNA process to ensure national consultation and country ownership of the process and results of the work. In month 6, 9, 12 and 15, as per the schedule indicated in the GCF proposal under activity 1.2, the Committee will take stock of current activities and will provide coordination support and recommendation as needed, at the various stages of the process: prioritization of technologies, development of action plan, national consultations and dissemination of action plan.

As part of this activity the work plan developed in activity 1.1 will be reviewed and endorsed by the TNA committee to ensure promoting a comprehensive participation of key stakeholders across all sectors in the TNA process.

| <b>Deliverables 1.3:</b>   | <b>Delivery date</b>            |
|--|---------------------------------|
| i. TNA Committee work plan   | 4 months after contract signing |
| ii. Endorsed TNA Constitution document, citing the roles/ responsibilities of main stakeholder groups in the TNA process and method of engagement. | 4 months after contract signing |



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| iii. | Report of the 1 <sup>st</sup> Committee’s meeting | 6 months after contract signing  |
| iv.  | Report of the 2 <sup>nd</sup> Committee’s meeting | 9 months after contract signing  |
| v.   | Report of the 3 <sup>rd</sup> Committee’s meeting | 12 months after contract signing |
| vi.  | Report of the 4 <sup>th</sup> Committee’s meeting | 15 months after contract signing |

**Outcome 2: Country Programming process**

**Sub-outcome 2: Technology solutions identified and prioritized in accordance with national strategies and plans**

**Activity 2: Prioritization of technologies and relevant action for increased access to finance**

**Activity 2.1: Pre-selection of sub-sectors for the fulfilment of Nigeria’s TNA**

The objective of this activity is to identify and obtain consensus about priority sectors (and subsectors) to shape the TNA. The starting point are the three sectors identified in the Nigerian NDC, namely agriculture, energy and industry.

While priorities have been identified in the Nigeria’s NDC, and three sectors have been prioritized as part of the draft 3<sup>rd</sup> Communication process, Nigeria lacks consistent technical information to support the indication of environmentally sound technologies. Therefore, a workshop will be organized to validate such outcomes by key stakeholders. These sectoral priorities will allow for technology identification for mitigation and adaptation and a drafting of the TNA action plan.

| <b>Deliverables 2.1</b>  | <b>Delivery date</b>            |
|--|---------------------------------|
| i. Report describing the methodology utilized for sector and subsector selection and prioritization, including the rationale and an executive summary. | 5 months after contract signing |
| ii. Sub-sectors stakeholder’s validation workshops report  | 5 months after contract signing |

**Activity 2.2: Pre-selection of mitigation and adaptation technologies for the fulfilment of Nigeria’s TNA**

The aim of this activity is to validate and prioritize key technologies, aligned to Nigeria’s NDC. This will be done through a multi-criteria analysis and market assessment for technology selection that considers endogenous capabilities, natural resources, skills base, NDC focus the fulfilment of Nigeria’s TNA.

This activity will focus on identifying and obtaining consensus about priority technologies by sector to fulfil the NDC. Such outcomes will be validated by key stakeholders in through a series of up to three workshops. Gender balance of participants and facilitators will be promoted. With this, priorities for the fulfilment of the NDC will be defined, and together with factsheets for each technology (which will be



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gender-responsive), will allow for the drafting of the technology action plan and will be produced to enable input into the country programme.

| Deliverable 2.2  | Delivery date                      |
|--|------------------------------------|
| <ul style="list-style-type: none"><li>i. Final reports including a mitigation TNA report and an adaptation TNA report with key stakeholders. Both reports are to be gender mainstreamed.</li><li>ii. Report detailing the technology prioritization process.</li><li>iii. Report of the 3 validation workshops that elaborates multi-criteria analysis, market assessment and participatory process conducted.</li><li>iv. Development of 3 TNA fact sheets briefs, summarizing main findings, recommendations and next steps.</li></ul> | 8 months after signing contracting |

**Activity 2.3: Technology Action Plan(s)**

The process for the development of a Technology Action Plan will involve a number of interviews and consultations with key stakeholders across the public, private and academic setting and will target various experts depending on the (sub) sectors and technology prioritized. The TAPs will be gender mainstreamed.

The Technology Action Plan should:

- elaborate very detailed project ideas, including comprehensive time frames and a breakdown of the estimated budget for the project idea.
- articulate project idea objectives, outputs, relation to national development priorities, deliverables, activities, timeline, budget and evaluation methods.
- consider elements such as research on the prioritized technology, capacity-building, financial schemes, pilot projects and technology demonstration.
- include an analysis of value chains, risks and overall barriers to implementation to aid policy development.
- consider the realms of regulatory, institutional, financial and information frameworks that may prevent the accelerated development of markets for environmentally sound technologies. Such barrier identification includes regulatory barriers, a lack of information, policy uncertainty and deficiencies in the understanding of economic and institutional frameworks.
- Include gender assessment of the technology.
- determine technology impact potential in terms of Nigeria’s GHG emissions reduction targets (conditional and unconditional), employment impact, and qualitative analysis of the co-benefits (mitigation and adaptation) in terms of both environmental and social perspectives resulting from the implementation of technologies prioritized.

Each TAP will be financially robust to enable funding to be secured and will identify measures for overcoming barriers and identify the responsible authority for implementation. The deliverable will:



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- Recommend enabling frameworks to address identified barriers, including conducting an analysis of the economic and social barriers that hinder the transfer and uptake of prioritized technologies.
- Assess the policy, institutional and financial options and technology risks to overcome these barriers and present project ideas and multiple actions that are categorized based on quantity of their identifications.
- Prioritize a number of subsectors, (such as renewable energy production, biofuels, energy efficiency, water collection and harvesting, drip irrigation and the efficient production and improvement of crop varieties).
- Present a clear financial plan with timelines, benchmarks and indicators that will elaborate measures to overcome these barriers and so aid policy makers, market actors and technology innovators. Financial assessments could include costs benefit analysis, return on investment, internal rate of return, net present value of a particular technology action /idea versus an alternate.
- Target the high initial costs for technology deployment, transaction costs and the lack of an appropriate policy environment to enable such deployment.
- Provide cost indications and assessments (financial incentives for implementation of an action), including potential domestic and international funding sources to deliver such actions, institutional/policy strengthening costs, market assessments and RD&D studies.
- Develop legal and regulatory instruments to create a sound enabling environment for identified technologies.

| <b>Deliverable 2.3</b>  | <b>Delivery date</b>                 |
|---|--------------------------------------|
| i. Report and executive summary of each Technology Action Plan for each of the priority technologies in compliance with the TNA, including project supports and project ideas as concrete actions for implementation. | 14 months after signing the contract |

**Activity 2.4: Validation of Technology Action Plan (TAP) with stakeholders**

This activity aims to discuss and validate the technology action plan by the TNA key stakeholders. It will facilitate collaboration and sharing of experience, lessons learnt and best practices, including external engagement with other sub-Saharan country’s NDEs and NDAs and private sector entities.

This is aimed at assisting stakeholders with the familiarization of identified technologies, such as awareness campaigns and training to enhance technical capacity, operation and maintenance, and data collection. Common methods utilized for that process included: interviews with experts and stakeholders; market mapping and problem trees; dedicated workshops; desk studies; and logical problem analyses. These activities will be gender responsive.

| <b>Deliverables 2.4:</b>   | <b>Delivery date</b>                 |
|--|--------------------------------------|
| i. Meeting report of the workshop for the validation of technology action plan and analysis of co-benefits | 16 months after signing the contract |



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| (minimum of three (3) workshops are to be conducted, with minimum 20-30 stakeholders attending each workshop). Report must also include a list of participants.                      |                                      |
| ii. Report to GCF outlining implementation of the coordination mechanism, including reports on activities undertaken by the committee in fulfilling its role throughout TNA process. | 16 months after signing the contract |

**Activity 2.5: Support the implementation of the Technology Action Plan with communications, guidance and training**

Delivery of a capacity building package for TNA key stakeholders including training and support materials for the development and application of prioritized technologies. Relevant participants will include the NDA, NDE, GCF and GEF focal points.

A key input into the development of this training is the national level training on GCF standards and processes, M&E, and decision-making delivered through the Nigerian GCF Readiness Support request for access to finance to contribute to the NDC pledge. The stakeholder matrix and training workshops identified within this proposal will provide a key input into the Communication strategy of the Nigerian GCF Readiness Support request for access to finance to contribute to the NDC pledge aimed at raising awareness and facilitating stakeholder engagement in the GCF processes.

Stakeholders will be provided with a 2-day regional training workshops in each of the 6 regions – a total of 6 workshops - on modules including (a) market mapping and problem trees to enable them to become more familiar with identified technologies, (b) gender awareness tools to enhance implementation capacities, (c) access to financing of prioritized technologies across domestic and international sources (aligned to Nigerian Readiness Request NDC Proposal aimed at delivering a GCF monitoring tool), (d) technical capacity, operation, maintenance and data collection, and (e) energy data assessment and modelling.

| <b>Deliverables 2.5:</b>  | <b>Delivery date</b>                 |
|---|--------------------------------------|
| i. Workshop reports on each of the 6 regional workshops (2-day workshops), including materials, a full list of participants, photo documentations, etc. | 18 months after signing the contract |
| ii. Report on a dissemination strategy.   |                                      |
| iii. Market assessment report that would entail analysis of financial schemes, value chains, risks and overall barriers to implementation of the TAP    |                                      |
| iv. 3 policy briefs (1 per sector) informing the regional workshops.  |                                      |
| v. A report on advanced energy models, capability and data inventory analysis to quantify costs of effective measures by                                |                                      |



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| vi. | sector and subsector.<br>Terms of reference to be shared with GCF, training material and tools. |  |
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**Outcome 3: Climate finance strategies strengthened, private sector mobilized, and project pipeline enhanced**

**Sub-outcome 3: Private sector engagement**

**Activity 3.1: Engaging the private sector in Nigeria’s consultative processes**

Engage the Nigerian private sector via a number of six (6) consultative workshops across the Technology Action Plan development process, including the methods for technology and sectorial prioritization. This will achieve input and perspective sharing on the market readiness of technologies and the potential deployment.

This engagement will also align with the Nigeria’s (NDC) Readiness Support proposal project deliverables including the identification of partnerships/ investments from the private sector for GCF-funding priorities. Workshops will enable private sector input into the sector, sub-sector and technology prioritization.

| <b>Deliverables 3.1</b> |  | <b>Delivery date</b>             |
|-------------------------|--|----------------------------------|
| i.                      | Report on the 1st training workshop conducted, including photo documentation and materials/tools             | 3 months after contract signing  |
| ii.                     | Report on the 2nd training workshop conducted, including photo documentation and materials/tools             | 6 months after contract signing  |
| iii.                    | Report on the 3rd training workshop conducted, including photo documentation and materials/tools             | 9 months after contract signing  |
| iv.                     | Report on the 4th training workshop conducted, including photo documentation and materials/tools             | 12 months after contract signing |
| v.                      | Report on the 5th training workshop conducted, including photo documentation and materials/tools             | 15 months after contract signing |
| vi.                     | Report on the 6th training workshop conducted, including a summary of the inputs compiled in the 6 workshops | 17 months after contract signing |

**5 GENERAL TIME SCHEDULE**

CTCN technical assistance activities under this contract have an expected duration of up to eighteen (18) months from the contract signature. The proposed plan for the implementation of activities and deliveries is presented in the following table:



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| Outputs  | Month                         |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
|--|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
|  | 1                             | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| <b>Development of planning and communication documents</b>   |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.i. Detailed work plan  | *                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.ii. Monitoring and evaluation plan   | *                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.iii. Impact description  | *                             |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | *  |
| D.iv. CTCN Closure and data collection report  |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | *  |
| D.v. GCF progress interim report   | <i>Every January and July</i> |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.vi. Annual audited financial statement   |                               |   |   |   |   |   |   |   |   |    |    | *  |    |    |    |    |    |    |
| D.vii. GCF completion report   |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | *  |
| D.viii. Final audited financial report   |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | *  |
| <b>O1: Effective coordination mechanism</b>  |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A1. Institutionalization of a coordination mechanism</b>  |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A1.1. Conduct a stakeholder's analysis</b>  |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.i. Report stakeholders' consultation workshops   |                               | * |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Dii Stakeholder mapping report, including a work plan for stakeholders' engagement in TNA processes      |                               | * |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A.1.2 Support to the establishment of a TNA Committee</b>   |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Di. National TNA Committee Constitution  |                               |   | * |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D ii. Set up of a management office for institutionalized coordination mechanism                         |                               |   | * |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D iii. Report on the TNA training  |                               |   | * |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A.1.3: Development and endorsement of TNA Committee work plan for monitoring and oversight</b>        |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.i. TNA Committee work plan   |                               |   |   | * |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.ii. Endorsed TNA Constitution document   |                               |   |   | * |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.iii. Report of the 1st Committee's meeting   |                               |   |   |   |   | * |   |   |   |    |    |    |    |    |    |    |    |    |
| D.iv. Report of the 2nd Committee's meeting  |                               |   |   |   |   |   |   | * |   |    |    |    |    |    |    |    |    |    |
| D.v. Report of the 3rd Committee's meeting   |                               |   |   |   |   |   |   |   | * |    |    |    |    |    |    |    |    |    |
| D.vi. Report of the 4th Committee's meeting  |                               |   |   |   |   |   |   |   |   |    | *  |    |    |    |    |    |    |    |
| <b>O2: Technology solutions identified and prioritized</b>   |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A.2. Prioritization of technologies and relevant action for increased access to finance</b>           |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A.2.1. Pre-selection of sub-sectors</b>   |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| D.i. Report describing the methodology utilized for sector and subsector selection and prioritization    |                               |   |   |   | * |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Dii Sub-sectors stakeholder's validation workshop report   |                               |   |   |   | * |   |   |   |   |    |    |    |    |    |    |    |    |    |
| <b>A2.2. Assess, prioritize and validate key technologies</b>  |                               |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
| Di Final reports including a mitigation TNA report and an adaptation TNA report.                         |                               |   |   |   |   |   |   | * |   |    |    |    |    |    |    |    |    |    |
| Dii Report detailing the technology prioritization process.  |                               |   |   |   |   |   |   | * |   |    |    |    |    |    |    |    |    |    |
| Diii Report of the 3 validation workshops  |                               |   |   |   |   |   |   | * |   |    |    |    |    |    |    |    |    |    |
| D.iv Development of 3 TNA fact sheets briefs, summarizing main findings, recommendations and next steps. |                               |   |   |   |   |   |   | * |   |    |    |    |    |    |    |    |    |    |





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|                       |   | <ul style="list-style-type: none"> <li>- Familiarity with the UN process, technology needs assessment methodology and technology actions planning;</li> <li>- working experience in the country (Nigeria highly desired)</li> <li>- Language skills: excellent command of oral and written English is required.</li> </ul>  |
| International Experts | <ul style="list-style-type: none"> <li>- Master's degree in, science/technology, natural resources management, business, climate change, engineering or other relevant field</li> </ul> | <p><b><u>Essential</u></b></p> <ul style="list-style-type: none"> <li>- 7 years' experience of providing technical consultancy services within a developing country;</li> <li>- Experience of developing national plans that involve rigorous assessment of technology options and sectoral analysis at a country or regional level;</li> <li>- Familiarity with the UN process, technology needs assessment methodology and technology actions planning;</li> <li>- Experience of engaging with multiple actors in the development of initiatives aimed at building regional/national capacity in developing countries;</li> <li>- Facilitation skills in delivering dedicated training workshops around the technology needs assessment process;</li> <li>- Experience of conducting technology prioritisation and multi-criteria analysis;</li> <li>- Nexus experience across agriculture, industry, and energy.</li> <li>- Language skills: excellent command of oral and written English is required.</li> </ul> <p><b><u>Highly Desirable</u></b></p> <ul style="list-style-type: none"> <li>- Understanding of wider policy measures and drivers to overcome barriers to the deployment of technologies and sectors for climate change mitigation and adaptation;</li> <li>- Knowledge of enabling environments and stimulus for SME development.</li> </ul> |
| Local Experts         | <ul style="list-style-type: none"> <li>- A formal academic qualification in, science/technology, business, engineering, climate change or other related field.</li> </ul>               | <p><b><u>Local experts required across the prioritised sectors and technology subsectors</u></b></p> <p><b><u>Essential</u></b></p> <ul style="list-style-type: none"> <li>- Experience of developing, facilitating and delivering stakeholder workshops and group facilitating aimed at engaging multiple actors;</li> <li>- 7 years' experience of energy, industry and agriculture sectors within Nigeria.</li> <li>- 5 years' experience of industrial policy development within Nigeria.</li> <li>- Awareness of the methodology of technology needs assessments and/ or technology actions plans;</li> </ul>  |



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|                   |  | <ul style="list-style-type: none"> <li>- Fluency in English highly preferred</li> </ul> <p><b>Highly Desirable</b></p> <ul style="list-style-type: none"> <li>- Understanding of wider policy measures and drivers to overcome barriers to the deployment of technologies and sectors for mitigation and adaptation.</li> <li>Knowledge of enabling environments and stimulus for SME development.</li> </ul> |
| Gender specialist | <ul style="list-style-type: none"> <li>- Master’s degree in gender studies or other discipline with focus on the field of gender issues in a developing country context</li> </ul> | <ul style="list-style-type: none"> <li>- At least 5 years working experience with gender mainstreaming issues in a developing country context;</li> <li>- Knowledge and experience of gender mainstreaming in climate change adaptation and mitigation;</li> <li>- Fluency in English highly preferred.</li> </ul>  |

The CVs of the respective experts assigned to this project by the Contractor must be provided.

Full qualification requirements for the contractor, including specific requirements of the proposed team are in the Evaluation criteria, which is an annex to this ToR.

**7 LANGUAGE REQUIREMENTS**

The working language for the purposes of this assessment is English, thus an excellent command of English is required of the proposed personnel. The final deliverables must be submitted in English. The technical and financial proposal under this tender must also be submitted in English.

All delivered documents must be of such a quality, that no further editing will be required.

**8 DELIVERABLES SCHEDULE**

The table below details the indicative schedule for this assistance.

| Reporting and communication Deliverables:   | Delivery date   |
|---|---|
| i. Detailed work plan (English)   | 1 month after contract signing  |
| ii. Monitoring and evaluation plan (a template will be provided) (in English)                     | 1 month after contract signing  |
| iii. Impact description (a template will be provided) (in English)                                | 1 month after contract signing<br>18 months after contract signing                |
| iv. Closure and data collection report (a template will be provided) (in English)                 | 18 months after contract signing or once the technical assistance is completed    |
| v. GCF progress interim report (a template will be provided) (in English)                         | Every 5 January and 5 July during the entire duration of the technical assistance |
| vi. Annual audited financial statement, audited by registered independent auditor or audit firms. | 12 months after contract signing  |



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| vii.   | GCF completion report (a template will be provided) (in English)  | Not exceeding 18 months <sup>3</sup> after contract signing or 5 days after the technical assistance is completed |
| viii.  | Final audited financial report, audited by registered independent auditors or audit firms.  | Not exceeding 18 months <sup>4</sup> after contract signing or 5 days after the technical assistance is completed |
| <b>Output 1: Effective coordination mechanism between NDA and National Designated Entity (NDE) for the UNFCCC Technology Mechanism and other climate finance</b> |   |   |
| <b>Deliverables 1.1:</b>   |   |   |
| i.   | Reports of stakeholders' consultation processes   | 2 months after signing contract   |
| ii.  | Stakeholder mapping report  |   |
| <b>Deliverables 1.2:</b>   |   |   |
| i.   | National TNA Committee Constitution to inform work of TNA Committee.  | 3 months after signing contract   |
| ii.  | Set up a management office for institutionalized coordination mechanism.  |   |
| iii.   | Report on the TNA training delivered to the stakeholders  |   |
| <b>Deliverables 1.3:</b>   |   |   |
| i.   | TNA Committee Work plan   | 4 months after contract signing   |
| ii.  | Endorsed TNA Constitution document  | 4 months after contract signing   |
| iii.   | Report of the 1 <sup>st</sup> Committee's meeting   | 6 months after contract signing   |
| iv.  | Report of the 2 <sup>nd</sup> Committee's meeting   | 9 months after contract signing   |
| v.   | Report of the 3 <sup>rd</sup> Committee's meeting   | 12 months after contract signing  |
| vi.  | Report of the 4 <sup>th</sup> Committee's meeting   | 15 months after contract signing  |
| <b>Output 2: Technology solutions identified and prioritized in accordance with national strategies and plans</b>  |   |   |
| <b>Deliverables 2.1:</b>   |   |   |
| i.   | Report describing the methodology utilized for sector and subsector selection, including rationale and executive summary delivered; | 5 months after signing contracting  |
| ii.  | Sub-sectors stakeholder's validation workshop report  |   |
| <b>Deliverables 2.2:</b>   |   |   |
| i.   | Final reports including a mitigation TNA report-and an adaptation TNA report with key stakeholders elaborated.                      | 8 months after signing contracting  |

<sup>3</sup> The precise timeline to submit the completion report will be agreed upon and settled prior to contract signing.

<sup>4</sup> The precise timeline to submit the final audited financial report will be agreed upon and settled prior to contract signing.



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| ii.                      | Report detailing the technology prioritization process is delivered.   |                                      |
| iii.                     | Report of the 3 validation workshops that elaborates multi-criteria analysis, market assessment and participatory process conducted.   |                                      |
| iv.                      | Development of 3 TNA fact sheets briefs, summarizing main findings, recommendations and next steps.  |                                      |
| <b>Deliverable 2.3:</b>  |  |                                      |
| i.                       | Report and executive summary of each Technology Action Plan for each of the priority technologies in compliance with the TNA, including project supports and project ideas as concrete actions for implementation. | 14 months after signing the contract |
| <b>Deliverables 2.4:</b> |  |                                      |
| i.                       | Meeting report of the workshop for the validation of technology action plan and analysis of co-benefits.   | 16 months after signing the contract |
| ii.                      | Report to GCF outlining implementation of the coordination mechanism, including reports on activities undertaken by the committee in fulfilling its role throughout TNA process.                                   |                                      |
| <b>Deliverables 2.5:</b> |  |                                      |
| i.                       | Workshop report,(for the 6 regional workshops) including materials, a full list of participants, photo documentations, etc.  | 18 months after signing the contract |
| ii.                      | Report on a dissemination strategy.  |                                      |
| iii.                     | Market assessment report that would entail analysis of financial schemes, value chains, risks and overall barriers to implementation of the TAP  |                                      |
| iv.                      | 3 policy briefs (1 per sector) informing the regional workshops.   |                                      |
| v.                       | A report on advanced energy models, capability and data inventory analysis to quantify costs of effective measures by sector and subsector.  |                                      |
| vi.                      | Terms of reference to be shared with GCF, training material and tools.   |                                      |
| <b>Deliverables 3.1:</b> |  |                                      |
| i.                       | Report on the 1st training workshop conducted  | 3 months after signing the contract  |
| ii.                      | Report on the 2nd training workshop conducted  | 6 months after signing the contract  |
| iii.                     | Report on the 3rd training workshop conducted  | 9 months after signing the contract  |
| iv.                      | Report on the 4th training workshop conducted  | 12 months after signing the contract |
| v.                       | Report on the 5th training workshop conducted  | 15 months after signing the contract |
| vi.                      | Report on the 6th training workshop conducted, including a summary of the inputs compiled in the 6 workshops   | 17 months after signing the contract |