



REQUEST FOR PROPOSAL-FEBRUARY 2024

TERMS OF REFERENCE FOR CONSULTANCY SERVICES TO CONDUCT A MARKET ASSESSMENT AND BASELINE STUDY FOR THE ENERGY TRANSITION CHALLENGE FUND (ETCF) – NIGERIA

1. The AECF

The AECF is a leading development finance organization that supports businesses to innovate, create jobs, and leverage investments to build resilience and sustainable incomes for rural and marginalized communities in Africa. AECF's goal is to bridge the investment gap between early-stage enterprises and business maturity for entrepreneurs serving the poorest communities.

The AECF provides patient capital to new and innovative business models in the agribusiness and renewable energy sectors across Sub-Saharan Africa through various financing instruments, which include grants, zero-interest loans, guarantees, and working capital facilities. AECF's financing products are supplemented by three additional growth support services to improve the viability and sustainability of our investees, namely, (i) Advisory Services to improve investee internal capabilities (ii) Investment Support in raising commercial capital in significant volumes, and (iii) Knowledge and Insights for learning and evidence gathering for policy influencing and advocacy.

AECF has successfully implemented programmes across 26 countries in Sub-Saharan Africa (SSA), supporting over 343 enterprises, raising US\$ 392 million in funding for programmes, leveraging \$750 million in additional capital, and impacting 28 million lives.

The AECF 2021-2025 new strategy objective is to build resilience and sustainable incomes for rural and marginalized communities in Africa. Through catalytic funding, the AECF surfaces and supports the commercialization of new ideas, business models, companies, and technologies designed to increase agricultural productivity, expand energy access, and alleviate poverty while also addressing the cross-cutting themes of women and youth.

2. The Nigeria Energy Transition Challenge Fund (ETCF)

Nigeria's Net Zero ambition is based on a transition to full electrification of the economy by 2060 - 250 GW of installed capacity (90% renewable), 80% of the fleet from EV, and clean cooking for 80% of the population. Reaching such targets requires innovative financing and first loss investments (such as catalytic grants) in technological improvements, productive energy and fuel switching in priority sectors, business model iteration and scaling for universal access, skills and jobs creation in ET priority sectors.

In the context of the Financial Cooperation with the Federal Republic of Nigeria, KfW, on behalf of BMZ, intends to set up a new Challenge Fund mechanism to contribute to the implementation of Nigeria's Energy Transition Plan (ETP). The mechanism will form part of the broader set of development cooperation activities between Nigeria and Germany in the energy space. The "Energy Transition Challenge Fund" (ETCF) will co-finance projects from the public and private sectors to promote the uptake of renewable energy technologies, energy efficiency-enhancing investments and the expansion of vocational training



opportunities in the area of renewable energies and energy efficiency. A demand-driven, competitive application mechanism will be used to systematically select the projects with the highest impact potential in relation to the requested grant funds. The selection of projects will be made through an internationally experienced Project Executing Agency (PEA) on the basis of clear evaluation criteria that will be jointly agreed with the partner side prior to launch.

The ETCF will be launched with an initial funding of EUR 20 Mio (grant funding). Subject to successful performance and available funding, the mechanism will be further expanded in upcoming years. Subject to further discussion with the partner side, the ETCF might in the future also carry out project competitions with respect to other societal challenges in Nigeria.

3. Overview of the Nigeria ETCF Concept

a) Context

The Government of Nigeria has developed the Nigerian Energy Transition Plan (ETP) with transition pathways for Power supply, Residential Buildings, Industry, Transport and Oil & Gas, and highlights the scale of the effort required for Nigeria's transition to net zero by 2060. Nigeria's Net Zero ambition is based on a transition to full electrification of the economy by 2060 with 250 GW of installed capacity 90% renewable, 80% of the fleet from EV, and clean cooking for 80% of the population. The Nigerian Energy Transition has the potential to create up to 840,000 net new jobs by 2060.

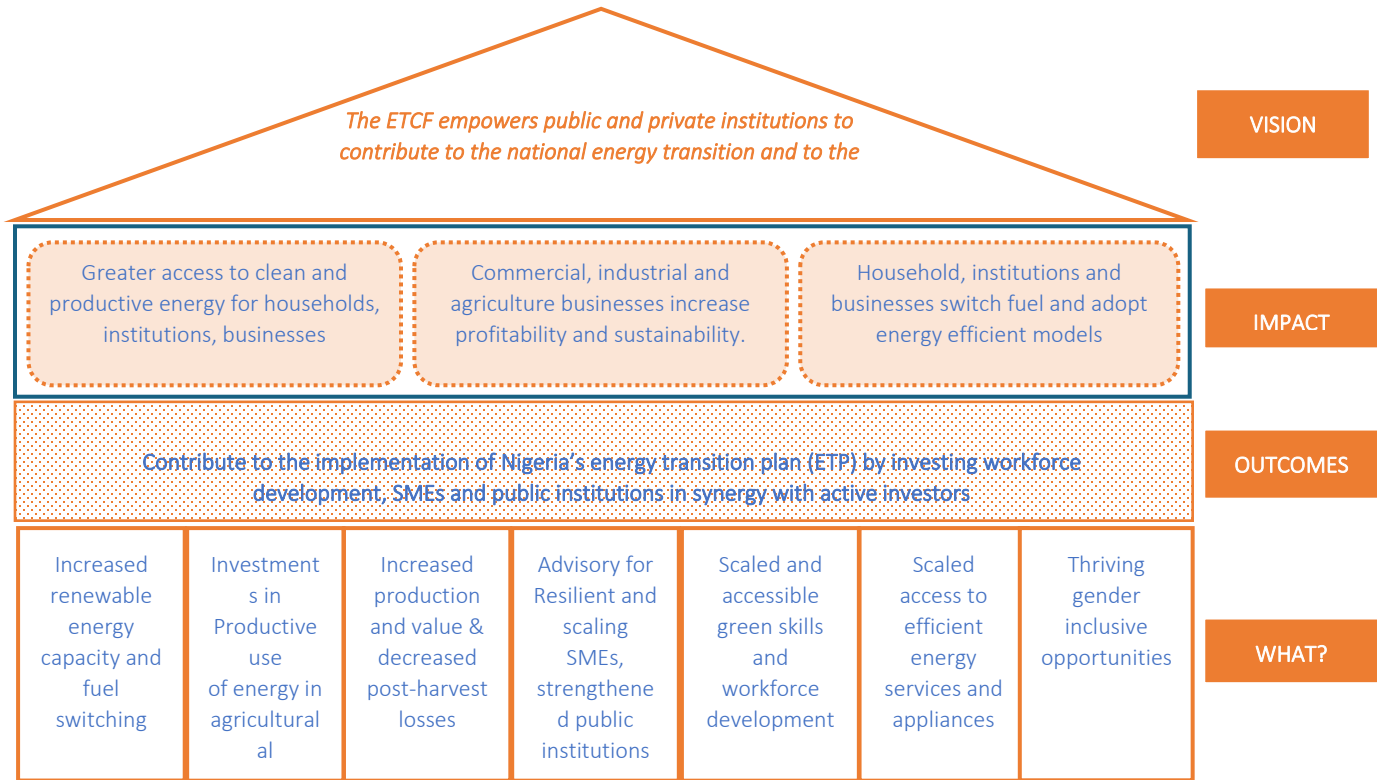
The ETP presents opportunities for transition to renewable and clean energy solutions including fuel/technology switching, productive use of energy including economic growth opportunities in energy nexus sectors such as agriculture, health and education, and drive job creation, especially in local assembly/manufacturing.

To reach the ambitious targets of ETP, it is essential to leverage innovative financing and first loss investments (such as catalytic grants, climate financing) and technical assistance in areas such as:

- Technological improvements;
- Productive energy and fuel switching in priority sectors;
- Business model iteration and scaling for universal access; and
- Skills and jobs creation in ET priority sectors.

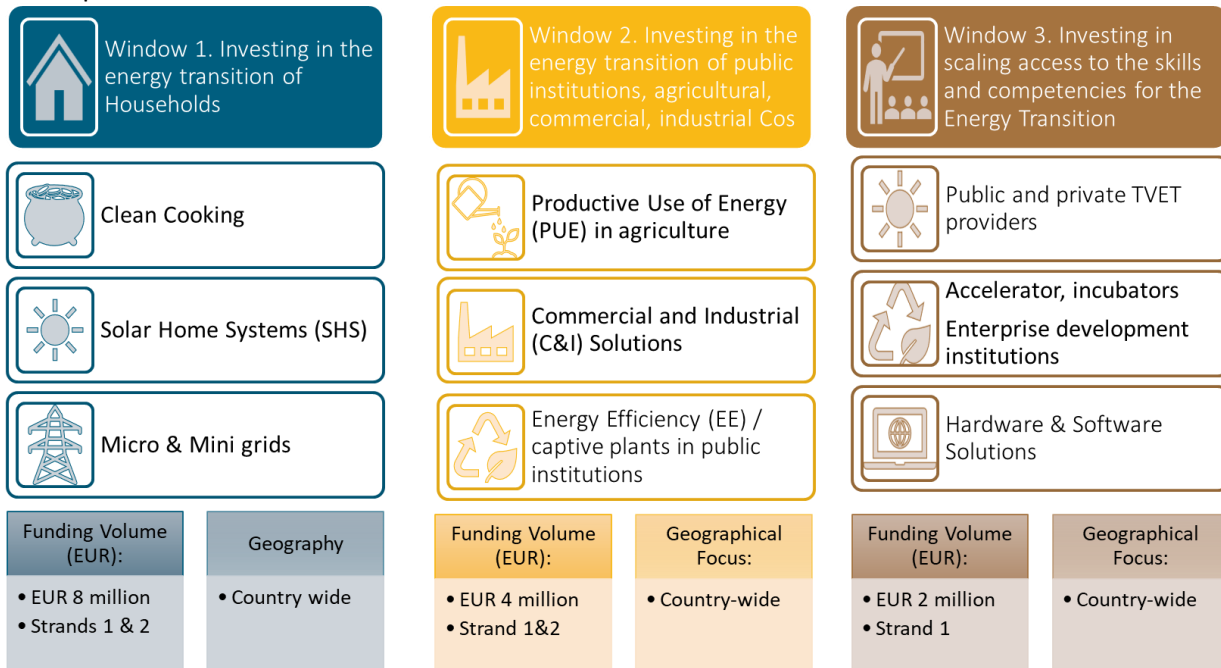
b) Objective and Theory of change of ETCF

The primary objectives of ETCF include promoting the adoption of renewable energy technologies; enhancing investment in energy efficiency; and expanding vocational training in renewable energies (RE) and energy efficiency (EE). Below is a snapshot of the proposed Theory of Change (ToC)



c) Structure of the ETCF

The ETCF is structured into three windows with two windows focusing on promoting different renewable energy/clean cooking technologies including energy efficiency and the third window focusing on skills development.











NB: For cooking solutions, Tier 2 biomass stoves, biogas, briquettes/pellets are not prioritized but shall be assessed during the baseline at inception if worth consideration.

d) Investment options under ETCF

The ETCF investment is structured into two strands i.e. small and large investments as summarized below and shall be accompanied by relevant technical assistance to the selected recipients. Co-financing from the recipients shall be required. This shall however be fine-tuned after conducting the initial market study.

Strand 1: Small Investments		Strand 2: Large investments	
	Investment grants between EUR 100 – 500K		Investment grants between EUR 500K – 1million
	Co-funding requirement from 20%		Co-funding requirement from 40%
	Fast-track due diligence; Up to 50days of TA/investee 1 site visit/year		Site visit at due diligence stage Up to 50 days of TA/investee 2 site visits/year
Funding Volume (EUR):	Portfolio size	Funding Volume (EUR):	Portfolio size
• EUR 6 million	• Up to 15 investments	• EUR 8 million	• Up to 10 investments

e) Implementation approach

ETCF will be implemented by a mix of two investment instruments i.e. results-based financing and milestone-based grants depending on the technology type and nature of support. Relevant technical assistance/capacity shall accompany the investment either through AECF academy (digital) or dedicated in-person TA.

f) Target beneficiaries and geographical scope


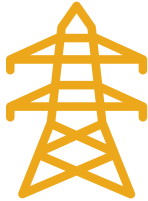


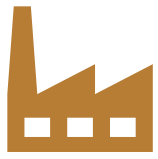

The initiative targets **growth-stage businesses** promoting renewable energy /clean cooking technologies for households, institutions and businesses, and **public institutions** planning to install renewable energy technologies for captive use mainly under the first two components. The third component focuses on skills development hence targeting private/public technical training/capacity-building institutions with experience in renewable energy and energy efficiency. The beneficiaries are expected to demonstrate co-financing capacity.

The initiative is open to all states in Nigeria and with focus in peri-urban and rural areas. However, specific geographical areas shall be prioritized in collaboration with the government conducting the initial market study.



g) Key Performance Indicators (KPIs)

The following KPIs are earmarked and shall be quantified at a later stage. The results of this market assessment shall inform the quantification of the KPIs.

					
Solar Home Systems Number of HH people reached % of HH - first time access % of HH - improved access % of HH - rural/underserved areas MW Installed	Mini grids MW installed HH connected (new) MSMEs connected (new) Litres of diesel/petrol substituted per year Cost savings per year CO2 emissions reduced	PUE (agro applications) Number of MSMEs reached % of female MSMEs % of HH - rural/underserved areas Income generation from PUE activities (EUR) Jobs created MW Installed	Cooking Number of HH people reached % of HH - clean cooking solutions % of HH - improved cooking solutions % of HH - rural/underserved areas CO2 emissions reduced	Institutions, C&I & EE MW installed C&I connections (new) Energy savings (kWh/year) Liters of diesel/petrol substituted per year Cost savings per year CO2 emissions reduced	Entrepreneurship & TVET # of local SMEs accelerated # of local start-up incubated # of trained solar/ EE technicians # of jobs created (gender disaggregated)

4. Overview and purpose of the assignment.

AECF is seeking a consultancy firm to conduct a market assessment prior to commencing the ETCF. The market assessment is aimed at providing the market status of the different energy technologies in Nigeria as well as providing the initial baseline data to guide the project roll-out, geographical scope, technology choices, financing models and options, and development of the KPIs. The goal of this assignment is to map out the opportunities for ETCF to unlock impact based on the analysis of the relevant market gaps for the different windows.

The specific objectives of the assignment include:

- Provide an overall market segmentation and status of the energy access, energy efficiency and energy transition in Nigeria.
- Mapping and prioritization of the supply and distribution chain for renewable energy, clean cooking, PURE, and energy efficiency technologies/services.
- Mapping and prioritization of relevant financial/investment options and models, financial institutions, providers, and intermediaries for the different technologies proposed under the ETCF including a segmentation for enterprises, public institutions, households, and TVET providers.
- Mapping of key stakeholders and existing programmes similar to the ETCF and assessing the complementarity or potential duplication of efforts.



- Assess the enabling environment for renewable energy, clean cooking and energy efficiency in Nigeria, including conducting a country and/or sectoral risk assessment with respect to ETCF.
- Assess the status of skills development in renewable energy, clean cooking and energy efficiency in Nigeria, including a mapping of government, development and private sector TVET providers in the country highlighting their strengths and weaknesses.
- Identification and prioritization of market barriers and gaps that shall translate into opportunities for ETCF for the different windows and respective technologies.

5. Scope of work

a) Market segmentation and status of energy access and energy efficiency in Nigeria

The consultant will provide an overall market segmentation and status of energy access and energy efficiency in Nigeria including penetration levels and market demand, based on recently available data from reliable sources. The output of this work shall form the baseline data of the project and shall preferably be disaggregated by energy access type and region.

This analysis shall encompass a deep dive into the status of energy access and energy efficiency technologies in the proposed windows i.e. clean cooking, SHS, micro/mini-grid, PUE in agricultural value chains, commercial, institutional, and industrial energy solutions, and energy efficiency measures.

The consultant shall specifically:

- Develop a list of data types and parameters to collect and agree with AECF before data collection. Below is a list of possible questions as a guide to this task which can be adapted accordingly:
 - Which are the most common energy technologies in the Nigerian market and segmented by energy source, technology type, application, and customer type?
 - What is the penetration of each technology per customer type and/or application?
 - Which agricultural value chains have the most potential for productive use of renewable energy (PURE)?
 - What is the status of PURE technologies for agro applications? Categorise by most mature to least mature technologies (and for which applications).
 - Which data is available with regards to energy efficiency in the Nigeria market and segmented by industry type? e.g. number of companies conducting energy audits, companies implementing energy efficiency measures including related energy savings, companies providing energy efficiency technologies and services etc.
 - What are the reliable sources for the required datasets?
- Collect, from existing reliable sources (that shall be cited), the datasets for energy access and energy efficiency in Nigeria in line with the pre-agreed datatypes and parameters. The data should be disaggregated per administrative units or regions depending on the resolution of available data.
- Synthesise the collected data while ensuring completeness and accuracy and prepare the final datasets that will be fed into an online database (relevant database platform agreed with AECF and preferably Airtable).
- Analyse the final datasets and generate findings and insights that shall guide the inception of the ETCF project including prioritisation of technologies & geographical scopes as well as informing the implementation approaches.



b) Mapping and prioritization of the supply and distribution chain for renewable energy, clean cooking and energy efficiency technologies/services

The consultant will review the supply and distribution chain of renewable energy, clean cooking and energy efficiency technologies and services in Nigeria with the aim of mapping and prioritizing key players in the sector, identifying available technological options, and identifying and mapping the key business models and distribution channels. This shall be performed for each technology/service anticipated under ETCF.

The consultant shall specifically:

- Develop a list of questions to assess and data types to collect and agree with AECF before data collection. Below is a list of possible questions as a guide to this task which can be adapted accordingly:
 - Do we have a database of companies promoting renewable energy/clean cooking/energy efficiency technologies and services?
 - How many? At what scale (small, medium, large)?
 - Which energy technologies/services do they provide/promote?
 - Is there a need to stimulate international companies to set base in Nigeria or support more local companies?
 - How is the coverage of these companies in the country?
 - Which regions do these companies cover? Is this sufficient for the sector?
 - Which renewable energy/clean cooking/energy efficiency technologies/services are demanded in rural areas and which companies are effective in promoting them there?
 - Are there areas that are not covered or have limited coverage by the identified companies or their distribution channels?
 - How is the affordability of the technologies/services addressed? What is the status of consumer financing of renewable energy/clean cooking/energy efficiency technologies/services? Are financial intermediaries/institutions playing a significant role in consumer financing? What about PAYGO?
 - How is the quality of technologies/services assured? Is there market spoilage from substandard products/counterfeits?
 - How is the investment landscape in Nigeria for the enterprises operating in renewable energy, clean cooking and energy efficiency space?
 - What is the status of technical and after sales support for the technologies including e-waste management?
 - Which are the emerging renewable energy/clean cooking/energy efficiency technologies that require further development of business models?
 - Which potential agro-energy solutions that require innovation for appropriate RE technologies?
 - How can renewable energy suppliers leverage on existing networks e.g. aggregators, cooperatives?
- Develop a database of key supply and distribution chain players for energy access and energy efficiency technologies and services.
- Draw a representative sample from the identified key players and conduct a phone survey to respond to questions pre-agreed with AECF. Questionnaires shall be developed and agreed upon during inception.



- Prepare an overview of the supply and distribution channels for energy access and energy efficiency technologies and services based on the findings of the survey.
- Develop a checklist for prioritising the companies to participate in the ETCF for the different windows based on the findings of the survey.

c) Mapping and prioritization of relevant financial/investment options, financial institutions, and intermediaries

The consultant will review the investment landscape for renewable energy, clean cooking and energy efficiency sector in Nigeria with the objective of identifying relevant financial/investment opportunities (local, regional & international) including appropriate financial/investment schemes for the businesses/enterprises, public institutions, households, and consumers. This shall also involve mapping of financial institutions/intermediaries, and other key financing providers/investors.

The consultant shall specifically:

- Compile a list of questions to assess and data types to collect and agree with AECF before data collection. Below is a list of possible questions as a guide to this task which can be adapted accordingly:
 - How is the investment landscape in Nigeria for the enterprises operating in renewable energy and energy efficiency space?
 - What is the status of access to appropriate consumer financing for renewable energy/clean cooking/energy efficiency technologies/services?
 - What are these financial/investment solutions/models/options?
 - Who is providing these financial/investment solutions?
 - What are the key issues and challenges to financing, and potential solutions based on local realities?
 - What innovative financing instruments can be deployed for renewable energy/clean cooking/energy efficiency technologies/services?
- Compile a database of investors and/or financial institutions/intermediaries/providers providing appropriate investment or financing for renewable energy/energy efficiency space including the type and features of the investment/financing solutions.
- Draw a representative sample from the identified key financial intermediaries/investors and conduct a phone survey to respond to questions pre-agreed with AECF. Questionnaires shall be developed and agreed upon during inception.
- Prepare an overview of the investment and financial landscape for energy access and energy efficiency technologies and services based on the findings of the survey.
- Develop a checklist for categorising and prioritising the financiers/investors to collaborate with in the ETCF for the different windows based on the findings of the survey.
- Propose strategies for leveraging existing financial/investment opportunities to support the businesses and public institutions that will be participating in the ETCF, particularly with regards to matching fund requirements.
- Propose strategies for improving access to consumer finance for the different segments and types of technologies.

d) Mapping of stakeholders and existing programmes like ETCF and assessing the complementarity or potential duplication of efforts



The consultant will identify and map all key stakeholders and existing programmes supporting the renewable energy and energy efficiency market development in Nigeria and with specific emphasis on enterprises and improvement of the enabling environment.

This shall consist of:

- Compiling a list of key stakeholders and their roles in the renewable energy, clean cooking and energy efficiency sector.
- Compiling a database of programmes and initiatives of donors and development partners in the renewable energy, clean cooking and energy efficiency
- Identify the objectives and focus of the existing programmes.
- Assess complementarity or potential duplication of efforts with ETCF.

e) Assess the enabling environment for renewable energy, clean cooking and energy efficiency in Nigeria, including conducting a country and/or sectoral risk assessment with respect to ETCF

The consultant will provide an overview of the enabling environment governing the energy sector in Nigeria, in particular the renewable energy, clean cooking and energy efficiency and its implications to ETCF as well as compiling a country/sectoral risk assessment matrix that shall inform the set-up of ETCF.

This shall entail:

- Identify, analyse, and summarise the relevant laws, regulations and policies governing the renewable energy and energy efficiency sector in Nigeria including implications to ETCF.
- Identify and summarise the standards for renewable energy technologies in Nigeria and assess their adequacy.
- Identify key sectoral risks, implications, and mitigation measures and particularly with respect to the ETCF.

f) Assess the status of skills development in renewable energy (RE) and energy efficiency (EE) in Nigeria

The consultant will also analyse the skills development space for renewable energy/clean cooking/energy efficiency with the view of identifying sweet spots for ETCF to intervene. The assessment shall entail but not limited to the following:

- Compile a database of institutions providing RE/EE/CC training and capacity building in Nigeria (private/public) per type of institution and including providing and summary of existing trainings/courses/capacity building measures.
- Identify regulations, standards and guidelines governing RE/EE/CC trainings and professions (including licensing of practitioners).
- Assess if the trainings and courses are recognised by the education system and/or regulatory/licensing bodies (including international bodies). Identify any gaps/barriers in curriculum development and trainings.
- Assess the current financiers, financing models and options for training and capacity building in RE/EE/CC in the country. Identify any gaps/barriers to financing training and capacity building.
- Draw a representative sample from the identified institutions (as well as key stakeholders and RE/EE businesses) and conduct a phone survey to respond to particularly on skills development needs. The questionnaires shall be developed during inception.



The assignment is expected to run between 1100-1500 man-days within a period 2 months with a mix of senior experts, junior experts and enumerators.

7. Qualifications

AECF is seeking a consultancy firm with a capacity to deploy a team comprising of an appropriate mix of engagement leader, senior experts, junior experts, and enumerators. The firm is expected to meet the following criteria:

- Registered and based in Nigeria and meeting all statutory requirements.
- At least 8-10 years of practical experience in conducting market assessments, surveys, stakeholder, and data analysis; stakeholder consultations, human centered design, and programme design in the development sector and preferably in Nigeria.
- At least 5 years' experience in development, management and /or monitoring of RE/EE/CC programmes in Sub Saharan Africa and preferably in Nigeria.
- An in-depth understanding of the RE/EE/CC industry, including an understanding of the RE/EE/CC regulatory and policy environment in Nigeria.
- Be fluent in English and Nigerian Local languages.

8. Proposal submission

Interested and qualified consultancy firms are invited to submit their proposal(s) comprising the following:

- a) A technical proposal, max 15 pages (excluding annexes)
 - An understanding of the consultancy requirements.
 - Methodology and work plan for performing the assignment.
 - Detailed reference list indicating the scope and magnitude of similar assignments.
 - At least 3 reference signed reference letters of similar work done
 - Relevant services undertaken in the past five (5) years.
 - Letters of references from 3 previous companies/assignments
 - Registration and other relevant statutory documents (this applies to Institutional consultants).
 - As per the Evaluation criteria
- b) A financial proposal – Download template here: [Financial Proposal Template - ETCF Nigeria.xlsx](#)
 - Financial proposal clearly showing the proposed team member, roles, and proposed days and the proposed professional fee (daily rate and total amount per team member). The financial proposal shall also include an indication of reimbursables (travel, communication e.t.c).
 - Note that the team members, man-days and rates used in this template are generic for illustrative purposes. Please adapt accordingly.
 - The financial proposal in **USD**

9. Pricing

The consultant shall submit a financial proposal indicating an all-inclusive daily rate for the anticipated period of assignment as well as the anticipated reimbursables.

10. Evaluation Criteria

An evaluation committee will be formed by the AECF which will include employees. All members will be bound by the same standards of confidentiality. Bidders should ensure that they fully respond to all criteria to be comprehensively evaluated. In deciding the final selection of qualified bidder, the technical



quality of the proposal will be given a weighting of 70% based on the evaluation criteria below. Only the financial proposal of those bidders who qualify technically will be reviewed. The financial proposal will be allocated a weighting of 30% and the proposals will be ranked in terms of total points scored.

NO.	CRITERIA FOR ASSESSMENT	Weighted Award
A.	TECHNICAL PROPOSAL	70
1.	An understanding of the terms of reference	20
1.1	Demonstrate understanding of the assignment and expected outcomes.	5
1.2	Demonstrate relevant experience to undertake the given assignment (8-10 years)	15
2.	Methodology and work-plan that will deliver the best value on the assignment	30
2.1	Methodology and delivery approach of undertaking the assignment in the provided timelines.	15
2.2	Demonstrate relevant services provided in the last three years with sample of work.	10
2.3	Geographical Reach: Demonstrate relevant geographical experience, knowledge and reach to effectively carry out the assignment.	5
3.	Qualification and Experience	20
3.1	Qualifications and competence of the key staff related to the study Bidders must provide descriptions and Documentation of staff/teams' technical expertise, experience, and assignment to the task	10
3.2	Provision of registration documentation and other relevant statutory document	5
3.3	At least 3 reference signed reference letters of similar work done	5
B.	FINANCIAL PROPOSAL: Clarity, relevance, reality to market value/ value for money of cost for the assignment (inclusive of any applicable tax, reimbursables and travel).	30
	Total Score	100

11. Application

AECF invites qualified consulting firms to send a proposal to aecfprocurement@aecfafrica.org, clearly marked “ **CONSULTANCY SERVICES TO CONDUCT A MARKET ASSESSMENT AND BASELINE STUDY FOR THE ETCF – NIGERIA**” to be received no later than the **15th of March 2024, by 5.00 pm East Africa Time (GMT +3)** addressed to: **The AECF, Procurement Department**. All clarifications and or questions should be sent to aecfprocurement@aecfafrica.org by **7th March 2024**.

12. Disclaimer

AECF reserves the right to determine the structure of the process, number of short-listed participants, the right to withdraw from the proposal process, the right to change this timetable at any time without notice



and reserves the right to withdraw this tender at any time, without prior notice and without liability to compensate and/or reimburse any party.

NB: The AECF does not charge an application fee for participation in the tender process and has not appointed any agents or intermediaries to facilitate applications. Applicants are advised to reach out directly to the AECF PROCUREMENT DEPARTMENT.