



RURAL ELECTRIFICATION AGENCY

ENERGY = EMPOWERMENT = EFFICIENCY

NIGERIA ELECTRIFICATION PROJECT

**TERMS OF REFERENCE
FOR THE ENGAGEMENT OF A CONSULTANT TO UNDERTAKE
TRAININGS ON PRODUCTIVE USE OF ENERGY**

2020

1 BACKGROUND

- 1.1 It is estimated that 95 million people in Nigeria do not have access to electricity. Nigeria has the second largest population without access to electricity in the world (after India which has over 240 million people without access). A significant proportion of this population without access live in rural areas; approximately 36% of Nigeria's rural population does not have access to electricity.
- 1.2 The Federal Government of Nigeria (FGN) is driving strategies to fast track development initiatives towards achieving the overall objectives of the Economic Recovery and Growth Plan (ERGP) and the Power Sector Recovery Programme (PSRP).
- 1.3 In support of the FGN's efforts to improving the country's power sector and in response to a request from the FGN, the Board of the African Development Bank (AfDB or the "Bank") approved a USD 200 million sovereign facility to support and finance the Nigeria Electrification Project (NEP). NEP will be implemented by the Rural Electrification Agency (REA or the "Implementing Agency").
- 1.4 The proceeds of the AfDB's financing for NEP will be applied across the following four components (the "Project"):
 - (i) **Component 1:** a minimum subsidy tender programme awarding subsidies to private sector developers to catalyse the rollout of solar and/or hybrid mini-grid solutions across up to 300 sites split into at minimum 6 lots;
 - (ii) **Component 2:** A results-based finance programme incentivizing solar home system installation companies and mini-grid developers to incorporate the distribution and sale of energy efficient productive use appliances in their regular line of activities;
 - (iii) **Component 3:** phase 3 of the Energizing Education Programme (EEP), a government-led initiative that aims to install dedicated power systems at eight federal universities;
 - (iv) **Component 4:** technical assistance and capacity building for a wide range of public and private sector stakeholders in the country's off-grid sector.

2 ASSIGNMENT DESCRIPTION

- 2.1 The objective of Component 2 is to increase the productive use of energy in remote communities by facilitating access to energy efficient productive use appliances and equipment for agro-processing and commercial business activities within the communities. Increasing the productive use of electricity in rural communities is expected to (i) improve their economic and social development, as well as contribute to the modernization of their local economies; and (ii) improve the sustainability of the business models of mini-grid developers and off-grid solar companies – the former of which relies heavily on productive loads for revenue.

- 2.2 Mini-grid developers in Africa, including in Nigeria, are increasing involvement in the productive use market through collaborative efforts with other companies /development agencies or by transporting and retailing energy efficient productive use equipment to the communities they are electrifying. Similarly, stand-alone solar installation companies increasingly offer ancillary electrical appliances (i.e. TVs, stereos, fans, salon kits) as part of the kits they retail to their customers. It is in the interest of mini-grid developers and other companies in the off-grid space to market and commercialize productive use appliances and equipment, as well as encourage local capacity for maintaining the equipment.
- 2.3 In light of the above, Component 2 features a results-based finance subsidy mechanism. The subsidy design, performance metrics and disbursement criteria for the allocated grant funds to the tune of USD20million, is being finalised. To this end, REA will undertake a pilot/initial roll-out in selected existing mini grid sites prior to the roll-out of the component 1 mini grids to be constructed under the Nigeria Electrification Project financed by the AfDB.
- 2.4 Awareness and Education on Productive Use is essential to create a knowledge economy in the industry as well as equip end-users to uptake productive use appliances to improve their business operations and income. Training of end-users/small holder farmers in rural communities is crucial to ensure the sustainability and demand stimulation of productive use.
- 2.5 The REA is now seeking a qualified consulting firm (the "Consultant") to support Component 2. The Consultant will be expected to design training materials and implement training workshops for key stakeholders on topics surrounding the productive use of energy in states benefitting from the Mini Grids component and other major agricultural value chain operating states across the country.

3 OBJECTIVE

- 3.1 The objective of the Training Consultancy is as follows:
 - 3.1.1 To stimulate interest in Component 2 by sharing current thinking on innovative practices and products in the Off-Grid space.
 - 3.1.2 To support end-users to increase income and reduce market barriers
 - 3.1.3 To provide practical guidance to enable & encourage stakeholders to participate in the energy-efficient productive use appliances market.
 - 3.1.4 To support in creating an enabling environment for the successful implementation of the component.

4 SCOPE OF WORK

4.1 Designing of Training Curriculum

- 4.1.1 The Consultant will be expected to design a robust training curriculum to be implemented across the lifespan of the project.

- 4.1.2 The Training Curriculum will incorporate the findings and lessons from the results of the pilot demonstrations undertaken by REA as provided in Clause 2.3 above.
- 4.1.3 The training methodology will involve practical simulations/case studies to ensure that it is interactive and impactful.
- 4.1.4 The Consultant will develop training handbooks covering relevant topics as relate to the end-users (4.2) and key stakeholder workshops (4.3).
- 4.1.5 The Consultant will be expected to train value chain actors across the country on the methodology and implementation of Component 2
- 4.1.6 The Consultant will also develop a training curriculum for engaging in mini-grid development and productive use of energy and energy efficient appliances businesses for educational institutions.

4.2 Training and Capacity Development for End-users

4.2.1 Undertake/coordinate training on productive use of energy for communities in participating states under the AfDB-NEP¹ Component 1 and the World Bank NEP. Trainings can be held in one state per zone from the list of participating states in the geo-political zones indicated in the table below.

Geo-political Zone	State
North-West	Jigawa, Sokoto, Kano
North-Central	Kogi, Nasarawa, Kwara, Niger, Plateau
North-East	Gombe, Bauchi
South-West	Oyo, Ekiti, Ondo, Ogun
South-South	Delta, Cross Rivers
South-East	Enugu, Abia, Anambra

4.2.2 End-users will undergo training that will include but not limited to the following:

- (i) Productive Use of Energy - End users will be trained on new strategies to increase income whilst using energy more efficiently.
- (ii) Enterprise Development (ED) - which will consist of entrepreneurship classes with an aim to develop the business skills of end-users in the rural areas.

¹ Ekiti, Enugu, Delta, Jigawa, Nasarawa, Kwara, Oyo, Kogi and Gombe

- (iii) Financial Literacy: End-users will be trained on basic finance skills such as book-keeping and maintaining positive cash flow to boost their creditworthiness.
- (iv) Technical Literacy: End users will undergo practical tutorials where they will be instructed on operation and maintenance processes regarding technical aspects of productive use appliances.

4.3 Training and Capacity Improvement Workshops for Stakeholders such as Mini-Grid Developers, Co-operatives, Agro-allied businesses, Government Agencies, DFIs and Non-Governmental Organisations:

4.3.1 These workshops will occur in Lagos and Abuja.

4.3.2 The scope of the training will include the following:

- (i) Overcoming Market Barriers: How to implement profitable mini-grids sustainably;
- (ii) Demand stimulation: strategies and techniques
- (iii) The nexus between improving productive use of energy in the agricultural Value Chain and economic development.
- (iv) Strategies to foster efficient maintenance culture of productive use appliances.
- (v) How to collaborate and interface with the Nigeria Electrification Project

5 FIRM'S QUALIFICATION AND REQUIREMENTS FOR THE KEY EXPERTS

5.1 The Consultant must have been in existence for at least five years as a firm (if the Consultant constitutes a consortium of firms, each firm must have been in existence for at least five years as a firm) and must have:

5.1.1 Experience in training and interacting with Rural Communities with the capacity to conduct several trainings concurrently;

5.1.2 Knowledge of agriculture and other commercial activities value chains in Rural Nigeria

5.1.3 Understanding of productive uses of energy in the off-grid and mini-grid sectors.

5.1.4 Deep understanding of the renewable energy access sector and market development approaches especially as it relates to sub-Saharan Africa;

5.1.5 Experience in building interactive training curriculums for a large range of stakeholders;

5.1.6 Ability to commence activities within a short time period following conclusion of the contract.

5.2 The Consultant's team shall comprise of the following:

- 5.2.1 **Energy Access Solutions Expert:** The expert shall have at least a master's degree in a relevant subject such as Engineering, economics, finance, management or business/public administration or an MBA. The expert shall have at least ten (10) years of relevant experience working at and/or for international institutions in similar assignments. The expert is expected to have an extensive network and experience liaising with private operators in off-grid and mini-grid sectors across the continent and in Nigeria in particular.
- 5.2.2 **Training Experts:** The experts shall have at least a master's degree in a relevant subject such as energy, economics, management or business/public administration or an MBA. The expert shall have at least five (5) years of relevant experience working at and/or for international institutions in similar activities. The expert is expected to have a track record of training in the renewable energy sector, with a demonstrated understanding of importance of productive use appliance for demand stimulation and community development. There will be 2 Training Experts required.
- 5.2.3 In addition, members of the Proposed Team must have the following qualifications:
- 5.2.3.1 Proven ability in report-writing, analytical skills and capacity to deliver outputs in a timely manner;
 - 5.2.3.2 Client and results-oriented with strong analytical and communication (verbal and written) skills, sense of accuracy and attention to detail; and
 - 5.2.3.3 Fluency in English as a working language and proficiency in local languages..

6 DURATION AND DELIVERABLES

- 6.1 The Assignment is expected to be carried out over a period of 5 months
- 6.2 Reports of each deliverables will be submitted as follows: One Electronic copy and three hard copies. After the delivery of each deliverable, REA-NEP will review the submissions (Deliverables) and confirm whether the reports are satisfactory or not within one week. The consultant will incorporate comments into the final copies of the reports, which will be submitted in three (3) hard copies and two (2) soft copies.

S/N	Delivery Description	Delivery Timelines	Payment milestones
1.	Inception Report and Work plan	T + 2 Weeks	10%
2.	Training Curriculum and Methodology including	T + 4 Weeks	20%

	proposed training calendar across the various zones		
3.	Training materials for end-users and other stakeholders	T + 6 Weeks	30%
4.	Submit Training Reports	T + 20 Weeks	40%

7 TRANSFER OF KNOWLEDGE

The Consultant shall ensure transfer of knowledge to the selected REA /PMU staff that will be assigned to work on the assignment by developing key strategies in facilitating inclusive, practical, hands-on engagement of the staff through all the stages of the project implementation.

8 TERMS OF PAYMENT

- 8.1 Payments to the Consultant shall be made according to the payment milestones in paragraph six above as well as submission of the reports listed in paragraph 6 and acceptable to the Client.
- 8.2 Reports of each deliverables will be submitted as follows: one electronic copy and three hard copies. Payment shall be made to the Consultant after submission and approval of the reports in line with the payment milestones stated in the table above.

9 SELECTION METHOD

The Consultant will be selected in accordance with the QCBS Method set out in the African Development Bank's "Rules and Procedures for the use of Consultants" May 2008 Edition Revised July 2012, which is available on the Bank's website at <http://www.afdb.org>.

10 COPYRIGHT AND OWNERSHIP

All raw and finished materials would be owned by the REA. The Consultant shall maintain in strict confidence all information received from the REA concerning all data and insights obtained during the course of the Project.