Terms of Reference: “Expert to conduct assessment of Nigeria’s grid efficiency and renewable energy training landscape”

1. Background information

The “Grid Efficiency and Resilience” (GEAR) is an international initiative focused on electricity grid maintenance and efficiency improvements in emerging markets. The aim of GEAR is to maximize the amount of electricity delivered to end-users without increasing emissions, while accelerating socio-economic development.

GEAR provides technical assistance and capacity building to governments and utilities, supports in grid assessments and matchmakes investment-ready renewable energy projects with finance and technology providers.

GEAR is managed by the Alliance for Rural Electrification (ARE) and founded by the International Copper Association (ICA), the International Energy Agency (IEA), SEforAll, UNIDO, United 4 Efficiency (U4E), African Forum for Utility Regulators – (AFUR) and Association of Power Utilities of Africa (APUA).

2. Objectives

The objectives of this assignment focused on the Nigeria market is twofold:

1) Identify focus areas for GEAR to collaborate with the Nigerian government and DISCOs on grid maintenance and grid efficiency projects with a renewable energy component

2) Identify key opportunities to contribute to renewable energy training efforts in Nigeria in support of renewable energy skills development in the long-term

3. Scope of work

GEAR is seeking a market expert to conduct this two-fold assessment. The final output will be an up to 14-page assessment report. The report should be divided into two parts as specified below.

1. **Part 1:** Evaluation key opportunities and focus areas for GEAR to collaborate with the Nigerian government and DISCOs on grid maintenance and grid efficiency projects with a renewable energy component. This should include:
   - High-level overview of status of the electricity grid, grid efficiency and renewable energy integration in Nigeria
   - Identification of one or several key state(s) in Nigeria for GEAR to focus its efforts on grid maintenance and grid efficiency on in view of the current market situation.
- Identification of 3 specific potential grid improvement projects to support modernization of the Nigerian grid with state-of-the-art grid transformers in the key state(s)
- Identification of key opportunities for GEAR to support the Nigerian national and/or state government(s) and the DISCOs in the target state(s) with capacity building support that may improve the enabling environment for grid maintenance and efficiency
- Based on the target state(s) and projects identified, the expert is expected to deliver a list of proposed partners for GEAR to engage with to further the initiative in Nigeria. This should include suggestions for the individual persons in the Nigerian government and DISCOs to reach out to and full contact details of this person, including full name, job title, email and phone number (whatsapp)

2. **Part 2:** Identify partners and opportunities for GEAR to support renewable energy training (on-grid and mini-grid renewable energy training. The expert is expected to identify:
   - High-level overview of status of renewable energy training and certification in Nigeria
   - Public sector partners that are certifying RE trainings in Nigeria, up to what level and what
   - Key gaps in RE training and certification in Nigeria and how these could be addressed
   - Universities with relevant renewable energy educations across Nigeria (e.g., electrical engineering or the like) and to what extent they are certified
   - Technical and vocational education centres (TVET) throughout Nigeria that offer RE training
   - Private sector companies offering renewable energy training
   - International funding partners involved in RE training and certification efforts across Nigeria (e.g. GIZ-NESP, World Bank, African Development Bank, etc.)

In line with this assessment, the expert is expected to deliver:
- Recommendations on how to address the gaps in renewable energy training in Nigeria (related to both on-grid and mini-grid training)
- A full list of activities of RE training institutions/partners identified, including universities, TVET institutions, private sector and international funding partners
- Geographical areas of activities of each of the potential partners identified (region and city/town/village(s) in Nigeria
- Contact details of each potential partner (full name, job title, email and WhatsApp).

The report should be delivered in **English** and will not be published publicly. The report will be the property of ARE, as the managing entity of GEAR.

The deadline for submission of this report is **8 December 2023**. The selected expert is expected to be based in Nigeria.
4. Required documents

Bidders are required to submit the following documents to Jens Jæger, Director of Policy & Business Development, ARE & Manager, CORE: j.jaeger@ruralelec.org

- **Technical proposal** of maximum three pages on the proposed methodology, timeline for delivery of materials and experience of the expert(s) in delivering similar trainings
- **Financial proposal** of no more than 1 page (in USD)
- **CV** of the expert(s) in format of choice.

5. Timeline

The deadline for submissions of proposals is **14 October 2023 (23:59 CET)**.  
The selected expert(s) will be contacted by **21 October 2023**.  
The deadline for submission of the assessment report is **8 December 2023**.

6. Fees

The selected expert(s) will be paid an all-inclusive service fee for the delivery of the trainings.  
The fees quoted in the Financial proposal should include all charges related to the assignment and are not subject to change after signature of the contract.

7. Payment schedule

Payments to the selected expert will be made along the following schedule:
- 25% upon signature of contract
- 75% upon submission of final report

Payments will be payable within 60 days upon receipt and acceptance of deliverable and invoice (electronic version) indicating the contract number and instalment requested.