

TERMS OF REFERENCE

ELABORATION OF THE WEST AFRICAN CLEAN ENERGY CORRIDOR PROGRAM AND ITS INSTITUTIONAL IMPLEMENTATION FRAMEWORK

Reference No.: WACEC-1/2020

June 2020

1. Background

With a population of over 300 million inhabitants and a growing economy, energy demand in West Africa is increasing at a rapid pace. The current **installed capacity in the region covers less than 40% of the demand** and only 42% of the population has access to electricity, while network reliability issues restrain the industrial development of the region and affect productive activities. Moreover, the perception of considerable risks associated with the power sector makes it hard for the region to attract sufficient investments to develop the much-needed energy infrastructure.

On the other hand, the region has an **important renewable energy potential** and the costs of both wind and solar electricity generation has declined rapidly over the past decade. This renewable energy potential is therefore considered a major opportunity, which could supply the much, needed power demand while supporting a transition to a low carbon economy.

In 2013, ECOWAS Authority of Heads of State and Governments adopted the **ECOWAS Renewable Energy Policy (EREP)**, which aims to reach a share of renewable energy (excluding large hydro) in the region's electricity mix of 10 % in 2020 and 19 % in 2030. Including medium and large hydro, the share would reach 35 % in 2020 and 48 % in 2030. These objectives translate into an EREP target for grid-connected Renewable Energy of 2425 MW of additional installed capacity of renewable electricity by 2020 and 7606 MW by 2030. Around 25% of the rural ECOWAS population will be served by renewable mini-grids and stand-alone systems by 2030.

In this context, **the West African Clean Energy Corridor (WACEC) initiative**, launched by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in partnership with the International Renewable Energy Agency (IRENA), seeks to bolster the development of utility scale renewable power and its integration in West African power systems. The initiative builds on ongoing efforts by national and regional partners and is structured around the following implementation pillars:

- Identification of ecologically acceptable areas with high potential for renewable energy sources and the cost-effective deployment of renewable energy projects;
- National and regional planning for the integration of cost-effective renewable energy generation options into national and regional electricity generation and transmission master plans;
- Strengthening of political, regulatory and institutional frameworks conducive to the promotion of investments in renewable energies;
- Building capacity to plan, maintain, and manage electricity systems with large shares of electricity from renewable sources;
- Fostering public and political support for the initiative and raising awareness of its benefits.

Within the framework of operationalising a regional electricity market within the **ECOWAS region, the West African Power Pool (WAPP)** is implementing the ECOWAS Master Plan

for the Development of Regional Power Generation and Transmission Infrastructure 2019-2033 that was adopted by the Authority of ECOWAS Heads of State and Government approved through Supplementary Act A/SA.4/12/18. The Master plan takes into consideration, among others, the evolution of the energy landscape within the ECOWAS region as well as the renewed drive of the sub-region to better integrate variable renewable energy resources into the regional energy mix. The Master Plan depicts 75 (#) priority projects of which are 47 (#) generation projects with a capacity of 15.49 GW. 68.9% of this generation capacity shall be from renewable energy resources including regional solar parks that the WAPP Secretariat is advancing in their development.

The WACEC initiative includes three strategies for exploiting the best available resources in the region:

- *Hydropower strategy*: includes West African countries with significant hydropower resources; with the aim of creating the necessary conditions to develop **2,4 GW** of small hydropower **by 2030**,
- *Solar strategy*: includes West African countries where large solar power plants could be built at low cost while benefiting from economies of scale; with the aim of creating the necessary conditions to develop **10 GW by 2030**.
- *Wind strategy*: West-African countries with large-scale wind resources, with the aim of creating the necessary conditions to develop **1 GW by 2030**.

COUNTRY	HYDRO	WIND	SOLAR
Benin	V		V
Burkina Faso	V	V	V
Gambia		V	V
Ghana	V	V	V
Guinea	V		
Ivory Coast	V		V
Liberia	V		
Mali	V	V	V
Mauritania		V	V
Niger		V	V
Nigeria	V	V	V
Senegal		V	V
Sierra Leone	V		
Togo	V		V

The three strategies above were developed and validated during a regional workshop from 16 to 18 September 2019 in Dakar, Senegal.

2. Objective of the assignment and expected results

The objective of this assignment is to transform the WACEC initiative into a structured regional program and to define an institutional framework for its implementation. The WACEC program and its regional institutional framework will be based on a participative, harmonized and integrated approach with good coordination between all stakeholders as well as funding institutions.

Based on relevant documents such as: ECOWAS Renewable Energy Policy (EREP), WACEC concept note and roadmap, strategy (solar, wind and hydropower) documents, ECOWAS Master Plan elaborated by WAPP etc...., the following results are expected:

- WACEC program elaboration including:
 - Agreed and clearly defined roles and responsibilities of all key stakeholders,
 - Proposition for strengthening of political, regulatory and institutional frameworks conducive to the promotion of investments in renewable energies,
 - Proposition of the coordination of International Funding Institutions intervention with resource and fund mobilization approach that identifies and fills gaps in funding and capacity for timely implementation,
 - Propositions of agreed blocks of activities in the short (2021), medium (2023-2024) and long term (2027-2028) to ensure that the region achieves the agreed overall objectives within a realistic timeframe, taking into account the lack of resources,
 - Proposition of a harmonized concept of RE procurement, including identification of ecologically acceptable areas (Zones) with high potential for renewable energy sources within suitable countries;
 - Proposition to solve capacity building needs
 - Proposition regarding fostering public and political support for the program and raising awareness of its benefits.
- WACEC institutional implementation framework including:
 - The mandate and role of relevant ECOWAS Institutions (ECREEE, WAPP, ERERA, PPDU etc..), are analysed and defined considering their respective missions as already assigned by the ECOWAS Heads of States and Governments recommendation for better definition made;
 - The key support stakeholders are analysed in order to propose an optimal institutional framework for the implementation of WACEC strategies;
 - Institutional framework and cooperation for the implementation of major renewable energy projects in the ECOWAS region is analysed;
 - Institutional framework for legal, technical support and capacity building is analysed;
 - Institutional framework for the implementation of the three WACEC strategies (Solar, Hydropower and Wind) is proposed.
 - Work plan for implementation of the WACEC program and its institutional implementation framework effective.

3. Tasks to be performed by the contractor

The contractor is responsible for providing the following services:

- Desktop research, such as: mandate and mission of main institutions, documents relating to the region energy policy, strategy and planning etc.,
- Exchange by teleconference with all three partners ECREEE, WAPP and ERERA,
- Exchange by teleconference with further stakeholders like: ECOWAS Commission, PPDU, IRENA, GIZ, USAID, and ECREEE National Focal Institutions in Member States,
- Elaboration of the WACEC programme with propositions of at least the following points:
 - the different components and activities, proposition of blocks of agreed activities in the short (2021), medium (2023-2024) and long term (2027-2028) to ensure that the region achieves the agreed overall objectives within a realistic timeframe, taking into account the lack of resources,
 - the identification of funding sources,
 - a harmonized implementation approach: legal framework, environmental, audit, budgeting etc...,
 - the multi-year (e.g. three-year) operation plan, an annual work plan,
 - the indicators for measuring these objectives,
 - the method of monitoring and evaluation of indicators and results,
- Proposition of a harmonized and optimal concept of funding that include:
 - Identification of suitable financing approach and arrangement for optimal funding of WACEC Programs
 - Proposition of the coordination of International Funding Institutions intervention with resource and fund mobilization approach that identifies and fills gaps in funding and capacity for timely implementation,
- Based on ECOWAS capacity building strategy document (implemented by WAPP and ECREEE) , Proposition of a capacity building activities to enhance capacities for the common implementation of the WACEC Program (common implementation by WAPP, ECREEE, ERERA).
- Proposition for strengthening of political, regulatory and institutional frameworks conducive to the promotion of investments in renewable energies,
- Proposition of actions fostering public and political support for the program and raising awareness of its benefits,
- Identification of main regional and international Institutions that can contribute to the implementation, and analysis of how they can contribute,
- Proposition based on institutional analysis for:
 - an efficient functioning of a steering committee and project implementation unit, their structure, composition and its strategic tasks,
 - a coherent institutional arrangement and practical measures (roadmap) for cooperation and for the implementation of the three strategies,

- coordination and monitoring of projects stemming from WACEC strategies,
- Proposition of a harmonized concept of procurement that include:
 - analyse existing utility scale renewable energy (solar PV, wind and hydropower) procurement practices in ECOWAS Member States for grid connected projects,
 - analyse factors that have contributed to successful procurement of these technologies IPPs or not in some West African countries;
 - identify the right conditions for the use of tenders and competitive bidding for utility scale renewable energy procurement given the existing practices and successful approaches;
 - examine the role and the conditions that enable competitive prices in a competitive procurement process, and the barriers that remain to achieve competitiveness,
 - specifically assess the importance of scale as a determinant for competitive prices in these IPP projects in the region.

The consultant will then:

- analyse the pertinence and feasibility renewable energy (solar, wind, hydropower) of bulk procurement scheme for the ECOWAS region against the existing challenges,
 - propose a design for such a scheme including analysis of relevant Institutions and stakeholders inherent to successfully implement the scheme,
 - propose a procurement procedure with templates of documents & contracts, sources of financing, insurance, guarantees etc...
- Proposition of the functional relationship between the Steering Committee and the project Implementation Unit,
 - Proposition of a monitoring and evaluation process and a periodicity and framework for meetings of the committee and the implementation unit,
 - Presentation of WACEC institutional implementation framework during a dedicated online workshop,
 - Taking into account all relevant comments,
 - Final report of the mission, which explains the process and the results including various stakeholders' comments.
-

4. Deliverables

The Consultant shall provide the following reports:

- Report of Online meeting with relevant stakeholders,
- An inception report containing a proposal and the work plan for making the WACEC program elaboration and its institutional implementation framework effective,
- A mid-term report with the main lines of the program and its institutional framework for implementation,
- Documents and templates, contracts (convention of concession, PPA, convention of connection to the grid), sources of financing, insurance, guarantees etc...

- Report containing all the above-mentioned aspects of the WACEC program document and work plan and its institutional framework with stakeholders responsibilities and time frame for implementation elaborated,
- Final report of the mission, which explains the process and the results including various stakeholders' comments.

Certain milestones, as laid out in the table below, are to be suggested and achieved by certain dates during the contract term, and at particular locations:

Milestone	Deadline	place	person responsible
Elaboration of online meeting program with over mentioned stakeholders,	One week after signature of the contract	Consultant office	Consultant
Hold consultation meetings with each stakeholders	Two weeks after meeting program	online	Consultant
inception report containing the proposal above and the work plan for making the WACEC program elaboration and its institutional implementation framework effective (French and English)	Two weeks after meetings	Consultant office	Consultant
a mid-term report with the main lines of the program and its institutional framework for implementation	Four weeks after the submission of inception report		
draft documents and templates, contracts (convention of concession, PPA, convention of connection to the grid), sources of financing, insurance, guarantees etc...			
draft report containing all the above-mentioned aspects of the WACEC program and its institutional framework	Four weeks after submission of draft documents and templates		

for implementation elaborated			
integration of comments from stakeholders	Four weeks after submission of draft report		
Validation Workshop	Two weeks after integration of all comments	online	ECREEE/GIZ
Final report of the mission, which explains the process and the results including various stakeholders' comments.	Two weeks after Online Validation Workshop	Consultant office	

Indicative period of assignment: 5 months starting after the contract signature.

5. Personnel concept

The bidder is required to provide experts who are suited to filling the position described and the required qualifications, on the basis of their CV.

The below specified qualifications represent the requirements to reach the maximum number of points.

Expert 1: Project Coordinator (team leader)

Qualifications

Education/training: University qualification ('Diploma'/Master) in Electricity, Energy Policy or Equivalent

- Language: Good business language skills in French and English
- General professional experience: 20 years of professional experience in Energy project coordination, Renewable Energy Policy, planning, monitoring and evaluation etc.,
- Specific professional experience: 10 years in RE program elaboration, institutional analysis and implementation framework, Regional Strategic Plan elaboration and its implementation,
- Leadership/management experience: 10 years of management/leadership experience as project team leader or manager in a company,
- Regional experience: 10 years of experience in the development of RE projects in the sub-Saharan African region, including ECOWAS sub-region,
- Development Cooperation (DC) experience: 10 years of experience in DC projects.

Expert 2: Renewable Energy Expert

Qualifications

Education/training: University qualification ('Diploma'/Master) in Electricity, Renewable Energy Policy or Equivalent

- Language: Good business language skills in French and English,
- General professional experience: 15 years of professional experience in Renewable Energy (solar, wind and hydropower), Renewable Energy Policy, RE Enabling Environment etc...,
- Specific professional experience: 10 years in RE program elaboration, Institutional Analysis and framework, Regional Strategic Plan Implementation,
- Regional experience: 10 years of experience in the development of RE projects in the sub-Saharan African region, including ECOWAS sub-region,

Expert 3: Legal Expert

Qualifications

Education/training: University qualification ('Diploma'/Master) in law

- Language: Good business language skills in French and English,
- General professional experience: 15 years of professional experience,
- Specific professional experience: 10 years in RE program elaboration, Institutional Analysis and framework, Regional Strategic Plan Implementation related to legal aspects, documents and templates elaboration such as (convention of concession, PPA, guarantee etc...)
- Regional experience: 10 years of experience in the development of RE projects in the sub-Saharan African region, including ECOWAS sub-region,

Expert 4: Financial Expert

Qualifications

Education/training: University qualification ('Diploma'/Master) in Economy or Finance with knowledge in Energy sector

- Language: Good business language skills in French and English,
- General professional experience: 15 years of professional experience in economic and finance,
- Specific professional experience: 10 years in RE program elaboration, Institutional Analysis and framework, Regional Strategic Plan Implementation related to financial aspects, documents and templates elaboration such as (convention of concession, PPA, guarantee etc...)
- Regional experience: 10 years of experience in the development of RE projects in the sub-Saharan African region, including ECOWAS sub-region,

Expert 5: RE Procurement Expert

Qualifications

Education/training: University qualification ('Diploma'/Master) in economy, Energy or Equivalent

- Language: Good business language skills in French and English,
- General professional experience: 15 years of professional experience

- Specific professional experience: 10 years in RE program elaboration, Institutional Analysis and framework, Regional Strategic Plan Implementation related to procurement aspects, procurement documentation elaboration,
- Regional experience: 10 years of experience in the development of RE projects in the sub-Saharan African region, including ECOWAS sub-region,

6. Costing requirements

Expert 1: Project Coordinator (team leader)

Total: 25 expert days

Expert 2: Renewable Energy

Total: 35 expert days

Expert 3: Legal Expert

Total: 30 expert days

Expert 4: Financial Expert

Total: 30 expert days

Expert 5: Procurement Expert

Total: 30 expert days

Total estimative level of effort is: 150 Men/Day.

7. Coordination and Reporting

The Consultants firm will report to the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in close partnership with GIZ and USAID. All documentation is to be provided in English and French.

8. Qualification and Evaluation Criteria

The best offer will be determined as follows:

80% Weight of technical score

- Quality and quantity (at least 3 similar assignments) of track-record of consultant firm's work experience with proof (30%);
- Quality of proposed methodology: shows clear understanding of all technical aspects related to services requested. It provides a plan and gives an outlook on the provided solutions to achieve the set objectives and meet all the requirements; (20%).
- Qualification of each expert of consultant firm (20%);
- Regional consultants' participation (10%);
- Language skills French and English (10%);
- Proposed planning (5%);
- Development Cooperation (DC) experience (5%).

Ts= Technical score (sum of the above points)

NB: the minimum required is 70 points.

20% Weight of Financial score

The financial evaluation of bids will be done according to the formula $F_s = L_p/F_p \times 100$

Where:

- F_s = financial score
- L_p = lowest price
- F_p = financial proposition of bidder.

The financiers reserve the right to verify the information provided by the consultant firm independently.

The final point of bidder will be: $F_p = (80\% \times T_s) + (20\% \times F_s)$

- F_p = financial point
- T_s = Technical score
- F_s = financial score

9. Application Procedure

Applicants shall upload their written technical and financial proposals in English or French in electronic form to tender@ecreee.org **ONLY**, latest by **24th August 2020**, clearly indicating in the subject: “ELABORATION OF THE WEST AFRICAN CLEAN ENERGY CORRIDOR PROGRAM”. The electronic application shall include the following documents:

- CV of each expert with a detailed track-record;
- A detailed track-record of consultancy firm with at least 3 similar assignments namely in Africa with proof;
- Short Technical proposal (including proposed approach, methodology and planning);
- Short financial proposal in Euro (incl. all taxes) indicating the proposed working days, daily rates, as well as all other costs (e.g. communication); travel costs to regional meetings shall not be included in the proposals.

10. Additional documents

- ECOWAS Renewable Energy Policy (EREP), <http://www.ecreee.org/page/policy-development>
- WACEC 3 strategies final documents <http://www.ecreee.org/document/wacec-final-documents>.
- ECOWAS Updated Master Plan

11. Contact

Requests for clarification can be directed to Mahmoud N'DAW, by e-mail: mndaw@ecreee.org or Mahmoud.Ndaw@giz.de