



## **Terms of Reference**

### **Recruitment of Senior Consultant Sustainable Energy Expert for EU Funded Project**

**Location: Praia, Cabo Verde**

**Submission deadline: by 23:59 hrs (GMT) on the 03<sup>rd</sup> April 2023.**

#### **1. Introduction**

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), with ten (10) other organisations, is implementing a project entitled Open source Nexus modelling tools for Planning sustainable Energy Transition in Africa (ONEPlanET). The project is funded by the European Union (EU) Horizon initiative focused on research and innovation, specifically the 2021 call on AU-EU Water Energy Food (WEF) Nexus.

According to the project document “ONEPlanET will co-design and test a Toolkit, built upon existing WEF Nexus models and methodologies, that allow to simulate scenarios optimizing existing resources with the most appropriate policies considering social, climate, economic and biophysical constrains”. Based on ECREEE’s comparative advantage, the Centre will be leading certain tasks (work packages) and participating in tasks led by other members of the consortium.

To fulfil this obligation, ECREEE is seeking to recruit a senior consultant in the sustainable energy field (covering experience renewable energy, energy efficiency, gender, and climate change, with strong experience in data collection and analysis). The consultant will be based in Praia, Cape Verde and will be responsible for the daily planning, implementation, monitoring and reporting

of the project's activities. As an ECREEE project, activities under ONEPlanET will be implemented in coordination with ECREEE technical programs (Renewable Energy, Energy Efficiency, Gender Mainstreaming, resource mobilisation, etc).

## **2. Background**

ONEPlanET project aims to develop a common nexus modelling framework to simulate and evaluate pathways to define a more sustainable future in Africa through the deployment of renewable energy infrastructure. In this way, it will be possible to stimulate a green energy transition in the continent as well as a decarbonization of existing energy plants. The ONEPlanET model will be tailored to the needs of different stakeholders and end-users (public and private actors, policy and decision-makers, experts, and citizens) and will be totally open source to stimulate its future upgrades. The model will include information on Water, Energy, Food (WEF) and interlinkages with other sectors as Economy, Ecosystems, Society, Climate and Land for delivering a multi-sectoral assessment consistent with socio-economic and climate scenarios. The ONEPlanET modelling approach will integrate Earth Observation data (e.g. Copernicus, ESA or GEOSS), statistical data and information from basins to national and regional, via three representative case studies in the Songwe (Malawi/Tanzania), Inkomati-Usuthu (South Africa) and Niger (Mali) river basins, which show different types of basins and socio-ecological systems. ONEPlanET will help to better understand the interactions between Nexus sectors to deliver sound technical and policy recommendations towards the implementation of energy infrastructure to build a more climate neutral and resilient society

A 3-year project, ONEPlanET will be implemented in six steps, which will run concurrently or independently of the other. These steps include stakeholder building and engagement; analysis of models and data on WEF nexus; development of a decision-analytic framework to evaluate WEF nexus at selected river basins in Africa, including the Niger River basin in West Africa; development of a web-based toolkit to aid policy makers in decisions concerning WEF nexus in Africa; scaling up and replicating the ONEPlanET project across the African continent and; capacity building and awareness raising for sustainability of project results.

The project's nine (9) work packages are as follows:

1. Socio-economic and policy baseline assessment within a Nexus approach
2. Definition of a Nexus common modelling framework
3. Development of ONEPlanET model
4. ONEPlanET ICT Tools development including Toolkit demonstration and testing
5. Capacity building and training
6. Communication, Dissemination, and awareness creation

## 7. Project Management

ECREEE will lead work package two (2): Definition of a Nexus common modelling framework and will participate as team member in the others, with tasks allocated specifically for ECREEE's implementation.

The main objective of work package two is to define a specific methodology (gained with the experience coming from Consortium models) to develop local dynamic models at water basin scale including feasible policies that consider African challenges, the design of consistent future scenarios to be implemented in the models and the development of the ONEPlanET model's database.

The following specific objectives will be pursued:

- i) to review previous experiences in the modelling of Nexus systems in Africa selecting functions and functionalities to be implemented by ONEPlanET models.
- ii) to develop conceptual models feeding SDMs in each selected basin.
- iii) to define a data exploitation and processing plan to create a Nexus database for model implementation.
- iv) to identify feasible Nexus policies to be implemented in the models and to design energy planning and supply scenarios towards the sustainability for a more resilient future.

## 3. Job description

The primary responsibility of the Sustainable Energy Expert recruited for this project is to execute ECREEE's responsibilities under this project in a timely manner and maintaining the highest quality. In addition, the Expert will work in ongoing initiatives of ECREEE that complement this project.

The specific duties and responsibilities of the Sustainable Energy Expert include:

- Develop, implement, and coordinate annual workplans and activities of ECREEE work packages and tasks under the ONEPlanET, ensuring that gender is mainstreaming through the process.
- Oversee daily management of relevant parts of the project - both organizational and substantive matters – budgeting, planning and general monitoring of the project in

- close collaboration with the ECREEE Renewable Energy Programme Officer (Technology) and under the supervision of the Director of Operations (DoO).
- Support Collect and review data collected from member states and other sources for accuracy and quality.
  - Support in updating data points and country energy statistics on the interactive country profiles on ECOWREX
  - Support with the development of the monitoring framework report on the implementation of the ECOWAS Sustainable Energy Policies
  - Work with the ECOWREX team to review and reorganize the indicators and sections of the country profiles to provide the most relevant information to the ECOWREX target groups i.e. policy makers, promoters, investors and general public, while at the same time, making the process of updating the ECOWREX platform more efficient;
  - Develop a data validation methodology that allows government stakeholders to fully explore the advantages of data sourced from non-state actors.
  - Actively contribute to ongoing data collection activities such as (ECOWAS RE&EE Reports, GSR data collection, EAC Regional RE & EE Report)
  - Develop information, communication, and education (IEC) materials and ensure regular dissemination of project implementation.
  - Prepare terms of reference for national and international consultants and subcontractors as needed.
  - Monitor and guide the subcontractors for compliance with the agreed work plan.
  - Develop and implement self-monitoring, quality assurance and independent evaluation systems, including facilitated feedback from Member States and international partners, as a basis to sharpen and improve the objectives, strategy, and operations of the ONEPlanET.
  - Monitor the expenditures, commitments, and balance of funds in line with the annual work plan and reporting requirements.
  - Develop periodic project progress reports, as well as any other reports requested under the project Consortium Agreement and by ECOWAS Monitoring & Evaluation Unit.
  - Build new partnerships with relevant institutions and identify funding opportunities for replicating and scaling up the project across West Africa.
  - Undertake any other actions requested by your supervisor.

## **4. Qualification**

- Master's degree in energy, engineering, economics, developmental studies, or any related field.
- At least 8 years of work experience in the sustainable energy sector.
- Sufficient knowledge of the ECOWAS energy landscape: policies, legal and regulatory frameworks, including the sustainable energy policies developed by ECREEE.
- Ability to undertake research and lead strategic dialogue on key development issues.
- Strong problem solving, communication, research, and analytical writing as well as organizational skills.
- At least fluency in two ECOWAS working languages required. The West African project site is in Mali. The expert should therefore be fluent in French.

### **4.1 Competences**

- Experience in System Dynamic modelling
- Complex Scenario definition
- Co-design methodologies
- Previous experience in WEF Nexus
- Experience in Nexus modelling
- Multidisciplinary approach in research
- Interactions with ECOWAS or AU based initiatives.
- Policy development capacity
- Stakeholders' inclusion in governance definition processes
- Stakeholders' engagement strategies
- Project replication in complex environments
- Training about Nexus topics
- Communication & Dissemination
- Multi impact assessment
- Experience working in donor funded projects (EU, UN, etc.).

## **5. Lump sum Monthly Fee**

The Lump sum annual fee is between EUR24,000 and Eur36,000 payable monthly.

## 6. Submission

Interested applications should submit CV and cover letter to [e-expert@ecreee.org](mailto:e-expert@ecreee.org) by 23:59 hrs (GMT) on the 03<sup>rd</sup> April 2023.