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**THE FIRST ORDINARY SESSION OF THE**

**AFRICAN UNION SPECIALIZED TECHNICAL**

**COMMITTEE ON TRANSPORT,**

**TRANSCONTINENTAL AND INTERREGIONAL**

**INFRASTRUCTURES, ENERGY AND TOURISM (STC-TTIET)**

**14 – 18 April 2019**

**Cairo, Egypt**

**PROPOSED PROGRAMME TO DEVELOP SOLAR ENERGY, SMALL HYDROPOWER AND SUPPORT RENEWABLE ENERGY IN AFRICAN ISLAND STATES**

**TECHNICAL PAPER**

**Technical Paper: Proposed programme to develop Solar Energy, Small Hydropower, and support Renewable Energy in African Island States**

1. **Background Information**
   1. ***Solar Energy and Small Hydropower Development***

The African continent is among the regions that receive the highest insolation in the world with a theoretical solar energy potential of 11TW. This demonstrates the huge potential for solar energy to contribute to the provision of sustainable and affordable energy especially for remote rural areas. Although Africa is endowed with this huge solar energy potential, the majority of the continent’s population still face energy poverty.

Small Hydropower is a proven and internationally recognized source of clean energy which has played and continues to play an important role for the global energy supply. Despite the global community rapidly adopting small hydropower because of its low-cost and high impact with associated benefits for rural electrification and improving access, Africa has not yet fully benefitted from this transition due to many barriers and constraints.

To address the problem of low deployment of solar energy and small hydropower, the African Union Commission (AUC), with support from the Africa-EU Energy Partnership (AEEP), in 2018, commissioned a study to design a programme to accelerate the development of these resources on the continent. The study identified main barriers and challenges and designed a programme with key actions to be implemented by the AUC in collaboration with the Regional Economic Communities (RECs), Regional Centre’s for Renewable Energy and Energy Efficiency (RCREEEs) and Member States with the support of different partners. The results of the study were validated by stakeholders comprising of RECs, RCREEEs, international organization, private sector and civil society, among others, at a workshop held in Dar es Salaam in July 2018.

The study recommended the following key activities for small hydropower development programme from 2019 to 2022:

1. Resource Assessment
2. GIS Hydropower Mapping
3. Create Model Institutional & Regulatory Framework
4. Capacity Building, Technology Transfer and Information Sharing
5. Design a Regional Business Plan for SHP in each region
6. Financial Modelling and Private Sector Promotion
7. Scoping Study for plant to manufacture small hydropower components
8. Energy for Productive Uses Initiative and Awareness Outreach and Communication (e.g. Africa SHP Expo)
9. Monitoring and evaluation

As a follow up action, Terms of Reference for resource assessment and GIS mapping for small hydropower potential were developed and a procurement process launched by the AUC. However, resources are required to carry out the activity.

The following activities were recommended for solar:

1. Strengthen Policy framework: Prepare standard /model policy support tools and strengthen Institutional Framework
2. Financing mechanisms for Solar Programs
3. Enhance Technical Capacity in order to raise:
   1. Experienced Solar Power Technical Experts
   2. Experienced Solar Managers & Developers
   3. Experienced O & M technicians
   4. Networking and Internet Hub for Solar
4. Promote Local Manufacturing Capacity and Solar Power Plant Scoping Study

As a follow up action, Terms of Reference for developing a solar energy policy framework and capacity building programme for RECs and RCREEEs were developed and a procurement process launched by the AUC. However, resources are required to carry out the activity.

* 1. ***Renewable Energy in African Island States (REAIS)***

The African Island States (AIS) face unique challenges in addressing energy needs due to their locations. Unlike mainland states, it is usually difficult for islands to benefit from the economies of scale gained by pooling of energy resources with neighboring countries through physical interconnection of infrastructure linking different countries. They are, therefore, forced to strive to be 100% self-reliant using the resources available on the island or imported from elsewhere. Currently, the AIS are highly dependent on fossil fuels, and some spend in excess of 30% of their foreign exchange earnings annually on importing fossil fuels. Fortunately, many AIS are endowed with huge renewable energy resources that can be sustainably developed for the benefit of their economies.

Due to their geographical locations, island states are not able to fully participate in some of the AUC programmes that involve physical interconnection of infrastructure linking different countries. However, island states can benefit from AUC and Regional Economic Communities (RECs) programmes on policy and strategy development, and capacity building. It is in this context that the AUC, in recognition of the unique circumstance of island states, plans to design a dedicated programme to support all AIS in developing renewable energy programmes and accessing financing from climate funds and other potential funding sources to develop their renewable energy resources. It is expected that the programme will support AIS to reduce their dependence on fossil fuels and significantly increase use of renewable and climate resilient energy resources in their energy mix.

A Concept Note was developed by AUC jointly with the AEEP. A consultation workshop held in August 2018 at the AU Headquarters where the African Island States, RECs, RCREEEs and other stakeholders validated the concept note and Terms of Reference for designing the programme. The AUC launched the procurement process for consultancy services to design the programme and a facility to support AIS to access climate financing and other sources of funding for renewable energy projects.

1. **Activities under 2019-2021**

To develop the programme, AUC will undertake the following activities during 2019-2021 period:

1. Develop a Solar Energy Policy Framework (SEPF)
2. Conduct studies for Resource Assessment and GIS Mapping of Small Hydropower Potential
3. Design a programme for Renewable Energy in African Island States (REAIS) and design a facility to support AIS to access climate financing and other sources of funding for renewable energy projects.
4. **Status of Implementation**

AUC is currently in the tendering process for consultancy services for the three activities. However, resources are required to complete the process.

1. **Expected Decisions from upcoming STC (14 – 18 April 2019)**

The STC is requested to urge the AUC to:

1. implement a programme for solar energy, small hydropower and renewable energy in African Island States;
2. design a facility to support African Island States to access financing for renewable energy development from climate financing and other financing sources; and
3. Mobilize resources to implement these activities.