

Department of Infrastructure and Energy Energy Division

Bioenergy Development Strategy and Investment Plan for Southern Africa Region

TERMS OF REFERENCE

September 2019

Addis Ababa, Ethiopia

Section I: Letter of Invitation

13 September 2019 **PROCUREMENT NUMBER: AUC/IED/C/011-002** Dear Sirs,

REF: REQUEST FOR EXPRESSIONS OF INTEREST: Consultancy Services to Undertake Bioenergy Development Strategy and Investment Plan for Southern Africa Region

1. The African Union would like to engage the services of an Individual Consultant for **Consultancy Services to Undertake Bioenergy Development Strategy and Investment Plan for Southern Africa Region.** The African Union Commission invites interested and eligible bidders to submit technical and financial proposals for the assignment as per attached Terms of Reference (TORS).

2. An **Individual Consultant** will be selected under the **Quality Cost Based Selection (QCBS)** procedures described in the AU Procurement Manual available on <u>https://au.int/en/bids</u>. The pass mark shall be 70%.

3. The deadline for submission of EOIs is 27th September 2019 at 1500hrs. Late submissions will be rejected.

4. Bidders may request for clarifications no less than 7 days from the deadline for submission, from **The Chairperson, Internal Procurement Committee, African Union Commission, Telephone number** (+251) 11 5517700, Ext 4341,

Email: tender@africa-union.org with a copy to fodays@africa-union.rg

- 5. For evaluation of the expressions of interest the following criteria will be applied:
- a) General Education Qualification and Relevant Training (20 points);
- b) Experience Related to the Assignment (25 points);
- c) Technical approach and methodology (40 points)
- d) Work plan (10 points)
- e) Language (5 points)

Interested candidates are requested to submit the following documents for AUC's consideration:

a) Technical Proposal not exceeding 8 pages on:

- I. understanding and interpretation of the TOR
- II. methodology to be used in undertaking the assignment
- III. time and activity schedule

b) Financial proposal not exceeding 1 page

- I. Consultant's daily rate in US\$
- II. Other costs e.g. travel
- III. Total cost
- c) Personal Capacity Statement

I. Relevant experience related to the assignment (include samples of two most recent similar works and/or references for the same)

- II. Contacts of at least 3 organizations previously worked for
- III. Curriculum Vitae of the Consultant (s)

6. The address for deposit of bids is: The Chairperson, Internal Procurement Commission, African Union Commission, Building C, 3rd floor, TENDER BOX, Roosevelt Street, P. O. Box 3243, Addis Ababa, Ethiopia or tender@africa-union.org

Yours sincerely,

Head, Procurement, Travel and Stores Division

Terms of Reference for Bioenergy Development Strategy and Investment Plan for Southern Africa Region

1 BACKGROUND AND INTRODUCTION

Despite efforts at providing universal access to electricity by many African countries, the use of biomass as a primary source of energy is not subsiding. Indeed, according to the latest International Energy Agency (IEA) statistics, the use of biomass is increasing even though electrification is progressively increasing. Only North Africa and South Africa have little use of biomass energy. In other regions, the use of biomass surpasses the use of electricity. This suggests that even when households have access to electricity, the use of biomass does not stop. On average, access to electricity in Africa is 52 per cent, while 71 per cent of the population still uses biomass energy, in the form of firewood and charcoal, as the primary energy source for cooking and heating.

The negative impacts of traditional biomass use are well documented by the World Health Organisation (WHO), especially its impact on women and children. However, this sector can be modernized and play a significant role in improving access to modern energy in Africa, including clean cooking fuels and technologies, income generation, economic development, etc. Continuing the current consumption of biomass can reverse development gains and can lead to increased poverty, exacerbate climate change, threaten food security and lead to increased mortality caused by respiratory diseases.

There have been major world developments in the field of modern bioenergy, especially clean cooking technologies. However, on the whole, Africa is yet to properly harness this source of energy for its development purposes. There already exists good regulatory frameworks that manage negative impacts of bioenergy in the world. Again, this is not sufficiently done in Africa owing in part to the complex nature of biomass. This sector cuts across many ministries (agriculture, environment, energy, health, etc.). It is worth noting that almost all Regional Economic Communities (RECs) in Africa have targets for renewable energy, including bioenergy, but these will not likely be met because less focus is put on modernizing the biomass sector.

It is against this background that the African Union Commission (AUC) in partnership with the UN Economic Commission for Africa (ECA) and the African Union Development Agency (AUDA-NEPAD) initiated a programme to modernize the bioenergy sector in Africa, through a consultative process spanning several years and involving a cross section of stakeholders and African Union Member States. This culminated in the development of the *African Bioenergy Framework and Policy Guidelines*, adopted by the AU Assembly in 2013. The purpose of the Framework is to (a) inspire and provide guidance to AU Member States and regions in developing bioenergy policies and regulations; and (b) enhance awareness among African policymakers and the civil society on the need for more environmentally friendly and socially acceptable bioenergy development policies.

There were a number of outputs generated by the Bioenergy programme since 2011. These outputs have been systematically implemented to build capacity and exchange experiences on some of the best practices on the African continent. Since its inception, the programme has developed studies with the aim of supporting the African Countries to implement policy and regulatory framework for bioenergy that support modernization of the bioenergy sector. The studies conducted under this programme are:

- 1. Africa Bioenergy Policy Framework and Guidelines;
- 2. Seven case studies on Regulatory Reforms for Adoption of Biofuel Programmes in Cameroun, Ethiopia, Kenya, Mali, Mauritius, Rwanda and South Africa;
- 3. Mainstreaming Gender in Bioenergy Development & Localisation of Clean and Renewable Energy Technologies in Africa.

While the bioenergy programme has achieved several important milestones, there are notable drawbacks that could influence its impacts at the national and regional levels. Against this background, building upon the achievements and lessons learnt from implementing the programme, the AUC in partnership with ECA and AUDA-NEPAD plan to develop Bioenergy Development Strategies and Investment Plans with associated action plans for each region of Africa (Northern, Western, Central, Eastern and Southern). These bioenergy development strategies and investment plans are expected to lead to the deployment of sustainable regional bioenergy projects that will accelerate the adoption of modern bioenergy technologies, practices that will have positive impacts on modern energy access, local industrial development, job creation and general improvement of local livelihoods and rural economic development.

By providing region specific strategies and investment plans, the ultimate expected accomplishments are to:

a) integrate bioenergy development into policy development and that AU Member States and regions put priority in modernizing the bioenergy energy sector;

- b) build capacity across African stakeholders, particularly policy makers, civil society, local private sector, academia and community-based organizations; and
- c) stimulate investments in the bioenergy sector by focusing on the specific priority areas relevant to each region.

2 OBJECTIVE OF THE ASSIGNMENT

The objective of this assignment is to develop Bioenergy Development Strategy and Investment Plan for Southern African Region based on the Africa Bioenergy Policy Framework and Guidelines and previous studies done under the programme as well as international, continental and regional best practices. Furthermore, the Bioenergy Development and Investment Strategy shall include Action Plans for required interventions to harmonize sustainable bioenergy development at regional level. It is also important to prioritize specific types of bioenergy resources relevant to the region.

3 THE SCOPE OF WORK

The assignment covers the Southern Africa Region which comprises the following fifteen (15) AU Member States: Angola, Botswana, Comoros, Democratic Republic of Congo (DRC), Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Zambia and Zimbabwe

A lot of work has been done in the region, mainly by regional and national institutions to advance modern renewable energy agenda. However, it is observed that such efforts tend to focus more on other renewable options such as solar, hydro, wind and geothermal, and less on the bioenergy sector, on which the majority of African households rely. It is, therefore, expected that the consultant will take into consideration what exists in the region in terms of data availability and their quality, bioenergy value-chain, bioenergy market, private sector participation, available skills, linkages with existing programmes (such as improved cookstoves, biogas and biofuel programmes), financing tools and mechanisms, bioenergy innovations, gender mainstreaming and bioenergy for productive use, the role of bioenergy in national energy plans, the important regional and international players.

Drawing on lessons learned from the implementation of the continental framework and policy guidelines, the consultant shall develop a Bioenergy Development Strategy and Investment Plan for Southern Africa region with associated action plans. In consultation with the relevant stakeholders including Regional Economic Communities, the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE), and bioenergy

developers in the region, among others, the consultant will make specific strategies on the bioenergy resources most prevalent in the region.

1. Analyse the region's and national existing and planned strategies and their robustness in delivering a viable modern bioenergy economy with a view to strengthen them. The analysis shall include, but not limited to:

a) Overview of the bioenergy industry:

- Bioenergy resources (liquid, solid and gaseous) and their availability in the region
- Various applications of bioenergy in the region
- Linkages of bioenergy to other sectors of national economy
- Desired infrastructure and investment environment for bioenergy development
- Relationship between food, biofuels and ecosystem
- Barriers to the uptake of bioenergy

b) Enabling policies and regulations:

- Existing bioenergy policy and regulatory, and institutional framework
- Bioenergy development strategies/plans and their implementation status
- Stakeholders analysis public, private, bioenergy business associations, civil society, community based organisations etc
- Available opportunities and structures for Innovation, training and skills development
- Availability of relevant bioenergy standards and enforcement mechanisms

c) Bioenergy markets and project development:

- Overview of bioenergy markets
- Business model for various feedstock
- Commercialization of bioenergy technologies
- Tools for mobilizing appropriate feedstock for biofuel production
- The development of appropriate feedstock supply chain
- Role of public sectors to enable the private sector
- Financing bioenergy projects

Terms of Reference: Bioenergy Development Strategy and Investment Plan

- Design the Bioenergy Development Strategy and Investment Plan and its action plan. The consultant shall explore issues pertaining to bioenergy situation in the region, including, but not limited to:
 - a) Addressing poor information among stakeholders on bioenergy industry including existing opportunities, programmes, markets, technologies (such as improved cookstoves, efficient conversion platforms and use), and potentials of biofuels as a viable energy source. This would mainstream biofuels as one of the key and sustainable energy sources for households and transport sectors, as well as bedrock for rural development. This will also help to mitigate against climate change factors and job creation for the young people.
 - b) Building partnerships to address the lack of awareness on high impact programmes as well as poor communication amongst stakeholders. In addition to the development of tailor-made communication packages, this intervention will lead to enhanced capacities through knowledge-sharing, financing and improved delivery of bioenergy programmes as well as improve communication between researchers, local communities and policy makers.
 - c) Creating enabling environment to address weaknesses in establishing a wellfunctioning and modern bioenergy industry, such as weak policies, low levels of Research and Development (R&D), low levels of biofuels development and the absence of improved and localized cooking technologies. This will, among others, enhance the development of robust policies that support localized solutions, enhance incentives and integrate biofuels into the wider energy economy.
 - d) Developing necessary policies, strategy, incentives and action plans to address inadequate enforcement and poor attitudes towards modern biofuels development, which will lead to the design of viable and effective regulatory frameworks, as well as a greater awareness by all stakeholders.
 - e) Developing adequate regional funding and investments in the bioenergy sector to address mainly the lack of support for innovative R&D, inadequate feedstock production by small-scale farmers, low levels of biofuels market development and the lack of support for localized cooking technologies. Addressing these issues will lead to enabling frameworks that support and enhance innovative financing for local players and dedicated funding for R&D, while also enhancing the capacity of private projects developers to design viable and bankable projects.
 - f) Enhancing knowledge generation in the bioenergy sector at all levels to address limited technical capacity at the local level, lack of capacity to manage the bioenergy sector, and limited technical know-how of feedstock development.

Addressing these issues will boost inclusive growth and improve local solutions and knowledge.

g) Promoting increased private sector participation (PSP) in the bioenergy sector to address the lack of capacity to develop bankable projects, lack of enabling environment for PSP, technical skills deficiency in bioenergy development and the lack of awareness by financial institutions on the benefits of bioenergy. Addressing these barriers will lead to improved investments from financial institutions to project development, enhanced investor confidence, increased local participation, and effective implementation of bioenergy projects and programmes.

4 DELIVERABLES

The consultant shall submit the following deliverables:

- 1. Inception Report describing the work programme and methodology
- 2. Draft full report of Bioenergy Development Strategy and Investment Plan for review by the AUC and the region's main stakeholders
- 3. Present the Strategy and Investment Plan in a validation workshop to be organised by the AUC
- 4. Final Report incorporating inputs from the validation workshop

5 CONSULTANCY'S COMPETENCIES DELIVERABLES AND REMUNERATION

The consultant that is envisioned to undertake this assignment has to have proven track record in carrying similar types of work and should provide references that are not older than three (3) years. The following competencies and experience are required:

- Masters qualification or higher in related disciplines such as engineering, energy economics and related sciences;
- More than 10 years of strategy development in similar areas of work;
- Excellent analytical and reporting skills;
- Publication record

The AUC is an equal opportunities institution, and gender equity will be strived at in the selection of the suitable consultancy.

6 DURATION AND SCHEDULING OF THE ASSIGNMENT

The assignment is estimated to take not more than 60 workdays. The consultant shall submit detailed plan of carrying out the assignment

The remuneration will be paid according to the following milestones:

- 25% on submission of the inception report
- 50% on submission of the draft report and presentation at the Stakeholders Validation Workshop
- 25% on submission of acceptable final report incorporating input from the Stakeholders Validation Workshop