

Section 3
TERMS OF REFERENCE (TOR)

**PROMOTION OF NATIONAL RENEWABLE ENERGY POLICIES AND
INCENTIVE SCHEMES IN THE ECOWAS MEMBER COUNTRIES**

I. Background

The International Renewable Energy Agency (IRENA) is an inter-governmental organisation, mandated by member states around the world to promote the widespread and increased adoption, and sustainable use of all forms of renewable energy. This concerns all forms of energy produced from renewable sources in a sustainable manner, which include bioenergy, geothermal energy, hydropower, ocean, solar, and wind energy.

The 15 Member countries of the Economic Community of West African States (ECOWAS) are determined to take measures towards providing their populations with reliable, affordable, and clean energy services that are needed to enhance the livelihood and to fuel economic activity. Renewable energy (RE) as a means to supply such services is coming to the fore and ten countries have committed to medium and long term targets.

In October 2012, more than 300 key stakeholders from the West African energy sector including the ECOWAS ministers convened at the High Level Energy Forum on the theme “Paving the Way for Sustainable Energy for All in West Africa through Renewable Energy and Energy Efficiency” in Accra, Ghana. During a ministerial session, resolutions on renewable energy and energy efficiency were discussed and adopted, focusing e.g. on the ECOWAS Policy on Renewable Energy¹.

The goal to ensure universal access to modern energy services to which IRENA is committed to contribute, requires governments to create conditions that allow effective contribution from the private sector.

IRENA’s Country Support and Partnerships (CSP) Directorate supports countries in the development and implementation of national and regional renewable energy strategies and supports key capacity-building efforts using effective needs assessment processes. It also aims to assist countries to create the environment in which the crucial skills and capacities can be developed through supporting regional capacity building initiatives.

In this regard IRENA and the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) have jointly developed the “Promoting a Sustainable Market for Photovoltaic (PV) Systems in the ECOWAS Region” (ProSPER) initiative². This assignment is part of the ProSPER initiative.

¹ For further background information refer to the ECOWAS Renewable Energy Policy (EREP), which can be downloaded from the ECREEE website: <http://ecreee.vs120081.hk-users.com/website/download.php?f=06eb808975766495a5dc8d93941902fb>

² A brochure on the ProSPER initiative is available on the URL: <http://www.irena.org/DocumentDownloads/factsheet/PROSPER%20factsheet.pdf>.

This initiative will promote the development, adoption and implementation of national RE policies, enhance the understanding of incentive schemes, and support the development of standardised procedures through training of three key stakeholder groups, namely policy makers from ministries and specialised government agencies, regulators, and utilities. The expected impact of IRENA's engagement is an increase in the number of countries with RE targets, RE promotion policy and regulatory frameworks and incentive schemes and strengthened implementation capacities.

While the region is endowed with abundant RE resource potentials, their uptake in the ECOWAS countries is currently still hampered by a variety of barriers, both technical and non-technical.

The institutional, legal and regulatory framework for RE deployment is still largely missing or weakly implemented in the region. Renewable energies are still not widely considered an option in national energy plans, connection rules and regulations and incentive schemes need to be improved to subsequently lead to increased deployment. Furthermore, major investments have to be made, but capital is neither available nor accessible, and investments in renewable power projects have had a predominant share of Official Development Assistance funding in the past.

a. Energy Challenges in the ECOWAS region

A severe energy crisis hampers the social and economic development of the ECOWAS member countries. The countries are facing the interrelated challenges of energy access, energy security and climate change mitigation simultaneously. The lack of access to modern, affordable and reliable clean energy and environmental friendly services is interrelated with a variety of economic, social, environmental and political challenges in West Africa.

All member countries of the region have committed themselves to the achievement of the United Nations Millennium Development Goals (MDGs) which feature quantified targets to reduce poverty. Although none of the MDGs is specifically directed towards energy, it is nevertheless widely understood that access to modern and clean energy services is a precondition for human and economic development.

Energy poverty and its consequences will continue to be a predominant challenge in the region in 2030 without considerable additional investments. West Africa has one of the lowest modern energy consumption rates in the world. The poor population in West Africa spends more of their income on poor quality energy services than the better-off on better quality services. Also, there are wide gaps between energy access rates in urban areas and rural ones.

The energy sector will be highly impacted by mitigation and adaptation costs of climate change in the forthcoming decades. Climate change risks and the need for reliable and affordable energy supply to ensure energy security and energy access create a dilemma. On the one hand, urgent investments are required while on the other, the expansion of energy supply based on inefficient low-cost fossil fuel combustion technologies will increase greenhouse gas emissions and interrelated negative climate change impacts which harm sub-Saharan Africa most.

Most ECOWAS member countries are reforming their electricity sector opening up for Independent Power Producers (IPPs), which can make a significant contribution in shifting the focus from fossil fuel based power generation and grid extension towards decentralised renewable power generation; but still much remains to be done to create the practical conditions in which a growing number of IPPs can produce on-grid and off-grid electricity from RE resources. The development and implementation of favourable regulatory frameworks, development or adaptation of business models, etc. are therefore imperative.

b. Institutional, policy and regulatory framework in the ECOWAS region

The ECOWAS RE Policy was adopted in October 2012 with a vision “to secure an increasing and comprehensive share of the member states’ energy supplies and services from timely, reliable, sufficient, least cost and affordable uses of renewable energy sources enabling:

- Enabling universal access to electricity by 2030
- RE share in total ECOWAS generation capacity (excl. large hydro) of 10% (about 2.425 MW) by 2020 and of 19% (about 7.606 MW) by 2030
- Rural population supplied by mini-grids and stand-alone systems: 22% by 2020 and 25% by 2030
- A more sustainable and safe provision of domestic energy services for cooking achieving the objectives of the White Paper for access to modern energy services by 2020”

The next steps in the region, after the adoption by the ECOWAS Energy Ministers of the Regional RE Policy is to assist the member states to further develop their national policies and regulatory frameworks to meet the regional targets. It is expected that all ECOWAS countries will have National Renewable Energy Action Plans (NREAPS) by the end of 2014 as a tool to guide the deployment of RE projects and investments.

Renewable energy development still follows an ad hoc path, with little alignment to regional and national energy plans. Coherent, consistent and conducive institutional, policy and regulatory as well as fiscal frameworks are central to the successful dissemination of RE in the region

At national level, some ECOWAS Member countries have already adopted RE promotion policies and committed themselves towards binding targets. A case in point is Cape Verde which in 2011 approved an RE law and a target of 50% renewable energies by 2020. In 2012, Ghana passed a RE bill and a feed-in-tariff mechanism is under development, and established a target of 10% renewable energies by 2015. Senegal approved an RE law in 2010 and different decrees are under development and has a target of 15% by 2020. Nigeria approved RE Feed-in-Tariff in July 2012.

ECOWAS countries can be categorised in terms of advancement in RE policy development. Cape Verde, Côte d’Ivoire, Gambia, Ghana, Liberia, Mali, Nigeria and Senegal have advanced well in RE policy development while countries that include Benin, Burkina Faso, Guinea Bissau, Guinea, Niger, Sierra Leone and Togo are still to develop theirs.

Although, most of the Member countries are increasingly including RE as an option in their national energy strategies and policies a better understanding of the appropriate promotion mechanisms for the region and individual countries is, however needed, both, for grid connection of medium and large scale RE power plants and for smaller scale village or household level systems.

New and more targeted policy and regulatory frameworks are needed to support the creation of market conditions favourable for the provision of modern energy services such as, for example, electricity generated through PV systems. To create these conditions, the various actors that include governments, specialised government agencies, regulators, utilities and IPPs need to understand the correlations of policies and regulations, available and appropriate technologies, required financing and business models and any further factors that affect the effective and efficient provision of modern energy services. Governments, in interaction with the relevant stakeholders, must develop and implement policies and plans to overcome political, institutional and legal barriers and address needs of public and private power producers when transforming the electricity sector.

II. Objectives and scope of the work

The main objectives of this work package are:

- Reinforcing the capacities among ECOWAS member states on policies, regulatory frameworks and incentive schemes to promote renewable energies at the national level.
- Support the development and implementation of an appropriate deployment strategy for RE technologies with emphasis on PV technologies at national level to enhance access to electricity for rural and peri-urban populations of the region and to mitigate shortfalls or disruptions in electricity supply through promotion of PV electricity generation from residential, commercial and industrial consumers.

Active participation and support of national and regional key stakeholders will be pursued to achieve the above objectives.

In particular, activities and actions strive to:

- Enhance understanding of policy makers on the economic, social and environmental benefits of renewable energies.
- Showcase viability of RE technologies and in particular of PV systems to policy makers, regulators and utilities.
- Provide an overview on available policies and regulatory mechanisms to promote on- and off-grid electricity generation through PV systems including implications on public budgets to policy makers, regulators and utilities.
- Provide information on the successful and less successful RE policy and regulatory frameworks in Cape Verde, Ghana, Senegal and others in the region
- Increase the understanding of regulators in the determination of viable electricity tariffs for PV projects, and for the significance of stable tariffs to increase access in rural areas and address power deficit in the national grid.
- Increase the understanding of utilities on the contribution of IPPs in reducing shortfalls and disruptions in electricity supply through PV power plants and development of standardised Power Purchase Agreements (PPAs).
- Build an understanding of the market power in the public sector and promote public procurement as a tool to support market introduction of RE technologies, contribute to the modernisation of the economy, create sustainable markets and jobs, and to provide best practices.

III. Description of the work

The project aims to raise the level of awareness and understanding of policy makers on instruments and mechanisms to strengthen RE development and investments. By technical assistance, the consulting firm is expected work with RE policy makers, regulators and utilities.

Required is a consulting firm with specific skills, knowledge and expertise to develop training workshops for policy makers, regulators and utilities. The firm will work closely with the responsible Programme Officer at the IRENA Secretariat and ECREEE and within the framework of these Terms of Reference.

The consulting firm's duties and responsibilities include the preparation of **two (2)** training workshops, development of a network for exchange of policy implementation practices and to raise awareness and understanding of policy makers, regulators and utilities for the favourable frameworks and requirements to increase market participation of IPPs.

It is expected within this project to increase the number of countries designing, adopting and implementing RE targets, especially PV, promotion policies and regulatory frameworks and incentive schemes.

The consulting firm should develop an appropriate methodology and specific work plan in order to achieve the assignment's objectives which are to be accomplished **within 4 months**.

The project will focus on **two (2) tasks**:

Task 1: Training workshops for policy makers, regulators and utilities in less advanced countries

The primary objective of the workshops is to strengthen the capacities of policy makers, regulators and utilities on policies, incentive schemes and business models needed to promote renewable energies and private sector participation at the country level.

For the preparation of the contents of the workshops, the consulting firm should analyse existing successful and less successful experiences from the ECOWAS member countries as well as from the international field in order to be used for the development of a better approach to the project.

As described above, at national level, some ECOWAS countries have already committed to RE targets and adopted RE policies. Specific focus under this task is on countries with less advanced policy and regulatory frameworks to provide them with information that will assist them in designing such instruments that will enable them to accelerate deployment of RE and bring in IPPs. It is expected that all **seven (7)** countries will be present at the training either through their policy makers, regulators and national/public utilities and delegates from IRENA, ECREEE, ERERA and WAPP. Participants would be directors, senior executives, system planners, or related portfolios.

The consulting firm will develop training materials which include an overview of the measures to overcome legislative, regulatory and administrative barriers in ECOWAS countries, particularly those related with implementation of different policy and regulatory instruments such as feed-in-tariffs, tendering and net-metering. The measures should include and detail those adopted by other countries in the region. The consultant will **develop and deliver a 5 day workshop** in both English and French languages for policy makers, regulators and utilities which will include at least the following contents:

1. Types of RE Support Mechanisms.
 - a. RE policy and regulatory support tools and their design.
 - b. Financing tools to make the mechanisms effective.
2. Renewable Energy National Planning and Policy.
 - a. Challenges for RE policy and planning at the country level.
3. Market regulation and tariffs.
 - b. Overview of market regulation at the national level.
 - c. Overview of national and regional regulation in ECOWAS countries.

4. Guide on how to assess the best RE policy for an ECOWAS country (the guide will be used to conduct practical exercises).
5. Private sector regulation in the energy sector in the ECOWAS region.
6. Case studies of National RE policies and regulatory frameworks in the ECOWAS region.
7. Practical session, in small groups on the assessment of the most appropriate RE incentive schemes and implementation frameworks for national policies. Outcome: recommendations and guidelines per country.

The consulting firm will be responsible for the identification of the speakers/facilitators and for providing support to the logistics for the workshop (e.g. drafting of invitation letters, proposal for dates and venues etc.). IRENA and ECREEE will be responsible for the selection and invitation of the speakers and participants for the workshop including the associated costs (rental of venue, travel costs and daily subsistence allowances of participants). The consulting firm will be responsible for compiling the workshop documentation, including summary and conclusions.

Task 2: Training workshops for policy makers, regulators and utilities in advanced countries

In order to increase the understanding of the role that IPPs can play in mitigating shortfalls and disruptions in electricity supply as well as in rural electrification, the consulting firm should prepare and organise a training workshop in both English and French languages for policy makers, regulators and utilities in advanced countries. This training will also help power sector role players to identify elements for review of their RE policies to increase deployment of PV in the electricity markets.

As described above, at national level, some ECOWAS countries have already committed to RE targets and adopted RE policies. Specific attention will be paid to policy implementation to address the harmonization between Regional RE Policy targets set and national promotion policies adopted, and actual deployment as well as to provide concrete assistance during the implementation.

The consulting firm will **develop** and **deliver** training materials which include the know-how to design and implement measures to overcome legislative, regulatory and administrative barriers, particularly those related with implementation of different policy and regulatory instruments such as feed-in-tariffs, tendering and net-metering. Focus will be on specific barriers such as PPAs, connection agreements and contracts, etc. currently faced by IPPs. It is expected that all **eight (8)** countries will be present at the training either through their policy makers, regulators and national/public utilities and delegates from IRENA, ECREEE, ERERA and WAPP. Participants would be directors, senior executives, system planners, or related portfolios.

In order to achieve the objectives of the project, components like skills transfer and capacity building play a decisive role.

The implementation of training session will be through the execution of a dynamic workshop with **5 days** duration depending on the curriculum, in which it will be necessary to highlight the following aspects including their best practices:

1. Regional RE Policy and design of national strategies and accords through specific policy and regulatory instruments.
2. Legal and regulatory frameworks.

3. RE penetration in national grid. Grid stability and dispatching – grid conditions (case studies) – Impacts of increased renewable energy penetration and management of its integration.
4. Standard PPAs and the structuring of IPP projects, including
 - a. Different models including public private partnerships,
 - b. Project financing and risk management,
 - c. PPA negotiations with private investors, e.g. land ownership, environmental and social issues.
5. Drafting of PPAs for sample countries as practical exercise
6. Rural electrification assessment
 - a. Options for rural electrification, e.g. grid extension/ densification, isolated micro-grids, stand-alone systems (policy examples from Burkina Faso, Ghana, Mali and Senegal)
 - b. Cost and financial analysis of RE micro-grids options for policy makers

The consulting firm will be responsible for the identification of the speakers and for providing support to the logistics for the workshop (e.g. drafting of invitation letters, proposal for dates and venues etc.). IRENA and ECREEE will be responsible for the selection and invitation of the speakers and participants for the workshop including the associated costs (rental of venue, travel costs and daily subsistence allowances of participants). The consulting firm will be responsible for compiling the workshop documentation, including summary and conclusions.

Follow up of the workshops

It is required that the consultant firm designs a follow-up programme to assess the workshops once they are concluded. It is necessary to define:

- Scope of the consultancy work and methodology for the follow up;
- Support methods: on line forums, on site, by email, etc.;
- Estimated duration of the follow up program;
- Final conclusions: along with IRENA and all the institutions and stakeholders involved in the workshops the results will be evaluated;

It is expected that the training workshops will produce the following practical results:

- The participants will learn all the range of possible policy and incentive schemes to promote RE at the national level.
- The participants will identify and apply the most suitable mechanism to promote RE from the public national level in their countries.
- The participants will understand the peculiarities of RE power plants in the national electrical system
- Strengthening of cross-country networking of policy makers on RE policy issues, incentive schemes and implementation.

IV. Consultant Qualifications

- Trainings on technical, legal, political and economic renewable energy aspects specifying in PV projects, as well as about project management issues.
- Fluency English and French, both written and spoken.
- Knowledge and experience in Sub-Saharan Africa, if possible in West Africa
- Ability to meet deadlines.
- Wide range of methodologies for workshops implementation, face-to-face trainings, group work, follow up advice consulting.

V. Criteria for evaluation of offers

In order to assess best value for money the technical qualitative evaluation of the bids will be based on:

Criteria	Weighting (%)
<p>1. Proposed work plan and approach: Understanding of the task;</p> <p>(a) Sufficient addressing of the important aspects of the task according to the different components of the project, i.e. development of material and methodology of delivery of the training;</p> <p>(b) Relating the scope of work to the Terms of Reference - clarity and organization of activities and whether the planning is logical and realistic³.</p>	30
<p>2. RE Policy development: Relevant and documented experiences in RE policy development (technical, legal, political and financial aspects), particularly for grid connected and rural areas – Provide details of projects related to RE policy development undertaken over the last 3-5 years.</p>	20
<p>3. Curriculum development, RE training and capacity building: Relevant knowledge and documented experiences in RE curriculum development, training and capacity building in policy makers, regulators and utilities – provide samples of similar work done in field over the last 3-5 years.</p>	15
<p>4. Team quality: Composition, qualifications and experiences of team and knowledge of the region– Provide CVs of at least 4 experts, whom you propose to;</p>	25

³ Taking into account that participants are both French and English language speaking, the training material and their presentation thereof will be in both languages.

