



*ECOWAS Regional Centre for
Renewable Energy and Energy Efficiency*

*Centre Régional pour les Energies Renouvelables
et l'Efficacité Energétique de la CEDEAO*

*Centro Regional para Energias Renováveis e
Eficiência Energética da CEDEAO*



International Renewable Energy Agency

Promoting a Sustainable Market for PV Systems in the ECOWAS Region (ProSPER)

A capacity building joint initiative of IRENA and ECREEE



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Background

1. Major challenges for the region:

Low rates of access to electricity impacting human and economic development;
National budgets impacted by heavy reliance on energy imports and oil price fluctuations.

2. Regional and national commitments:

Commitment to the MDGs geared towards reducing poverty;
Regional policy to increase energy access (White Paper and RE Policy under elaboration);
Ouagadougou Declaration to establish ECREEE;
Some countries with RE Policy adopted.

3. Common goals of IRENA and ECREEE's vision and mission:

Accelerate the deployment of renewable energy;
Capacity Building.

4. IRENA's engagement with Africa and the region:

IRENA-Africa High Level Consultative Forum, Abu Dhabi, July 2011;
Pilot Renewable Readiness Assessment, Dakar, November 2011;
Capacity Building Expert Meeting, Abu Dhabi, January 2012;
RRA roll out. Accra, September 2012.



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IRENA

International Renewable Energy Agency

WP Title	Promotion of national renewable energy policies and incentive schemes in the ECOWAS Member countries
Lead partner	ECREEE
Partners	IRENA; Others as relevant and interested
Target group	Policy makers (ministries of energy and finance), representatives of regulators and electricity utilities of the ECOWAS Member countries; Staff of the ECOWAS Commission;
Start	September 2012
Duration	18 months
Objectives	<p>The main objectives of this work package are:</p> <ul style="list-style-type: none"> - Reinforcing the capacities among ECOWAS member states concerning policies to promote renewable energies at the national level; - Support the development and implementation of an appropriate deployment strategy for renewable energy technologies with emphasis on PV technologies 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 of residential, commercial and industrial consumers.



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IRENA

International Renewable Energy Agency

WP Title	Promotion of national renewable energy policies and incentive schemes in the ECOWAS Member countries
Description of work	<p>Task 1: Workshop for policy makers to enhance the understanding for the socio-economic benefits of renewable energies, and promote decentralised electricity generation through renewable energy systems which includes setting incentives for market participation of IPPs. Best practices and lessons learned in renewable energy policy design, types of incentives, planning tools, and case studies (i.e. on net metering).</p> <p>Task 2: Training for utilities and regulators to increase the understanding for the role IPPs can play in mitigation of shortfalls and disruptions in electricity supply and their benefits for providing urban and rural communities with electricity. Training on designing and implementation measures to overcome legislative, regulatory and administrative barriers, particularly related with connections and contracts, currently faced by IPPs.</p> <p>Task 3: Netmetering promotion throughout the region</p> <p>Task 4: Support the development of a regional renewable energy policy</p>



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IRENA

International Renewable Energy Agency

WP Title	Increase lending for PV projects
Lead partner	ECREEE
Partners	<p><u>IRENA</u></p> <p><i>African Development Bank (AfDB) and Climate Investment Funds (CIF): dissemination of business models and experiences from SREP;</i></p> <p>Others as relevant and interested</p>
Target group	<p>Branch managers of financial institutions;</p> <p>Investment Promotion Agencies;</p> <p>Private sector associations.</p>
Start	November 2012
Duration	12 months
Objectives	<p>The main objective of this work package is:</p> <ul style="list-style-type: none"> - Increasing the confidence of lending institutions (commercial banks, microfinance institutions and other credit grantors) into renewable energy technologies, specifically PV systems to increase lending to PV projects (on- and off-grid) in the region



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IRENA

International Renewable Energy Agency

WP Title	Increase lending for PV projects
Description of work	Task 1: Training for lending institutions (commercial banks, microfinance institutions, other credit grantors) to raise awareness for the benefits of renewable energies investment projects Task 2: Development of template for standardised loan requests for renewable energy, and particularly PV products (standardised business cases) and support (educational) materials



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IRENA

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WP Title	Promotion of renewable energy entrepreneurship
Lead partner	IRENA
Partners	<p>ECREEE;</p> <p>Local education and training or research institutions as CNES, CNESOLER, CERER, 2iE, University de Cocody, INITA, KNUST, Renewable Energy Centre Ghana etc.</p> <p>International providers of training and expertise, incl. required equipment;</p> <p>Local business and/ or industry associations (i.e. solar energy industry associations of Burkina Faso, Ghana and Mali).</p>
Target group	<p>Local trainers dispatched by national education and training or research institutions from the region;</p> <p>Renewable energy entrepreneurs.</p>
Start	September 2012
Duration	24 months
Objectives	<p>The main objective of this work package is:</p> <ul style="list-style-type: none"> - To enable renewable energy entrepreneurs to assess business potentials, develop viable business plans, and loan requests, and to successfully implement on- and off-grid PV projects; - To enable renewable energy entrepreneurs to design, install, operate and maintain/ trouble-shoot PV systems.



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IRENA

International Renewable Energy Agency

WP Title	Promotion of renewable energy entrepreneurship
Description of work	<p>Task 1: Trainings for renewable energy entrepreneurs to enhance the understanding for the benefits of renewable energies. Increase knowledge of and understanding for renewable energy technologies, specifically PV technology, and for business models applicable in PV projects. Enhance technical and business skills needed to evaluate business potentials of PV projects, develop business plans and requests for loans, and implement the project successfully. Strengthen the capabilities to design, install, operate and maintain/ trouble-shoot PV systems. The technical part of the workshop shall include hands-on components. Specific requirements for implementation of net metering projects will be discussed.</p> <p>Task 2: Involving industry and/ or business associations for provision of technological advice and business support to entrepreneurs to promote successful implementation of PV projects and for collaboration with training institutions.</p>



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IRENA

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WP Title	Establishment and update of renewable energy higher education
Lead partner	IRENA
Partners	IRELP partners
Target group	Universities already providing or with potential to provide study programmes and modules related to renewable energy and PV technologies, as i.e. KNUST, UCAD, 2iE, UNI-CV.
Start	February 2013
Duration	continuous
Objectives	<p>The main objective of this work package is:</p> <ul style="list-style-type: none"> - To enable higher education institutions in the ECOWAS region to establish and update renewable energy modules and study programmes.
Description of work	<p>Task 1: Inclusion of universities and professors in the forum under the IRENA Renewable Energy Learning Partnership, promoting and supporting through a network of international experts and academia the elaboration, update and adaptation of current RE curricula. Strengthening of scientific contacts to the international academia. Material development and identification of methods will be facilitated.</p>



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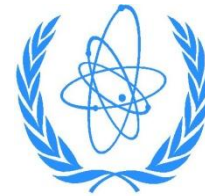
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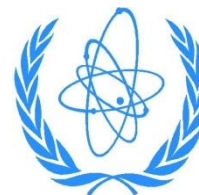
WP Title	Training workshop on energy planning
Lead partner	IRENA
Partners	ECREEE Various other international organizations working on energy planning in the region
Target group	Energy planners, researchers
Start	September 2012
Duration	3 months
Objectives	To make energy planners aware of available energy planning methodologies, in particular the West African Power Pool model that IRENA has developed, and to assist them in eventually adopting energy planning practices
Description of work	In 2011 IITC developed a West African Power Pool Model. The model computes cost minimizing configurations of an energy system to meet a given demand under a set of economic, technical, geo-political, social and environmental constraints. In 2012 ECREEE and IRENA will coordinate a workshop on energy planning to discuss the use of economic optimization models for policy making and collection of needed data.



"Energy Planning Support for the Elaboration of National Renewable Energy Action Plans for the ECOWAS Countries"

ECOWAS Policy Response to energy crisis in the region:

- In 2003 ECOWAS Energy Protocol envisaged the improvement of energy efficiency and increased use of RE sources.
- In 2006 the ECOWAS/UEMOA White Paper on access to energy services for populations in rural and peri-urban areas foresees that at least 20% of new investments in electricity generation should derive from locally available renewable resources.
- The West African Power Pool (WAPP) and its Master Plan, revised in 2011, aim at the creation of a regional electricity market by 2020/25. The expansion of electric generation capacity derives primarily from large hydro resources and the exploitation of WAGP.
- In 2010 the ECOWAS Energy Ministers with support of the Governments of Austria, Spain and technical assistance of the United Nations Industrial Development Organization (UNIDO) established ECREEE), the first regional renewable energy promotion agency in Sub Sahara Africa
- In 2012 the ECOWAS Commission elaborated the Regional Renewable Energy Policy and the Regional Energy Efficiency Policy coordinated by ECREEE with support of the Africa-EU Renewable Energy Cooperation Programme (RECP) and the ACP-EU Energy Facility of the European Union.

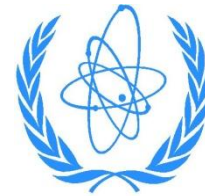


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ECOWAS RE Policy Targets by 2020/2030

Grid-Connected RE Targets	2020	2030
RE share in total ECOWAS generation capacity (incl. large hydro)	35%	48%
RE share in total ECOWAS generation capacity (excl. large hydro)	10% 2.425 MW	19% 7.606 MW

Rural Electricity and Cooking RE Targets	2020	2030
Rural population supplied by mini-grids and stand-alone systems	22%	25%
Mini-Grids to be installed	60,000 3,600 MW	128,000 7,680 MW



"Energy Planning Support for the Elaboration of National Renewable Energy Action Plans for the ECOWAS Countries"

Training on ECOWAS RE Planning Modeling Scenario

The workshop will produce the following results/outputs:

- The energy planning capacities of 35 key experts of ministries, energy agencies, utilities and ECREEE are strengthened and the usage of the MESSAGE tool will contribute to the development of the national renewable energy action plans and scenarios
- Baseline data and projections of the individual renewable energy country scenarios are verified
- The individual renewable energy scenarios will be compiled to a comprehensive publication and disseminated through the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX) and IRENA



Thank you! Merci! Muito Obrigado!

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