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MESSAGE FROM THE EXECUTIVE DIRECTOR



Dear Colleagues,

It is a pleasure to bring you this newsletter, our first for 2013, as it affords us a unique opportunity to take stock of the key events of 2012. This edition comes against the background of the ECOWAS High Level Energy Forum themed 'Paving the Way for Sustainable Energy for All in West Africa through Renewable Energy and Energy Efficiency', which was held from 29–31 October 2012 in Accra, Ghana. We are grateful for the support of the Governments of Ghana, Austria, Spain and France; the European Union (EU); the Global Forum for Sustainable Energy (GSFE); the United Nations Industrial Development Organization (UNIDO); the Global Environment Fund (GEF) and other partners for their support in the organization of the forum.

The forum brought together over 300 participants, including ministers of energy and environment, leaders of international organizations, diplomats and other high-level actors to facilitate the establishment of a regional implementation framework for the SE4ALL Initiative in the ECOWAS region. The main outcomes of the meeting included the adoption of the historic and ground-breaking regional policies on renewable energy and energy efficiency by ECOWAS Energy Ministers.

This edition of the newsletter is also published against the background of the UN General Assembly's historic resolution that declared the period 2014 to 2024 as the Decade for Sustainable Energy for All. The policies adopted

by ECOWAS demonstrate the region's strong political will to employ sustainable energy technologies towards the realization of our energy access objectives as well as the SE4ALL targets. Also, importantly, they provide clear regulatory frameworks that promote greater private sector participation and investment. The adoption of these regional policies is therefore a historical milestone in our journey towards universal access to sustainable energy services. It was therefore an honour for ECREEE to be nominated by the ECOWAS Energy Ministers to be the focal point for the implementation of the SE4ALL initiative in West Africa.

We are also pleased to witness the encouraging developments in the area of clean and sustainable energy sources. From Cape Verde to Senegal, Ghana and other Member States, we have seen that it is possible to chart a new course in our energy planning process. Today, we are at the threshold of significant developments in the renewable energy and energy efficiency sector. ECOWAS is now the second regional bloc, after the EU, to have such a comprehensive framework for sustainable energy. ECREEE has also proved to be a model for Southern and Eastern Africa. SADC and EAC have started the preparatory process to establish similar centres under the supervision of UNIDO. ECREEE will support this process and is honoured to be part of an emerging and vibrant network of sustainable energy promotion agencies in Africa.

Across the region, we are working hard to translate these policy visions into action. To achieve concrete measures on the ground however, it is important for the private sector and private capital to engage more robustly with the policy and regulatory frameworks we are putting in place. We are confident that the execution of these policies on regional and national levels will lay the foundation for making our energy systems far more sustainable and ensuring that we move rapidly from a carbon-based to a low-carbon economy. The knowledge and technologies required for this transformation are feasible and already with us. We must not only continue to encourage further innovation but also ensure that these technologies are available to developing countries, thus equipping them with useful tools that can be utilized to address their own developmental challenges.

We hope you find this edition both interesting and informative.

Thank you.

Mahama Kappiah
Executive Director, ECREEE

ECOWAS PLEDGES SUPPORT FOR SUSTAINABLE ENERGY FOR ALL IN WEST AFRICA

The ECOWAS Commission, through ECREEE, and in collaboration with the Government of Ghana, the Global Forum on Sustainable Energy (GFSE), the Global Environment Fund (GEF) and the United Nations Industrial Development Organisation (UNIDO) organised a high level energy forum in Accra, Ghana, from October 29 – 31, 2012, under the theme Towards Sustainable Energy for All in West Africa: Paving the way through Renewable Energy and Energy Efficiency. The event was organized under the auspices of the UN Sustainable Energy For All (SE4ALL) Initiative, which aims, by 2030, to: ensure universal access to modern energy services; double the share of renewable energy in the global energy mix; and double the global rate of improvement in energy efficiency.

The forum was formally declared opened by Mr. Emmanuel Amah Kofi Buah, Deputy Minister for Energy, Ghana. In his opening address, Mr. Buah noted that the issue of poverty in West Africa cannot be solved without the region achieving universal access to energy. In support of this statement, Dr. Kandeh Yumkella, Director General of UNIDO, and Chair of UN-Energy, commented that the forum presented an opportunity for the policy makers in the ECOWAS region to draw up concrete actions for



H.E. Kadré Désiré Quedraogo, President of the ECOWAS Commission

achieving sustainable energy for all. Ms. Irene Giner-Reichl, President of the GFSE, commended the ECOWAS Commission for its determination towards ending the energy crises in its region. She added that this determination has been recognized by other sub-regions in the continent- the Southern African Development Community (SADC) and the Eastern African Community (EAC) - and has encouraged them to do the same. Ms. Giner-Reichl urged the Ministers to continue in their effort to end energy poverty.

The forum brought together over 320 participants, including ECOWAS energy and environment ministers, lead-

ers of international organizations, diplomats, and other major players to facilitate the establishment of a regional implementation framework for the SE4ALL Initiative in the ECOWAS region.

The forum featured a meeting of ECOWAS Energy Ministers which adopted resolutions relating to the ECOWAS Policy on Renewable Energy, ECOWAS Policy on Energy Efficiency, ECOWAS Small Hydro Power Program, and the ECOWAS Bioenergy Strategy Framework.

The forum also witnessed the official launch of the ECOWAS Energy Efficiency initiatives on standards and labelling, lighting, electricity distribution and efficient cooking. The ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX), developed within the framework of the implementation of the GEF-UNIDO Strategic Program for West Africa (SPWA), was also launched at the event.

“ensure universal access to modern energy services; double the share of renewable energy in the global energy mix; and double the global rate of improvement in energy efficiency.”

ECOWAS OBSERVATORY FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY (ECOWREX)

The launch of the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX) at the High Level Forum, on the 31st of October, in Accra, Ghana, marked a giant step towards addressing the existing knowledge and information barriers hindering development in the energy sector in West Africa.

ECOWREX is a key project of ECREEE funded by the Global Environment Facility (GEF), aimed at providing decision makers, project developers, investors and other stakeholders with reliable and tailored information on the ener-

gy resources and systems in West Africa.

ECOWREX would act as a catalyst for development in the energy sector and serve to complement and/or facilitate the adoption and execution of national and regional policies, initiatives, programs and activities such as the ECOWAS/UEMOA White Paper on Access to Energy Services in peri-urban and rural areas, the ECOWAS Renewable Energy Policy, the ECOWAS Energy Efficiency Policy, Master Plan of the West African Power Pool (WAPP) and others. It will also act as an enabler to foster the adoption of interoperable services in Africa by con-

tributing to other initiatives and projects like the AfriGEOSS initiative, EnerGEO and others.



HIGH LEVEL FORUM IN PICTURES



ECOWAS ENERGY MINISTERS ADOPT REGIONAL POLICIES ON RENEWABLE ENERGY & ENERGY EFFICIENCY

The 11th Meeting of ECOWAS Energy Ministers held on 31st October 2012 on the occasion of the ECOWAS High Level Energy Forum which held from 29 – 31 October 2012. The meeting was convened by the ECOWAS Commission, in collaboration with The Government of the Republic of Ghana, and was chaired by the Honourable Oluniyi Robbin-Coker, Minister of Energy and Water Resources of the Republic of Sierra Leone.

The main objective of the meeting was to adopt a common action plan to implement the SE4ALL Initiative in the ECOWAS region, and to consider and adopt the recommendations of technical experts from Member States on the progress of various ECOWAS Energy Programmes particularly:

- The ECOWAS Energy Efficiency Policy;
- The ECOWAS Renewable Energy Policy;
- The ECOWAS Small-Scale Hydro Power Programme; and
- The ECOWAS Bio-energy Strategy.

The Meeting noted the persistent energy crisis in the region and its effects on the economic development of Member States, and expressed their commitment to the improvement of energy security and increased access to modern energy services through the promotion and use of renewable energy and energy efficient technologies in ECOWAS Member States. It also expressed satisfaction with current market trends which indicate a consistent price reduction for renewable energy technologies, making them more competitive and offering opportunities for the diversification of the ECOWAS region's energy sources.

There was therefore the need to enhance the enabling environment for increased access to energy services in the region. The Energy Ministers therefore adopted the regional policies and corresponding action plans on renewable energy and energy efficiency, noting that they would assist the region to exploit its significant renewable energy and energy efficiency potentials.

The ECOWAS Regional Renewable Energy Policy aims to ensure increased use of renewable energy sources such as solar, wind, small-scale hydro and bioenergy for grid electricity supply and for the provision of access to energy services in rural areas. The policy scenario will complement other



Cross section of participants at the meeting to adopt regional Policies targeting Energy Access and Energy Poverty

important conventional sources for power production (e.g. large hydro and natural gas). The policy primarily focuses on the electricity sector, but also considers some additional issues regarding the use of heat in the domestic energy sector and the potential production of biofuels. The specific objective of the renewable energy policy is to increase the share of renewable energy in the region's overall electricity mix to 10% in 2020 and 19% in 2030. Including large hydro the share would reach 35% in 2020 and 48% in 2030. Around 25% of the rural ECOWAS population will be served by mini-grids and stand alone systems by 2030.

The ECOWAS Energy Efficiency Policy aims to implement measures that free 2000 MW of power generation capacity and in the long term, more than double the annual improvement in energy efficiency, so as to attain levels comparable to those of world leaders. To this end, five priority regional flagship energy efficiency initiatives will be implemented:

- lighting – to phase out inefficient incandescent bulbs by 2020;
- electricity distribution – to reduce average losses in electricity distribution from the current level of 15 - 40% to the world standard level of 7%, by 2020;
- cooking – to achieve universal access to safe, clean, affordable, efficient and sustainable cooking for the entire population of ECOWAS by 2030;
- standards and labels – to establish and adopt initial region-wide standards and labels for major energy equipment by end 2014;
- finance – to create instruments for fi-

nancing sustainable energy, including carbon finance, by the end of 2013;

The meeting also highlighted the importance of hydro power in addressing the region's energy challenges and called on Member States to ensure the effective implementation of the ECOWAS Small-Scale Hydro Power Programme. It also noted that bioenergy is the single biggest source of energy in the region and stressed the need to ensure the sustainable exploitation and utilisation of the resource. Consequently, two resolutions on hydro power and bioenergy were equally adopted.

The Energy Ministers commended the visible leadership of the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in the promotion of sustainable energy solutions and urged ECREEE to play a leading role in the implementation of the SE4All Initiative in West Africa. They also welcomed the recent appointment of Dr. Kandeh Kolleh Yumkella, the Director-General of UNIDO and Chairman of UN Energy as Special Representative for the SE4All and CEO of the Initiative by the UN Secretary General. The Energy Ministers expressed optimism regarding future collaboration between ECOWAS and the Initiative. In a similar vein, the meeting also called on the UN General Assembly to declare a Decade for SE4All.

Dr. Yumkella, speaking at the event, commended the ECOWAS Commission for demonstrating unparalleled commitment to the deployment or renewable energy and energy efficiency in the region as seen by the establishment of ECREEE, a model which is about to be emulated by the Eastern African Community and the Southern African Development Community. The Special Representative highly welcomed the decision of the ECOWAS Energy Ministers mandating ECREEE to act as the focal institution for the implementation of the SE4All Initiative in West Africa. Dr. Yumkella and other high level members of the international community applauded the leadership of ECOWAS for the adoption of the ECOWAS policies on renewable energy and energy efficiency, noting that it demonstrates a strong regional political commitment to the achievement of sustainable energy for all by 2030. They pledged their support for the implementation of the newly-adopted policies and their corresponding action plans.

ECREEE, AND PARTNERS, ORGANIZES THE FIRST INTERNATIONAL OFF-GRID RENEWABLE ENERGY CONFERENCE (IOREC) IN ACCRA, GHANA

ECREEE in partnership with the International Renewable Energy Agency (IRENA) and the Alliance for Rural Electrification (ARE) conducted the first ever international conference on off-grid renewable energy, from 1- 2 November 2012, in Accra, Ghana.

The conference was attended by more than 350 participants from 80 countries, 30 of which were African countries. These participants were drawn particularly from ministries and agencies in charge of renewable energy development and rural electrification, the academia, regional and non-governmental organizations, development organizations and lending institutions.

The conference provided a platform for dialogue among stakeholders of rural electrification, with a special focus on the African continent. With speakers from 23 different countries, the conference provided an opportunity to exchange ideas, knowledge and experiences on conditions for successful rural electrification programmes. Discussions focused mainly on the policy, regulatory and financing conditions necessary for up-scaling the deployment of renewable energy technologies for rural electrification.

The outcome from the deliberations was a consensus that off-grid renewable energy technologies have the potential to close the energy gap through decentralized power grids, thereby achieving the objectives of rural electrification. Agencies in charge of rural electrification were advised to consider strongly off-grid renewable energy as a strategy for rural electrification.

Secondly, it was agreed that without enabling regulatory frameworks in place scaling up rural electrification will be difficult to achieve. Having in place the right regulatory framework was considered to be the most important factor in expanding rural electrification.

In addition to this, African governments were advised to work towards raising awareness on the benefits of off-grid renewable technologies particularly in income generation through its application for productive uses. Further to this, capacity building of the main stakeholders in the value chain was pinpointed as a necessary catalyst in rural electrification through off-grid renewables; the target groups include public institutions, financing agencies, communities and the private sectors.

Organized in parallel with the conference was an exhibition on products, projects and technologies for off-grid renewable energies.

ECOWAS AND GBEP CONDUCT WORKSHOP ON BIOMASS RESOURCE ASSESSMENT AND MAPPING



Participants at the Biomass Resource Assessment and Mapping workshop

ECREEE, in collaboration with the Global Bioenergy Partnership (GBEP) organized a workshop on Biomass Resource Assessment and Mapping, under Activity Group 1 (AG1) of the Working Group on Capacity Building (WGCB) for Sustainable Bioenergy. The event was held in Rome, Italy, from 13–14 November 2012 with the support of the Government of the United States of America.

The workshop was a follow-up to the Regional Bioenergy Forum held in Bamako in March 2012, where participants identified biomass resource assessment and mapping as an essential first step of the Bioenergy Strategy Framework.

The event brought together representatives of the Ministries of Energy and Agriculture from the ECOWAS Member States, GBEP partners and observers, as well as regional and international organizations, academia, and business and civil society representatives active in the field of bioenergy.

Discussions focused on various methodologies and tools for resource assessment and mapping of biomass resources (calculation of total available biomass), tools and methodologies on investments in bioenergy related to environmental, social and economic aspects; they also covered cataloguing and sharing experiences on biomass use, existing resource maps and socio-economic conditions, including methods for the allocation and tenure of land from the ECOWAS Region.

Workshop conclusions were present-

ed by the chairpersons, Mr Raffi Balian – Department of State, Government of the United States of America – and Mr Bah F.M. Saho of ECREEE. These include: (1) establishment of a network of institutions at regional and at national levels (including the civil society) to facilitate bioenergy promotion in the ECOWAS region; (2) compiling a matrix of tools and methodologies on resource assessment, mapping and investment planning; (3) compilation of data/information on the bioenergy sector in the region highlighting gaps to improve data for investment; (4) identifying financial opportunities to attract business driven investments in the bioenergy sector.

Representatives of all ECOWAS countries were called on to take leadership in their role as ambassadors of sustainable bioenergy to foster energy access and food security, and thereby improve health conditions for citizens. These actions, as catalysts of change in the energy sector in the ECOWAS region, are fundamental for achieving the goals of the Sustainable Energy for All (SE4ALL) initiative.



REGIONAL TRAINING WORKSHOP ON DESIGNING AND IMPLEMENTING SOLAR ENERGY BASED LIVELIHOOD PROJECTS FOR RURAL COMMUNITIES, LOMÉ, TOGO

ECREEE, the United Nations Industrial Development Organization (UNIDO), the Energy and Resources Institute (TERI), and the Government of Togo organized a regional training workshop on 'Designing and implementing solar energy-based livelihood projects for rural communities', from 1 to 5 October 2012 in Lomé, Togo. The workshop, financed by the Governments of Austria, India and Spain, and the Institut de l'énergie et de l'environnement de la Francophonie (IEPF), addressed the following modules:

- Introduction of solar technology
- PV Systems – Assessment, Design, Economics, Operations and maintenance
- Project Management and design of business models for solar PV based livelihood projects
- Quality Assurance and monitoring of solar PV projects

The opening ceremony was chaired by Togo's Minister of Mines and Energy. During his speech the minister highlighted the importance of renewable energy and energy efficiency and particularly PV systems for the region's and its peoples' development, and expressed the Government of Togo's total support for ECREEE.

The main objective of workshop training, conducted by two experts from TERI, India, was to enhance capacities and skills on technical and financial issues related to PV stand-alone systems and mini-grids in small settlements, sensitizing participants to the planning, design, implementation and utilization of solar PV technology for livelihood-based projects in rural areas.

Thirty-two engineers, technicians and experts from across the region participated in the workshop training. The participants were drawn from:

- rural electrification agencies or bodies responsible for rural electrification
- local and regional NGOs working in rural community programmes
- local and regional companies working in solar solutions
- other stakeholders in renewable energy and energy efficiency.

The training workshop contributed towards improving participants' knowledge on solar energy technology and its various applications, particularly for rural livelihood projects. Specifically, participants acquired skills on designing, dimensioning, implementing and maintaining small PV systems for rural livelihood applications.

CAPE VERDE HOSTS REGIONAL WORKSHOP ON ECOWAS WIND AND SOLAR RESOURCE MAPPING

ECREEE, with the support of the United States Agency for International Development (USAID) and the technical assistance of Nexant, organized a regional workshop on ECOWAS Wind and Solar Resource Mapping in Praia, Cape Verde, from 9–11 July 2012.

The objectives of the workshop were to present and discuss the contents of the Preliminary Report of Phase I of the Task; present the resource maps for each country and the entire ECOWAS region; and build capacities in the region regarding screening and modelling methodologies for RE investment projects.

The workshop is a component of an on-going Wind and Solar Resource Mapping and Project Development Task for the ECOWAS region. It aims to provide a framework to support the early stages of ECREEE's initiatives to facilitate the development of commercially viable wind and solar energy projects by providing governments, investors and developers with timely, inexpensive and accurate information for project development.

The task therefore aims to deliver an organized and user-friendly database containing high-quality wind and solar resource data for country mapping and identification of potential project sites throughout the ECOWAS region; execute screening to recommend project sites within ECOWAS countries, based on resource data and on knowledge of countries' infrastructure; and develop a methodology for modelling resource data along with well-informed project assumptions, including country infrastructure and other parameters generally used in power project financing.

IMPLEMENTATION OF THE ECOWAS RENEWABLE ENERGY FACILITY (EREF) PROJECTS UNDERWAY

The implementation of the First Call of the ECOWAS Renewable Energy Facility (EREF) got underway with the commencement of the contracting phase in February 2013. This was based on the recommendations of the EREF technical committee which approved 41 projects for the grant award.

One of the projects – Electricity Transmission Losses Reduction in the City of Brikama – undertaken by The Gambian National Water and Electricity Company (NAWEC) seeks to enhance the supply of electricity in Brikama through energy efficiency measures. The managing director of NAWEC, Ebrima Sanyang, observed that renewable energy and energy efficiency can play a key role in the provision of electricity supply needs. He expressed hope that the project would address the technical losses in electricity and improve the livelihoods of the beneficiaries.

A second project - Provision of Minimum

Energy Services in Rural Communities in Benin – is being undertaken by a non-governmental organisation, ABED-Benin. The project kicked-off with the training of local technicians on solar PV technology maintenance and accounting management of energy installations. Participants at the training session received toolkits for installation and troubleshooting of solar PV panels to allow them strengthen their knowledge on management of solar PV projects. The project aims at the installation of 600 WC for designated community centres in 5 villages for services such as: lighting, battery recharges (phones, radios), television, rural internet and freezing. Beneficiary villages are organized in Village Committees for Energy (VCE) and will be responsible for the technical and financial management of the solar installations. ABED will assist the VCE to develop business models as well as in the technical and accounting management of the installations.

THE UN INITIATIVE ON SUSTAINABLE ENERGY FOR ALL LAUNCHED IN NIGERIA

In line with the declaration of the year 2012 as the International Year of Sustainable Energy for All, on 23 August 2012 the President of the Federal Republic of Nigeria, Dr Jonathan Goodluck, and the Director General of the United Nations Industrial Development Organization (UNIDO) and Co-chair of the high-level group on Sustainable Energy for All, Mr Kandeh K.



From L to R: Mr Namadi Sambo, Vice President of Nigeria, Mr Bart Nnaji, Minister of Power, Mr Kandeh K. Yumkella, DG of UNIDO

Yumkella, launched the UN initiative on Sustainable Energy for All in Nigeria.

In his speech, the president, represented by his Vice-president, Mr Namadi Sambo, noted that the country is committed to fully implementing the objectives of the initiative by the year 2020, a decade ahead of the global target.

The initiative, launched by the UN Secretary-General, Mr Ban Ki-moon, aims to achieve the following by 2030: provide universal access to modern en-

ergy services; double the rate of improvements in energy efficiency globally; and double the share of renewable energy in the world's energy mix. The achievement of these objectives in Africa's first most populous country will have a significant impact on the socio-economic development of the people of Nigeria, of whom 60% presently do not have access to modern energy services.

The launching event brought together national and international dignitaries; representatives from the public and

privates sectors, academic and financial institutions, national, regional and international development organizations, including ECREEE, thus emphasizing the importance of this initiative to the country.

Furthermore, the event which was opened and closed by the then Minister of Power, Mr. Bart Nnaji, featured panel discussions on: Challenges and

Opportunities for Nigeria in meeting the objectives of the initiative; Financing Energy Infrastructures for 2030, Integration of Local and Regional Energy Markets, moderated by Mr. Mahama Kappiah, the Executive Director of ECREEE; Accountability and Tracking Results.

Nigeria's decision to join this global effort is certain to add momentum to the success of the initiative in the ECOWAS region, and throughout the African continent.

ECOWAS EXPERTS TRAINED ON ENERGY PLANNING

ECREEE and the International Renewable Energy Agency (IRENA) organized a regional workshop on Energy Planning Methodologies and Tools in Abidjan, Cote d'Ivoire from 10–12 December 2012.

The workshop aimed to acquaint energy planners in the region with appropriate methodologies, using the ECOWAS Renewable Energy Planning model developed by IRENA, based on the MESSAGE modelling tool (software developed by the International Atomic Energy Agency (IAEA) to support national governments in energy planning).

The workshop was part of the joint ECREEE-IRENA initiative- Promoting a Sustainable Market for PV Systems in the

ECOWAS Region (ProSPER)- with a focus on capacity building to foster renewable energy development in the region. The workshop was also part of the ECOWAS training programme on Energy Planning Support for the Elaboration of Renewable Energy Action Plans for ECOWAS Member States, organized by ECREEE in collaboration with its partners.

The targeted participants were professional staff from the planning units at ministries and electricity utilities. Thirty participants attended the workshop, most of them senior staff from their respective energy planning units who also had experience in energy planning models and analysis tools. The participants came from 13 ECOWAS Member States, specifically from the Ministry of Energy as well as the national elec-

tricity utility.

During the two-and-a-half days, participants learned the basics of the ECOWAS Renewable Energy Planning Tool (EREP) as well as how to use the MESSAGE tool to run the simulation and channel results into EREP. They were able to run their own country simulation and compare different scenarios.

The main outcome of the workshop was the acknowledgement that EREP was a tool that could play a useful role in energy planning. The availability of EREP is exceptionally timely as Member States, following the adoption of the regional renewable energy policy, are working on the development of their national renewable energy action plans (NREAP) in an effort to achieve the regional targets.

6th ECREEE BOARD MEETING AND 3rd TECHNICAL COMMITTEE MEETING

The Sixth Executive Board Meeting of ECREEE was held on Friday 2 November 2012 at the Movenpick Hotel in Accra, Ghana. The main objective of the meeting was to adopt the ECREEE 2012 Work Plan Status Report and the ECREEE 2013 Work Plan as well as discuss new developments in the energy sector.

The Minister for Environment, Science and Technology of Ghana, Hon. Sherry Ayittey formally declared the meeting open. Other high level members of the Board in attendance included the ECOWAS Commissioner for Infrastructure and Board Chairman, Mr Ebrima Njie; the Spanish Ambassador to Ghana, H.E. Olga Cabarga Gómez; the UNIDO Director for Energy and Climate Change, Dr Pradeep Monga; the Director of International Programs and Projects of the Austrian Development Agency (ADA), Mr Robert Zeiner; and the ECREEE Executive Director, Mr. Mahama Kappiah.

In his address, the ECOWAS Commissioner for infrastructure expressed satisfaction that the meeting was taking place at the background of the background of the historic decisions taken by the ECOWAS Ministers of Energy



ECREEE Board members

regarding the adoption of the regional policies on renewable energy and energy efficiency and noted that the focus will now shift to the achievement of the set targets. He thanked all the partners for their continued support to ECREEE and indeed the ECOWAS region's energy programmes. The UNIDO Director for Energy & Climate Change, in his remarks, congratulated ECOWAS, ECREEE and the partners for being the first region in Sub-Saharan Africa to adopt regional green policies, while also emphasising the need to translate these successes into concrete actions. He expressed UNIDO's willingness to collaborate with ECREEE in the implementation of the SE4ALL initiative.

Also delivering his address, the ADA Director for international Programmes and Projects commended ECOWAS for the successful organisation of the recently concluded High Level Forum. He reiterated Austria's commitment to continue providing financial and technical support to ECREEE. The Spanish Ambassador to Ghana, in her remarks, expressed pride at representing Spain on the ECREEE Board and commended the centre for the achievements recorded. The Hon. Minister for Environment, Science and Technology of Ghana while highlighting the role of energy for socio-economic development, also commended the ECOWAS Commission for its efforts in the energy sector and the establishment of ECREEE. She expressed optimism that the coming years will witness significant improvement in the region's energy access situation.

The Board meeting was preceded by a meeting of the ECREEE Technical Committee (TC) on Thursday, 1 November 2012 at the same venue. The TC, which provides technical guidance to the Centre, met to review and make recommendations on the reports submitted for the Board's approval.

ECOWAS HOLDS ITS FIRST RENEWABLE ENERGY INVESTMENT AND BUSINESS FORUM

Co-organized by the African Development Bank (AfDB), the first ECOWAS Renewable Energy Investment (EREI) and Business Forum took place on 27–28 September in Dakar, Senegal. This forum which was attended by more than 90 participants from the ECOWAS Member States, Europe and the USA, brought together financiers, project promoters, donors and market analysts interested in investment opportunities in renewable energy in the ECOWAS region.

This ECREEE forum was the first milestone of the EREI and Business

Initiative, and was part of an effort to fulfil ECREEE's mandate to attract investment into the region's RE sector, as stated in the ECOWAS White Paper on improving access to energy services, with a focus on rural and peri-urban areas. The forum provides a platform for ECOWAS Member States, investors, lenders and promoters of RE projects in West Africa to address investment challenges related to RE infrastructural projects.

The forum presented information on a pipeline of 40 renewable energy projects throughout the ECOWAS region, covering a wide range of tech-

nologies (photovoltaic, wind, small hydro and biomass) with an overall expected capacity of 552 MW and an expected investment of approximately €1.5b. The forum succeeded in acting as a communication bridge between promoters of RE projects and financial partners in the ECOWAS region as well as raising awareness on the transformation in the power sector coming from renewable energy technologies.

The second edition of the forum scheduled to hold in October 2013 in Accra, Ghana, with project financiers already expressing support.

ECREEE CONDUCTS RENEWABLES READINESS ASSESSMENT (RRA) IN THE GAMBIA

ECREEE, in partnership with IRENA, based in Abu Dhabi, conducted a two-day RRA exercise in the Gambia, with the objective of evaluating the country's readiness for the deployment of renewable energy technologies.

RRA is an IRENA initiative which, through multi-stakeholder engagement, assesses the market, legal and regulatory conditions for renewable energy development in a country. Based on the outcome of the study, barriers are identified and a roadmap, tailored according to the needs of the country, is developed. The first study within the ECOWAS region was conducted in Senegal in November 2011. Following the successful implementation of this exercise, ECREEE and IRENA selected three additional countries from within the region for a second phase of implementation; these include Ghana, Niger and the Gambia.

For the study in the Gambia, on 17 December 2012, delegates from the two institutions held bilateral meetings with representatives from the Ministry of Energy; the Public Utility Regulatory



A group picture of participants at the workshop on renewables readiness assessment for The Gambia

Authority (PURA); the European Union Delegation to the Gambia; Gambia Investment and Export Promotion Agency; and the Renewable Energy Association of the Gambia. Through these meetings, barriers such as capacity gaps in the renewable energy sector and financial constraints were identified. However, there was a general agreement that the newly drafted Renewable Energy Law, if ratified, would obviate some of the challenges and create an enabling business environment for local and foreign investors to invest in the sector.

On day 2, 18 December 2012, a workshop comprising focus group discussions prioritized renewable energy technologies and resources for energy services for development in the Gambia. Results showed solar for centralized electricity to be a top priority for the country, followed by solar thermal for heating, solar for decentralized electricity, wind for centralized electricity, and lastly solid biomass for cooking and heating.

At the end of the workshop, there was consensus among the stakeholders that concerted action must be directed towards hastening the process of adopting the drafted RE policy; establishing standards and labels for renewable energy equipment; rehabilitating the Gambia Renewable Energy Centre (GREC); validating data on solar, biomass and wind resource assessments; creating a renewable energy fund; and building the capacities of stakeholders (policymakers, regulators and the private sector).

It is envisaged that the RRA process will be replicated in 2013 in the remaining 11 ECOWAS Member States.

ECREEE UNDERTAKES STOCKTAKING MISSION TO GUINEA-BISSAU

Within the framework of the implementation of the SEEA-WA project, a team of experts, led by Mr Martin Lugmayr and Mr Jansenio Delgado from ECREEE, and accompanied by Mr Peter Cattelaens, an expert from the EU Energy Initiative, Partnership Dialogue Facility (EUEI PDF) conducted a stocktaking mission to Guinea Bissau to observe the current status of renewable energy and energy efficiency in the country. The delegation was received by Mr Biabe Siga, Head of the Energy Division at the Ministry of Energy, Guinea-Bissau, who also serves as the ECREEE National Focal Point.

During the stocktaking mission, which was

held from 22–26 January 2012, the expert group met with officials from the Ministry of Energy, Industry and Statistics, and the National Electricity Utility, as well as representatives of the World Bank and UN organizations stationed in Guinea-Bissau. The mission highlighted the critical state of the energy situation as well as the under-utilization of ample renewable energy resources. Moreover, the visit to two proposed sites for small hydro power projects, Saltinho (18 MW) and Cusselinta (30 MW), also revealed that the projects possessed good technical and economic potential which, if implemented, could contribute significantly to the country's energy situation.

At the end of the mission, it was agreed that ECREEE would work collaboratively with the Government of Guinea-Bissau to develop a national renewable energy policy, build capacity on the use of renewable energy project analysis tools, such as RETScreen, and conduct feasibility studies on small hydro sites.

Similar stocktaking and diagnostic missions were undertaken for all 15 ECOWAS Member States by a team of technical experts from ECREEE and its partners – AERE of France and the Austrian Energy Agency (AEA) – to assess the current status of energy efficiency and renewable energy in the region and identify key actions to ensure improvements.

LAUNCH OF THE GEF CAPE VERDE PROJECT



Launch of the GEF Cape Verde Project: Mr Mahama Kappiah, Executive Director (ED) of ECREEE, Dr. Humberto Brito, Minister of Tourism, Industry and Energy, Cape Verde, and Mrs Petra Lantz, UN Resident Coordinator



On 12 April 2012 the global environment facility (GEF) project, Promoting Market-based Development of Small- to Medium-Scale Renewable Energy Systems in Cape Verde, was officially launched at an event in Praia, Cape Verde. UNIDO, in cooperation with ECREEE and the Ministry for Tourism, Industry and Energy (MTIE), Cape Verde, will execute the project over the next three years. The project is co-funded by the GEF with a grant of US\$1.8m.

During the launch, Dr. Humberto Brito, Minister of Tourism, Industry and Energy, Cape Verde, and Mrs Petra Lantz, UN Resident Coordinator, stressed the importance of the project for achievement of Cape Verde's renewable energy policy targets. Mr Alois Mhlanga, Industrial Development Officer at UNIDO, gave an overview of the implementation, reporting procedures and requirements.

The project aims to boost sustainable

development and reduce global greenhouse gas emissions by creating and enabling market conditions for the deployment of small- to medium-scale renewable energy systems. This objective will be achieved by:

1. implementing small- to medium-scale renewable energy demonstration projects on different islands. A pipeline of projects including all kinds of technologies (e.g. solar thermal, PV, wind) and solutions (grid-connected, mini-grids, stand-alone systems) is under development;

2. preparing an investment strategy for scaling up or replicating pilot projects, and establishing a dedicated seed fund as part of EREF, which will provide co-funding for the development of small- to medium-scale renewable energy projects in Cape Verde;

3. strengthening the regulatory framework to effectively promote and support small- to medium-scale

renewable energy development within economic and social sectors;

4. conducting a study on how to achieve the goal of a 100% renewable electricity system in the Island of Brava;

5. strengthening the institutional capacity, and addressing the insufficient technical capacity, of market enablers and market players (especially entrepreneurs, banks, etc.) to identify, develop, appraise and implement renewable energy projects.

The project contributes to the ambitious Cape Verdean Government's plan to reduce the country's dependence on imported fossil fuels through increased energy production from renewable sources. Through private sector investment and the implementation of supporting policies, Cape Verde has already achieved its target to generate at least 25% of its electricity from renewable sources by 2012. The government is presently working towards a 50% share by 2020; with a goal to produce 100% of electricity on the island of Brava from renewable sources. Small- and medium-scale renewable energy solutions can play an important role in the achievement of the governmental plan.

THE SEEA-WA PROJECT TEAM HOLDS ITS 4TH COORDINATION MEETING

On 3 November 2012, the expert team on the SEEA-WA project met to appraise the activities implemented in the year 2012 and deliberate on action plans for the second year of the project cycle. SEEA-WA, which stands for Supporting Energy Efficiency for Access in West Africa, is a project funded by the European Union; it aims to address the inherent barriers hindering the transition towards an energy efficient economy in the ECOWAS region.

The project, which was officially launched on 10 October 2011, has achieved remarkable success within a short period of time. Within a year, a stocktaking exercise to assess the current status of energy efficiency in the ECOWAS region had been conducted and a detailed report on energy efficiency status developed for each of the 15 Member States; a network of national partners and stakeholders had been established and engaged; and a regional policy document on energy efficiency had been drafted and adopted by the ECOWAS energy ministers. In order to achieve the objectives of the regional EE policy, five flagship initiatives were launched - the ECOWAS Initiative on



A cross-section of the SEEA-WA Project team at the Coordination meeting

Efficient Lighting which aims at transitioning to efficient lighting and habits in West Africa; the ECOWAS Initiative on Achieving High Performance Distribution of Electricity which aims to reduce commercial and technical losses in the region's electricity distribution systems; the ECOWAS Initiative on Safe, Sustainable and Affordable Cooking which aims at increasing access to safe, sustainable and affordable cooking fuels and stoves; the ECOWAS Initiative on Standards and Labelling (S&L) which aims at developing and implementing regional standards and labels for energy equipment, to be adopted by all ECOWAS Member States; and the ECOWAS Initiative on

Financing Sustainable Energy which aims to mobilise financing instruments to support regional energy efficiency and renewable energy projects.

From 2013 onwards, the focus will be on the implementation of these initiatives. Currently, Minimum Energy Performance Standards (MEPS) and harmonization of new and existing standards are being developed under the initiatives on Energy Efficient Lighting and Standards and Labelling. For the cooking initiative, the activities will focus on developing national and regional strategies for their implementation, establishing labels for cook stoves, and research and development, while for the initiatives on Achieving High Performance Distribution of Electricity and Financing Sustainable Energy, stakeholder meetings have commenced with a view to identifying the needs and appropriate interventions.

The performance and impact of these activities will be monitored, evaluated and reported by the Environment and Development Action in the Third World (ENDA-TM), an organization based in Dakar, Senegal, to ensure that the objectives of the project - combining improved energy efficiency in order to broaden energy access - are fully realised.

ECREEE AND NARUC FORGE NEW PARTNERSHIP

On 2 November 2012, the National Association of Regulatory Utility Commissioners (NARUC) went into a partnership agreement with ECREEE. The objective of this partnership is to collaborate specifically in the policies and regulatory aspects of Renewable Energy and Energy Efficiency (RE & EE) in the ECOWAS region.

NARUC, founded in 1889, is the United States association representing the State Public Service Commissioners regulating utility services, namely: energy, water and telecommunications. Through its international program, the association has since 1998 been sharing best practice and information on innovative solutions with energy regulators in parts of Europe, Africa, Asia and Latin America and the Caribbean.

As the focal point institution for the

ECOWAS region, ECREEE will serve as the channel by which NARUC's long-standing expertise in utility regulation would be passed on to Member States. This is evident in the activities planned to be executed through the partnership. These include:

- strengthening national and regional policy, regulatory, legal and institutional frameworks in support of the development of markets by ensuring adequate information exchange of renewable energy issues;
- organizing workshops, seminars and other RE & EE activities;
- supporting regional and national processes relating to reforms or creation of policies, and legal and regulatory frameworks to promote RE and EE markets in the region;
- enhancing capacities of national and regional regulators in support of

the regulatory framework of ECOWAS Member States;

- developing regional and national programmes and projects in RE and EE Policy Frameworks;
- exchanging knowledge in the fields of RE & EE;
- cross-linking the two websites: www.naruc.org and www.ecreee.org, and publishing on both websites news of each other's events.

The Memorandum of Understanding (MoU) was signed by Ms Bevan Flansburg, Senior Program Officer, International Programs, and Mr. Mahama Kappiah, Executive Director of ECREEE.

Following the approval of the NARUC/USAID 2013 work plan on Clean Energy Technical Assistance in West Africa, it is envisaged that the implementation of the aforementioned activities will commence in the first quarter of the year.

ECREEE PARTICIPATES IN THE 5th PRESENTATION OF THE RE EXHIBITION IN DAKAR

The RE exhibition was held in the International Hall of Renewable Energy in Dakar, Senegal from November 7 - 10, 2012.

It was organized by EXPO Carrefour Afrique (EXCAF), in partnership with the Ministry of Energy and Mines of Senegal. Over 60 organizations from around the world participated, aiming to showcase their technologies, products and services in the area of renewable energy.

There was a significant presence of the civil society as a whole, particularly students, businessmen and potential investors. There was significant interest in ECREEE's activities, the renewable energy potentials of Senegal and the region as a whole, and the regulatory frameworks in place.



From L - R: Ms Aminata Fall in an interview with the press, accompanied by the Director of the Renewable Energy Promotion Directorate Mr. Lamine Diop and the Minister of Energy and Mines Mr. Aly Ngouille Ndiaye

The ECOWAS Observatory on Renewable Energy and Energy Efficiency (ECOWREX), developed by

ECREEE with the support of the Global Environment Facility (GEF), was also presented during the exhibition. The general reaction of participants was very positive towards this new tool, taking into account the huge impact the Observatory will have in the dissemination of the region's relevant energy related data. As a potential investor remarked, 'this tool will greatly facilitate our market study and analysis, helping us to decide whether or not to invest'. He also added that the tool was exactly what was needed.

The exhibition also presented the opportunity to inform the general public about the activities of ECREEE, its mission and projects, and the relevance of the centre's operation in the West African context, as well as the regional RE targets.

ECREEE TO PARTNER WITH CLUB-ER ON RURAL ELECTRIFICATION

The Club of Agencies and Structures in charge of Rural Electrification (CLUB-ER) held their 9th Annual Meeting in Abidjan, Côte d'Ivoire from December 10 - 14, 2012. In attendance were representatives from the European Commission, the Energy and Environmental Institute of French speaking countries (IEPF), the Alliance for Rural Electrification (ARE), the International Renewable Energy Agency (IRENA), the Photovoltaic Power System Program of the International Energy Agency Task 9 (IEA-PVPS Task 9) and its most recent partner organization, ECREEE.

Chaired by Mr. E. Noel Guetat, Chief of Staff of the Ministry of Mines, Oil and Energy, the meeting provided an opportunity for intending members to showcase the organisations and the potential benefits of joining the Club.

Following the presentation made by

Mr. Mahama Kappiah, the Executive Director of ECREEE, on the Centre, its achievements, goals and the potential of its collaboration with the CLUB-ER, the members of the club unanimously agreed to have ECREEE as its partner, seeing that such a partnership will be pivotal to the achievement of a mutual objective, which is: expanding energy access to the rural populations in Africa.

The CLUB-ER is an operational workgroup dedicated to rural electrification in the African continent. The group is a product of an initiative of the French Agency for Environment and Energy Management (ADEME). Its first workshop was held in Francheville, Paris, in December 2002, with the participation of six African countries, namely: Cameroon, Côte-d'Ivoire, Morocco, Mauritania, Niger and Senegal. Since then its membership has grown to include seven additional ECOWAS Member States, namely: Be-

nin, Burkina Faso, Ghana, Guinea, Mali, Nigeria and Togo.

With the partnership between ECREEE and the CLUB-ER, the role of the club in promoting rural electrification is projected to extend to the ECOWAS countries who are not currently members of the CLUB-ER, thereby covering a wider area than would have otherwise been achieved. Furthermore, this partnership places ECOWAS Member States at a more advantageous position to pursue renewable energy-based rural electrification programmes in their respective countries.

"The CLUB-ER is an operational workgroup dedicated to rural electrification in the African continent."

ECREEE PARTICIPATES IN THE 71st EXECUTIVE COMMITTEE MEETING OF THE INTERNATIONAL ENERGY AGENCY SOLAR HEATING AND COOLING PROGRAMME

ECREEE, ZIE, KNUST AND SIREA, AWARDED RESEARCH GRANT FOR CONCENTRATED SOLAR POWER

ECREEE, in partnership with l'Institut International d'Ingénierie de l'Eau et de l'Environnement (2IE), Burkina Faso (lead partner), Kwame Nkrumah University of Science and Technology, Ghana and SIREA-ENERGIE, France, received a grant of €743,096.38 to support research on 'Development of a Cost-effective, Modular and Dry Concentrated Solar Power (CSP) for Africa: Design and Test of Components'.

The grant was awarded to ECREEE, and its project partners, on 28 March 2012, at the African Union Headquarters in Addis Ababa, Ethiopia, under the framework of the African Union Commission Research Grants Open Call for Proposals. This grant, which covers about 70% of the total budget (€1m), will be financed through an agreement between the European Commission and the African Caribbean Pacific (ACP) Group of States under the ACP Research for Sustainable Development Programme of the 10th European Development Fund (EDF) Intra-ACP envelope.

ECREEE's project proposal on concentrated solar power (CSP) was one of nine proposals accepted out of 262 submitted from across the African continent. The 3-year project aims to address the main barriers to the development of solar power technologies in West Africa, including financial barriers and the lack of local technical capacities required to operate such projects. It is against these barriers, and the fact that current technologies are not well suited to the sub-Saharan African context, that the research project will work towards a reduction in investment costs by promoting local manufacture of solar energy components and by developing technologies that are suitable for geographic regions with water scarcity.

The project is the first of its kind in the ECOWAS region and is part of an on-going effort by ECREEE to promote academic research in the field of renewable energy in the region. The project was officially launched on 8 May 2012, at the ECREEE Secretariat in Praia, Cape Verde.



Participants of the IEA-SHC Board

ECREEE, as a member of the International Energy Agency (IEA) Solar Heating and Cooling (SHC) Programme, was invited to participate in the International Conference on Solar Heating and Cooling for Buildings and Industry (SHC 2012), and the 71st Executive Committee Meeting of the IEA SHC Programme, which took place from 9–11 July and 12–13 July 2012 respectively.

The SHC Programme is one of the first collaborative research and development (R&D) programmes established by the IEA. Since 1977, its participants have conducted 49 joint projects in active and passive solar energy systems, for the building sector and for industry. The SHC Programme is the pre-eminent international collaborative programme in solar heating and cooling technologies and designs, with members from across the world representing 20 countries and the European Commission. ECREEE joined the programme as a member in 2012.

It is envisaged that ECREEE and the IEA SHC will cooperate in the area of knowledge sharing and strengthening

awareness on the benefits of solar thermal systems for heating and cooling. ECREEE will be responsible for disseminating the latest knowledge in the region and providing useful country data to the IEA. It was agreed that West Africa would be included in the annual Global Solar Thermal Reports.

SHC 2012 is the first in a new series of annual scientific conferences to be organized by the IEA SHC Programme that specifically addresses solar thermal topics. Besides the presentation of results of on-going projects, the conference provided an opportunity for the international solar thermal community to highlight their various activities and accomplishments.

Taking part in these events provided an opportunity for ECREEE to promote its initiatives and share its programmes (including its planned programme on solar thermal), and targets with other institutions specialized in renewable energy and energy efficiency. The ECOWAS Renewable Energy Policy includes targets for the dissemination of solar thermal water heating systems, particularly in the tourism sector and industry.

"ECREEE will be responsible for disseminating the latest knowledge in the region and providing useful country data to the IEA."

UPCOMING EVENTS IN 2013

March, GEF SPWA Biodiversity (incl. bioenergy)	July, ECREEE-IRENA Capacity Building Initiative (Training Entrepreneurs)
April, Brazil Study visit for capacity building and training	July, Niger Capacity building programme on NAMAs (TOT)
April 23 th -25 th , Burkina Faso Regional Workshop on the cooking initiative	September, ECREEE-IRENA Capacity Building Initiative (Training Financing Institutions)
April 22 nd - 24 th Pamplona, Spain IEA PVPS ExCO Meeting	July, Praia, Cape Verde ECOWAS Wind Power Conference and training workshop
May, ECREEE-IRENA Capacity Building Initiative (Training for Utilities and Regulators)	July, Praia, Cape Verde ECOWREX Data collection workshop
May 27 th - 31 st , Vienna, Austria ECREEE Technical Committee & Board meetings	September & October, Benin Regional Bioenergy workshop to validate and adopt Policy and Strategy Document and Draft Policy Document (Technical and Political Sessions)
May 28 th - 30 th , Vienna, Austria Vienna Energy Forum, ECREEE SHP Study Tour & RE&EE Centres side event	
June, Praia, Cape Verde HOMER Training of Trainers	October, ECREEE SSHP Training
June, Praia, Cape Verde Hybrids Systems Training for Portuguese Speaking Countries in Praia	October, Accra, Ghana EREI Investment Forum

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Cover photo:

From L - R: H.E. Victor James Gbeho, Advisor on Foreign Relations for the Government of Ghana; H.E. Kadré Désiré Ouedraogo, ECOWAS President; Kandeh Yumkella, UNIDO Director General; and H.E. Claude Maerten, Ambassador and Head of the EU Delegation to Ghana.

High Level Forum in Pictures (p. 4)

1. Group photo
2. Hon. Emmanuel Armah Kofi Buah, Deputy Energy Minister of Ghana
3. Cross section of participants
4. H.E. Victor James Gbeho, Advisor on Foreign Relations for the Government of Ghana; H.E. Kadré Désiré Ouedraogo, ECOWAS President; H.E. Amb. Claude Maerten, Ambassador and Head of the EU Delegation to Ghana; Dr. Kandeh K. Yumkella, UNIDO Director General and Chair of UN Energy
5. Dr. Kandeh K. Yumkella, Director General of UNIDO and Chair of UN Energy
6. Dr. Kandeh K. Yumkella, Director General of UNIDO and Chair of UN Energy and André Laperrière, Deputy CEO of the Global Environment Facility
7. Hon. Oluniyi Robbin Coker, Minister of Energy and Water, Sierra Leone
8. Hon. Sherry Ayittey, Minister of Environment, Science and Technology of Ghana
9. Ebrima Njie, ECOWAS Commissioner for Infrastructure and Mahama Kappiah, Executive Director of ECREEE
10. H.E. Amb. Frédéric Clavier, Ambassador of France to Ghana; H.E. Amb. Olga Cabarga Gómez, Ambassador of the Kingdom of Spain to Ghana; and H.E. Amb. Michael Linhart, Director General for Development Cooperation in the Austrian Ministry of European and International Affairs
11. Dr. Pradeep Monga, Director for Energy and Climate Change Branch, UNIDO and Deepak Gupta, former Secretary of Indian Ministry of New and Renewable Energy
12. H.E. Amb. Irene Giner-Reichl, President of the Global Forum on Sustainable Energy (GFSE)
13. ECOWAS Member States' Delegates and cross section of participants