

SUMMARY OF THE SECOND HIGH-LEVEL MEETING OF THE AFRICA-EU ENERGY PARTNERSHIP: 11-13 FEBRUARY 2014

The Second High-Level Meeting (HLM) of the Africa-EU Energy Partnership (AEEP) took place from 11-13 February 2014 in Addis Ababa, Ethiopia, on the theme "Taking the Next Step: Africa and the EU are tackling energy challenges together." The meeting was jointly hosted by the Ethiopian Government, the Governments of Austria, Germany and Mauritius, and the African and European Co-Chairs of the AEEP: the African Union Commission (AUC) and the European Commission. Organization of the meeting was under the responsibility of the EU Energy Initiative Partnership Dialogue Facility (EUEI PDF), which serves as the AEEP Secretariat.

The meeting was attended by over 450 African and European political and business leaders, high-level experts and heads of international energy institutions, as well as members of civil society, the private sector and the research community, who gathered to review progress in implementing the AEEP 2020 Targets and discuss how to shape future Africa-EU relations in the energy sector.

The Second AEEP HLM was organized in three broad segments. On the first day, delegates participated in pre-meeting side events organized by diverse stakeholders to discuss experiences, tools and approaches for enhancing energy access in Africa. The HLM officially opened on the second day, during which delegates convened in an "Expert Day" to showcase the achievements of African and European partners in the context of the AEEP 2020 Targets. During the high-level Ministerial segment that took place on the third day, energy ministers reviewed the AEEP's achievements since the first HLM and explored how to improve cooperation between the policy and business sectors in order to attract and substantially accelerate private investments to meet the AEEP 2020 Targets. An exhibition showcasing technological innovations by diverse energy stakeholders also took place in parallel to the HLM.

During the closing session of the Ministerial Segment participants approved the "Addis Ababa Communiqué," which defines the Partnership's priorities and vision for African-European collaboration on energy affairs. The Communiqué contains nine recommendations for accelerating access to sustainable energy on both continents and achieving the AEEP Targets, as well as four key messages to be forwarded to African and EU Heads of State and Government at the EU-Africa Summit in April 2014.

This report summarizes the discussions and outcomes of the meeting.



African and European Ministers and heads of international institutions on the final day of the conference

A BRIEF HISTORY OF AFRICA-EUROPE COOPERATION ON ENERGY DEVELOPMENT AND OTHER RELATED PROCESSES

Africa and Europe have a shared interest in accelerating access to sustainable, efficient and secure energy supplies. Although it is endowed with abundant renewable energy resources, Africa requires significant technical and financial investments as well as capacity building to reduce its fossil fuel dependence, power economic growth and promote social progress. Europe, in turn, seeks to enhance its energy security in cooperation with African partners.

The following is an overview of important initiatives and programmes in the framework of Africa-EU collaboration on energy issues, as well as some related international developments.

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EUEI: Established at the World Summit on Sustainable Development (WSSD) in August-September 2002, the EU Energy Initiative for Poverty Eradication and Sustainable Development (EUEI) has put in place instruments such as the EU-ACP (Africa, Caribbean and Pacific) Energy Facility. The EU contributed initial funding of €420 million towards the Facility's aims of promoting modern, affordable and sustainable energy services in rural and peri-urban areas.

AEEP: Launched during the second EU-Africa Summit in Lisbon, Portugal, in December 2007, the AEEP is one of eight strategic partnerships that emerged from the Africa-EU Joint Strategy and Action Plan. The AEEP is a long-term framework for structured political dialogue and cooperation on energy issues of strategic importance, reflecting African and European needs. The AEEP's overall objective is to increase the effectiveness of efforts to secure reliable and sustainable energy services and extend their access on both continents, enhance access to modern energy services and expand renewable energy and energy efficiency in Africa.

EU RENEWABLE ENERGY DIRECTIVE: Adopted in April 2009, the EU Renewable Energy Directive commits EU Member States to ensuring that 20% of their energy comes from renewable sources by 2020, as part of efforts to improve energy security and competitiveness, and combat climate change. It aims to maintain the EU's global leadership in renewable energy technologies. However, it states that the EU will undoubtedly be required to import some of this capacity, and, as a result, inter-regional renewable energy projects between Africa and the EU have begun to take shape.

AGECC and SE4ALL: In 2009, the UN Secretary-General established an Advisory Group on Energy and Climate Change (AGECC) to provide recommendations on how to ensure universal access to modern energy services in the context of climate change, poverty eradication and sustainable development. In November 2011, UN Secretary-General Ban Ki-moon formally launched the High-Level Group on Sustainable Energy for All (SE4ALL) and the related SE4ALL initiative to mobilize action by all stakeholders on energy access and energy poverty. The Secretary-General's "Vision Statement" for the initiative sets three broad goals for 2030: ensuring universal access to modern energy services; doubling the rate of improvement in energy efficiency; and doubling the share of renewables in the global energy mix. The UN also designated 2012 as the International Year of Sustainable Energy for All, and 2014-2023 as the Decade on Sustainable Energy, in order to bring attention to this issue.

PIDA: The Programme for Infrastructure Development in Africa (PIDA), developed by the AU Commission, the Secretariat of the New Partnership for Africa's Development (NEPAD) and the African Development Bank (AfDB), came into existence in July 2010. PIDA aims to improve access to integrated regional and continental infrastructure networks, and has a programme to identify priority renewable energy projects for investment.

FIRST AEEP HLM: The First AEEP HLM took place from 14-15 September 2010 in Vienna, Austria. The HLM agreed on a set of concrete targets to be attained by 2020, grouped under six priority areas: energy access; energy security; renewable energy and energy efficiency; institutional capacity building; scaling up investment; and dialogue. The targets include: ensuring access to modern and sustainable energy services for at least an additional 100 million Africans; and substantially

increasing the use of hydropower (by 10,000 megawatts), wind (by 5,000 megawatts) and solar energy (by 500 megawatts); tripling the capacity of other renewables, such as geothermal and modern biomass; and doubling the capacity of African cross-border interconnections within the continent and to the EU.

LAUNCH OF THE RECP: The Africa-EU Renewable Energy Cooperation Programme (RECP) was launched at the first AEEP HLM with the aim of contributing to the achievement of the AEEP 2020 targets, by: enhancing industrial and business cooperation between the two continents; improving policy and regulatory frameworks for renewable energy in Africa; contributing to the development and financing of concrete renewable energy projects; and helping to develop the next generation of energy professionals on the continent. The RECP complements ongoing initiatives such as the EU-Africa Infrastructure Trust Fund and the ACP-EU Energy Facility, as well as bilateral EU member state and European Commission activities.

FIRST AEEP STAKEHOLDER FORUM: The First AEEP Stakeholder Forum took place from 9-10 May 2012 in Cape Town, South Africa. The aim of the Forum was to achieve progress on the AEEP 2020 targets in the fields of renewable energy and energy efficiency, energy access, and energy security, with a focus on renewable energy. Participants at the Forum explored, among other issues, how to enhance synergies among different stakeholder groups and address barriers to increased investment and development assistance in the energy sector.

NATIONAL ENERGY STAKEHOLDER DIALOGUES: In 2013, stakeholder consultations took place in Uganda, Djibouti, Zambia, Ghana and Cameroon, to enhance the engagement of diverse interest groups in shaping the energy agenda and contributing to the AEEP 2020 targets on energy access, energy security, and renewable energy and energy efficiency.

ADOPTION OF A REGIONAL RENEWABLES POLICY FRAMEWORK FOR WEST AFRICA: On 31 October 2012, energy ministers from the Economic Community Of West African States (ECOWAS) adopted the ECOWAS Renewable Energy Policy, which was subsequently endorsed by ECOWAS Heads of State and Government in July 2013. The policy framework was developed by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), with support from RECP, following a consultation process within the region to raise awareness about the importance of an enabling policy environment to promote investments in renewable energy markets. ECREEE is facilitating follow-up work in ECOWAS member states to develop policy frameworks at the national level.

CONSULTATIVE PROCESS FOR A SOUTHERN AFRICA CENTRE FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY: In 2013, member states of the Southern African Development Community (SADC) approved a project document that will serve as the basis for the establishment of a dedicated renewables and energy efficiency institution for the sub-region, a Southern African center for renewable energy and energy efficiency. The conceptual framework was developed following a consultative process in the SADC region, with support from RECP, the UN Industrial Development Organization and Austrian Development Cooperation.

REPORT OF THE MEETING

The Second High-Level Meeting (HLM) of the Africa-EU Energy Partnership (AEEP) took place from 11-13 February 2014, and was divided into three broad sessions: pre-meeting side events on 11 February, an “Expert Day” on 12 February and a Ministerial segment on 13 February. This report is organized around these three broad sessions, and covers all the plenary sessions that took place during the meeting, as well as a selection of the side events on 11 February and the thematic parallel sessions on 12 February.

PRE-MEETING SIDE EVENTS

The Second AEEP HLM opened on Tuesday, 11 February, with participants convening in five panel discussions and stakeholder consultations organized by different AEEP partner organizations. The sessions addressed the following topics: accelerating inclusive energy access solutions and policy through partnerships with civil society; Africa-EU Renewable Energy Cooperation Programme - presentation and stakeholder consultation; Mini-Grid Policy Toolkit consultation workshop; making sound energy decisions - the role of data collection in Africa and attracting investment for clean energy in Africa - the Climatescope index; and rural electrification - financial models and commercial project examples.

This section highlights discussions at four of these sessions.

ACCELERATING INCLUSIVE ENERGY ACCESS SOLUTIONS AND POLICY THROUGH PARTNERSHIPS WITH CIVIL SOCIETY: This side event was held on Tuesday morning, and was moderated by Simon Trace, CEO, Practical Action. The event was co-organized by Practical Action, the Kumasi Institute of Technology, Energy and Environment (KITE) and Hivos, and aimed to enhance civil society engagement and the incorporation of pro-poor perspectives into policy processes such as the SE4ALL initiative and national energy planning and budgeting.

In his introductory remarks, Trace called on participants to consider further inputs to a draft civil society statement for possible inclusion in the final outcome document of the HLM.

Interactive Panel Discussion on Policy and Budgeting Engagement: This session was moderated by Grace Mukasa, Regional Director, Practical Action-Eastern Africa, and considered: the energy issues poor people want to see on the energy agenda; the challenges in getting these issues on the agenda; and how civil society can contribute to enhancing energy access.

Sabina Anokye Mensah, CEO, Anomena Ventures, defined gender as socially constructed roles, behaviors, activities and attributes that a given society considers appropriate for men and women. She said that poor people need to see the linkages

between gender and energy, and called for financing for gender mainstreaming in the energy sector. Mensah lamented the limited availability of energy-related disaggregated data, and called on civil society to engage in the collection and dissemination of this information.

David Ebong, CEO, Clean Energy Partnership Africa Ltd, called for a coordination mechanism to facilitate dialogue and experience sharing between governments, the private sector and civil society. Highlighting the immense knowledge base of civil society organizations (CSOs), he called on CSOs to engage in drafting motions on energy access and security for parliamentarians, instead of only producing policy briefs, which he noted largely go unread.

In response to the question “what do the poor want on the agenda?,” Kevin Kinusu Kinyangi, Climate and Energy Advocacy Officer, Hivos East Africa, said poor people expect to see the face of villages, not of big industry, on the energy agenda. He underlined that the affordability of energy products, alongside enhancing energy access, is a priority.

Kinyangi highlighted the need for national planning processes to show clear ambition, targets and financing mechanisms for energy access. He also advised CSOs to take advantage of “low-hanging fruit,” such as incorporating the goals of the SE4ALL initiative into national planning efforts.

James Baanabe Isingoma, Commissioner for Energy Resources Department, Ministry of Energy and Mineral Resources, Uganda, highlighted some challenges related to energy access, including inadequate financing, unsustainable models of providing access, non-affordability to the end user, and poor enforcement of standards for energy products. He highlighted the need for awareness raising of energy products, a task that he said should be performed by civil society.

In the subsequent discussion, participants, *inter alia*: called for further national and continental networking of energy stakeholders; noted the dearth of civil society actors in the energy sector; supported gender mainstreaming in the promotion of energy access; and called for partnerships with parliamentarians in order to influence policy.

Interactive Panel Discussion on Partnerships for Delivery: This session was moderated by Grace Mukasa. Aaron Leopold, Global Energy Advocate, Practical Action, outlined his organization’s activities in promoting energy access, including research and development, and testing and scaling up renewable energy technologies. He called on participants to use the AEEP as a platform to raise the voice of civil society in the energy discussion and listed some areas for civil society engagement with both government and the private sector, including the provision of policy, advocacy, finance and administrative support.



Interactive Panel Discussion on Policy and Budgeting Engagement. L-R: **James Baanabe Isingoma**, Ministry of Energy and Mineral Development, Uganda; **Kevin Kinusu Kinyangi**, Hivos East Africa; Moderator **Grace Mukasa**, Practical Action; **David Ebong**, CEO, Clean Energy Partnership Africa Ltd; and **Sabina Anokye Mensah**, CEO, Anomena Ventures.



Interactive Panel Discussion on Partnerships for Delivery. L-R: **Ishmael Edjekumhene**, Director, KITE; **Agnes Kalekye**, CAFOD East Africa; Moderator **Grace Mukasa**, Practical Action; **Myra Mukulu**, Executive Secretary, Kenya Clean Cookstoves Association; and **Aaron Leopold**, Practical Action.

Myra Mukulu, Executive Secretary, Kenya Clean Cookstoves Association, said civil society needs to mentor businesses and entrepreneurs in the clean energy arena, giving them, among other things, business development skills. She called on participants to: engage in monitoring and evaluation activities; identify committed entrepreneurs for funding and training opportunities; and package energy-related information in a “one-stop-shop model.”

Agnes Kalekye Kithikii, Programme Officer, CAFOD, East Africa, outlined her organization’s contribution to promoting sustainable energy access, including through projects to provide solar lighting and refrigeration systems for schools and hospitals in Kenya.

Ishmael Edjekumhene, Director, KITE, spoke on the success of the multifunctional platform projects instituted in rural areas in Ghana to power multiple machines at the same time. He called on CSOs to promote cutting edge solutions to fill the gaps left by government, the private sector and the donor community.

In the ensuing discussion, one participant said international discussions on financial instruments for promoting energy access should reflect needs at the community level. Participants then highlighted a number of issues for inclusion in the draft civil society statement, including gender equity, the role of civil society, access to affordable finance, and the need for a civil society network.

MINI-GRID POLICY TOOLKIT CONSULTATION WORKSHOP: This side event took place on Tuesday morning and was moderated by Michael Franz, EU Energy Initiative Partnership Dialogue Facility (EUEI PDF). The event, which was co-organized by EUEI PDF, the Renewable Energy Policy Network for the 21st Century (REN21) and Alliance for Rural Electrification (ARE), aimed to: discuss the rationale for, and content of, the Mini-Grid Policy Toolkit, including its intended target group and outreach approach; and gather practitioners’ experiences and perceptions on the history and future of mini-grids.

Welcoming participants, Franz noted that while a lot has been written about mini-grids there is need for hands-on guidance for policy makers.

Introduction of the Mini-Grid Policy Toolkit: Introducing the toolkit, Rana Adib, REN21, noted that there are diverse mini-grid systems in use, with varying capacities, energy sources, regulatory frameworks and financing arrangements. She said that while mini-grids could help accelerate energy access in Africa, there is a need to overcome the prevailing vision of electrification and power infrastructures, in which stand-alone energy sources are regarded as an intermediate solution at best, “until the main grid arrives.”

Adib highlighted key challenges as, *inter alia*: the lack of clear and stable policy and regulatory frameworks; the relatively high investment costs for rural electrification in general; low awareness of cost reduction opportunities; and limited experience on the ground, which increases the risks for investors. She invited participants’ input to the final draft and peer review of the toolkit, stating that it is tentatively scheduled to be launched at the Africa-EU Summit in April 2014.

In the ensuing discussions, participants stressed the need to sensitize policy makers about the potential of mini-grids, noting there are numerous proven operator models that could be scaled up if the regulatory environment was improved. A private sector investor said the toolkit was interesting for both operators and policymakers, and that it could help bring the two groups of stakeholders together.

On challenges, several speakers lamented that many countries have not sufficiently liberalized their energy sector, stressing that this increases the transaction costs of implementing energy projects. One operator said a specific challenge is the lack of information from energy authorities about planned grid extension, noting this makes it difficult to locate potential sites for mini-grids.

A representative of the UN Secretary-General’s SE4ALL initiative underscored that micro-grid policy should be about supporting and fostering deployment of renewable energy resources, and invited public and private stakeholders to provide input on what form and level of support might be needed.

In response to a question on how to access funding for micro-grids at the community level, some speakers stressed the need to aggregate smaller initiatives to make them more bankable, and others called for more targeted funding



Participants listening to the panel presentations



L-R: David Lecoque, ARE; Rana Adib, REN21; and Michael Franz, EUEI-PDF

initiatives. Another speaker pointed to the potential of tapping into carbon finance to increase demand and attract investment for clean technologies.

One speaker stressed the need to support community-based operators as an essential component of a rights-based approach to energy access. Noting that it is not always feasible to use renewable energies, he called for a pragmatic approach that starts with whatever energy source is available before transitioning to more sustainable models.

While noting that the “pay as you go” tariff adopted by many micro-grid operators works well, one speaker stressed that the issue is what happens “when the grid comes in” and called for energy decision makers to explore ways of building on existing local infrastructure in rural electrification projects.

Interactive discussion on operator models: Introducing the session, Moderator Franz stressed the importance of selecting the right operator model, stating that this is essential in designing a sound policy framework. He noted that the toolkit does not advocate any particular model but aims to provide guidance on how to develop commercially viable business models in different contexts.

David Lecoque, ARE, provided an overview of the four operator models discussed in the toolkit and highlighted some strengths and weaknesses of each model. Comparing the utility-driven and the commercial operator models, he noted that while energy utilities have the advantage of a well-established infrastructure, private energy providers have the potential to achieve much higher levels of energy efficiency if the right regulatory and policy framework is in place.

Lecoque noted that while the hybrid model, where public utilities work with private operators, partly addresses constraints inherent to each model, its success is dependent

on sufficient capacity within the public utility to provide, or take off and distribute power, as well as a well-structured collaboration framework.

With regard to the community operated model, Lecoque observed that while it is important for addressing access and supporting self-governance, establishing ownership is difficult and local operators often suffer from inadequate technical and management capacities.

In the ensuing discussion, a representative of a private operator noted that irrespective of the model, the key challenge is to enhance energy efficiency. He identified improving the procurement process as one of the single most important interventions that can be made in this regard and added that “energy efficiency precedes renewable energy.”

A representative of Kenya’s energy regulator said the country has opened up market access to all operators but that there is a general lack of awareness of this among potential operators. He said different stakeholders have approached the utility to help operationalize a framework for other business models and, in this regard, he welcomed the development of the policy toolkit saying it could help to level the playing field.

Responding to these remarks, a representative of a mini-grid operator said the national energy utility continues to dominate the market and is reluctant to accept power from mini-grids. He called for more robust policy measures to encourage investors to negotiate energy tariffs and connect to the national energy infrastructure.

Presenting experiences from Tanzania and Ghana, another speaker emphasized the need for smart grid systems that are flexible, can be deployed quickly, and can independently generate data to minimize the need for on-site technicians.

One speaker stated that while “pure” community models have been largely ineffective, each of the other models could incorporate a community engagement element. Concurring with this view, other speakers noted that none of the four models discussed can operate in a vacuum, and that utility models also come in different forms, for instance decentralized utilities that are closer to end users.

Interactive discussion on a policy and regulatory framework for mini-grid development: Introducing the session, Moderator Franz noted that a regulatory framework helps to balance the interests of market participants with the broader public interest, and to guide the market in the desired direction by defining clear rules of the game.

Franz further noted that the toolkit aims to contribute to the creation of an enabling regulatory environment by: highlighting a range of regulatory principles, institutional



Participants focused on the panel discussions

landscapes, essential policies and regulatory instruments that must be in place in order to achieve scale; suggesting how to accelerate this through supportive measures such as incentives for clean technologies and financial mechanisms; and addressing bottlenecks such as grid connection and tariff issues.

During discussions, speakers said the toolkit should address, *inter alia*: how users, mini-grid operators and other stakeholders can hold energy regulators accountable; the diversity of local and national contexts, which makes it difficult to propose specific policy approaches; the need for empirical analyses and policy-relevant recommendations to guide decision makers; and the need for capacity building of operators.

Highlighting an experience from Tanzania, one speaker said more than 50 registered mini-grid projects in the country lack financing to undertake feasibility studies and called on the AEEP to provide advice on different energy-mix options.

Another contributor highlighted the role of Climate Innovation Centers, an initiative of the World Bank, in helping private sector players develop practical solutions. He noted that from an innovation perspective, the missing link is an enabling environment, since the required technologies and business models are already widely available.

MAKING SOUND ENERGY DECISIONS: THE ROLE OF DATA COLLECTION IN AFRICA TO ATTRACT NEW INVESTMENT, DEVELOP ENERGY POLICIES AND ENSURE ENERGY ACCESS:

This side event, which took place on Tuesday afternoon, was co-organized by REN21, the Economic Community Of West African States (ECOWAS) Centre for Renewable Energy and Energy Efficiency (ECREEE), WorldWatch Institute and Bloomberg New Energy Finance. It was moderated by Rana Adib.

The aim of the session was to demonstrate that good information is fundamental to sound energy decision-making, by exploring “why we need data, what data means, who produces data, what it is used for, who uses it and how it is collected.” The discussions explored real examples of how data has been used, through specific case studies, such as the Climatescope Index.

Adib presented on the need for data, noting that lack of data is a major barrier to advancing and deploying renewable energy technologies. She highlighted that data is important because it showcases the potential of a region to attract investment, demonstrates the current situation and opportunities, and is the basis for decision making.

Adib noted that although there is no exhaustive answer to the question ‘what is good data’, some criteria to consider are quality, reliability, accessibility, timeliness, involvement of various stakeholders to promote transparency, comprehensiveness of the data and the data collection approach, and validity of the data. She highlighted some reasons for the challenges in the sector including its cross-cutting, politically-sensitive nature and the tension among and between stakeholders.

Helen Tarnoy, Managing Director, Aldwych International, outlined investor perspectives on data, as well as the challenges of dealing with non-traditional energy sources. She said the oil and gas sector has years of experience in data collection, and that it is thus easy for new investors to draw from available sources; whereas there are hardly any data sources for renewable energy and investors have to “start from scratch” when looking at a potential project.

Tarnoy illustrated this with the case of a wind farm in Turkana, Kenya, where it has taken over eight years to build investor confidence through data collection. On power and grid stability, she noted that it is not the usual due diligence that needs to be carried out, but major data collection. She described the work of the US Agency for International Development on the Kenya wind farm project, in ensuring that the 1300 MW main grid had the capacity to handle the additional 300 MW to be generated by the project.

Participants then raised issues regarding: sources of data that attract investor confidence; political concerns about governments sharing data with private actors; lack of funding for studies; data disaggregation, which compounds the challenge of data collection; and the need for a one-stop-shop for information that can be used by potential investors.



Side Event on “Making Sound Energy Decisions: The Role of Data Collection in Africa to Attract New Investment, Develop Energy Policies and Ensure Energy Access.” L-R: **Helen Tarnoy**, Aldwych International Ltd; **Nico Tyabji**, Bloomberg New Energy Finance; **Lauren Williamson**, REN21; and **Rana Adib**, REN21.

In the ensuing discussion, participants considered ways to build investor confidence. Some participants underscored the importance of government-driven baseline studies that provide a basis for further data collection by investors. One participant described a “proof of concept” tool used by his organization to showcase a potential project to investors.

Others noted that: in the absence of renewable energy data, models can be used to fill the gaps; quantitative and qualitative data must be balanced to reflect the demand-side of the energy equation; difficulties exist when validating informal data; and the public needs to be informed on the availability of government data.

Nico Tyabji, Bloomberg New Energy Finance, provided an overview of the Clean Energy Investment Attractiveness Index, Climatescope. He described it as a scorecard for countries’ clean energy investments and noted that data on Africa will become available in September 2014.

Lauren Williamson, REN21, outlined the work of her organization, including in collecting data for the Global Status Report on various renewable energy technologies. She noted that their data comes from various sources including the International Energy Agency (IEA), governments, non-governmental organizations, data agencies like Bloomberg, and fieldwork.

Williamson drew attention to the ECOWAS Status Report, noting that the idea is to institutionalize data collection and reporting processes at national and regional levels. She lauded the political will in the West Africa sub-region, highlighting the upcoming National Renewable Energy Action Plans for all countries in the regional bloc.

Participants then shared experiences of data collection, reiterating the challenges of poor data dissemination and lack of funding. Concluding the event, Williamson called for greater creativity and “out-of-the-box” thinking in data collection and dissemination in order to enhance energy access on the continent.

RURAL ELECTRIFICATION-FINANCIAL MODELS AND COMMERCIAL PROJECT EXAMPLES: This side event on Tuesday afternoon was facilitated by ARE and moderated by Balthasar Klimbie, Vice-President, ARE. It aimed to provide a platform for rural electrification experts to discuss how to better link public and private sector objectives in their efforts to achieve universal energy access.

The session explored promising market conditions, as well as smart financing models for risk mitigation that can attract private investments in the short term while creating a basis for self-sustaining business solutions.

Welcoming the five private-sector panelists to discuss their experiences, Klimbie observed that the policy landscape is changing rapidly, partly driven by high-profile initiatives such as the SE4ALL initiative, and noted that a key issue is how to accelerate and scale up successful projects.

Robert Seguin, Reiner Lemoine Institut GmbH, discussed how energy system modeling and geo-information systems analysis are being used to facilitate planning for economically-viable rural electrification schemes. He said ARE is currently developing an online tool that will be made available to energy stakeholders to help them identify potential sites for new projects.

Nestor Mwemena Kamabwe, Societe Africaine de Developpement Rural (SADER), the Democratic Republic of Congo, said Africa should emulate the experience of the US, which in 1935, had only 10% of rural households with access to electricity, but which then managed to establish 900 energy cooperatives serving 47 states “within one generation.” He lamented the situation in his country’s Katanga province where despite abundant hydroelectric resources, the national utility serves only 4% of rural households.

Kamabwe explained that while a system serving 100,000 consumers in the province would only require 30 MW capacity, there is currently no rural electrification programme in country. He said SADER’s goal is to establish a long-term programme that will expand organically in viable areas of the province as a first step towards developing functional private rural utility models.

Klaus Maier, Mobisol, described his company’s business model which, he said, aims to explore opportunities to merge “mobile money and solar systems,” in order to leapfrog conventional grid development. He gave one example of this as the use of remote metering and prepaid mobile payments.

Noting that access to energy also opens up new employment opportunities, which in turn boosts rural demand, Maier said his company offers a range of systems suitable for household and small-scale commercial applications such as multiple phone charging units, hair trimmers and refrigerators. He said that since its launch in 2011, the company has sold



Side Event on “Rural Electrification-Financial Models and Commercial Project Examples.” L-R: **Nestor Mwemena Kamabwe**, Société Africaine de Développement Rural; **Robert Seguin**, Reiner Lemoine Institute GmbH; **Klaus Maier**, Mobisol; **Nico Peterschmidt**, INENSUS GmbH; **Claude Ruchet**, Studer Innotec; and **Dereje Walelign**, Lydetco PLC.

3000 solar systems in East Africa, with projected sales set to triple in 2014. In response to a question on whether such off-grid solutions are sustainable, Maier stressed that Mobisol undertakes regular monitoring and is confident that they have come very close to matching what the grid can offer.

Claude Ruchet, Studer Innotec, discussed some innovative solutions for managing rural electrification challenges, including: load management in micro-grid systems; dealing with conflicts arising from unequal access to energy; and individual energy demand management.

Ruchet highlighted one such solution as the concept of the Energy Daily Allowance (EDA) for setting tariffs, noting that unlike conventional kWh-based pricing, EDA utilizes prepaid cards and is based on a flat fee to reduce transaction costs. Among other advantages, he highlighted remote invoice management and the ability to virtually store saved energy, noting that this enables energy swapping between users.

Nico Peterschmidt, INENSUS GmbH, presented a comparative study of micro-utility projects in the Philippines, India and Senegal, characterizing micro-utilities as primarily small- and medium-sized enterprises with limited financial resources, but strong motivation to “electrify rural areas.”

Peterschmidt outlined the varying policy and capacity contexts in the three countries, which range from a highly regulated environment in the Philippines, a concession model with regulated tariff in Senegal, and a deregulated landscape in India. He said that with the most business-friendly environment, the Indian operator was able to expand very rapidly and currently reaches 200,000 users.

Peterschmidt noted, however, that irrespective of their context, all micro-utilities face common challenges, including technical system instability due to high variability in loads, low revenues due to lack of diverse income sources among customers, and high transaction costs. On how the three micro-utilities had resolved some of these issues, he said that in the Philippines, the operator has well-trained local customer relations staff, and that India has adopted a franchise model operated by local entrepreneurs, but with maintenance by a professional company.

On strategies to help diversify local incomes, Peterschmidt said that the Philippines’ operator has developed a “community energizer platform” to explore ways to use electricity productively; Indian operators are producing incense sticks from ash and also purchasing husks from local farmers; while the Senegal project has initiated a partnership with a micro-finance institution to provide loans to local users.

Discussing how the three operators managed to overcome the financing gap, he noted strategies ranged from obtaining equity finance in the Philippines, qualifying for a business plan award in India, and receiving additional subsidies from German institutions in Senegal.

Dereje Walelign, Lyedteo PLC, described some of the stand-alone solar solutions implemented by the company, including solar lanterns, lighting and cooling appliances for schools and health facilities, and community water pumps. He noted that a key element in the company’s business model is focusing on simple but efficient products.

Among challenges, Walelign highlighted difficulties in accessing remote sites and high turnover of technical staff due to the difficult work conditions. He noted that scaling up is often hampered by policy rather than financing gaps.



Participants during the discussion

During discussions, one participant questioned the lack of discussion of gender or social impact dimensions of energy access, while another speaker stressed the need for a differentiated approach that caters for different end users – from simple household lighting to rural entrepreneurs.

EXPERT DAY

OPENING SESSION: On Wednesday 12 February, the Second AEEP HLM officially opened. In his introductory remarks, Aboubakari Baba Moussa, Director of Infrastructure and Energy Department, African Union Commission (AUC), lauded the AEEP as being the most active of the partnerships established in Lisbon in 2007. He underscored the singular importance of energy for economic development, and expressed hope that delegates would have fruitful discussions on the way forward for the Partnership, which would set the tone for the ministerial discussions.

Franz Marré, Head of Division 313, Water, Energy, Urban Development, Geosciences Sector, Federal Ministry of Economic Cooperation and Development, Germany, highlighted figures from an IEA study that revealed an increase in energy demand in Africa, while demand in Europe was set to decline over the next 30 years. He further noted that the study estimated Africa’s energy savings potential could be as much as 85%, compared to 20% for Europe.

Outlining the drivers of energy demand on the African continent as economic development and population growth, Gary Quince, Head of the EU Delegation to the African Union, drew attention to the African Economic Outlook’s figures that project energy demand increasing at an average rate of 6% a year until 2050. He said this demand requires an investment of €40 billion per year, and that the Partnership is already addressing this through various resource mobilization activities.



Franz Marré, Head of Division 313, Water, Energy, Urban Development, Geosciences Sector, Federal Ministry of Economic Cooperation and Development, Germany



Gary Quince, Head of the EU Delegation to the AU



The dais during the opening session. L-R: **Klaus Rudischauser**, Deputy Director General, DG Development and Cooperation, European Commission; **Franz Marré**, Federal Ministry of Economic Cooperation and Development, Germany; Amb. **Gary Quince**, Head of Delegation of the EU to the AU; **H.E. Elham Ibrahim**, Commissioner for Infrastructure and Energy, AUC; **Wolfgang Moser**, Federal Ministry for European and International Affairs, Austria; and Moderator **Aboubakari Baba Moussa**, Director, Infrastructure and Energy Department, AUC.

Reiterating the EU's commitment to renewable energy and energy efficiency, Quince announced that above and beyond the AEEP, the EU has committed to partnering with 11 African countries that have prioritized energy in their national planning processes.

In her opening address, Elham Ibrahim, Commissioner for Infrastructure and Energy, AUC, reiterated that economic growth and sustainable development can only be achieved where there are reliable and affordable climate-smart energy sources. She lamented that Africa's energy access is below 35%, noting that this has reduced the economic growth and competitiveness of the continent.

Ibrahim called on delegates to use this meeting to review the status of the Partnership, map the way forward to sustain momentum of its 2020 Targets, and harmonize its path with related initiatives such as SE4ALL and the Programme for Infrastructure Development in Africa (PIDA).

THE ROAD FROM 2010 TO 2014 – DEVELOPMENTS OF THE AFRICA-EU ENERGY PARTNERSHIP: This session on Wednesday morning was moderated by Wolfgang Moser, Head of Unit VII.5d Development, Federal Ministry for European and International Affairs, Austria, and AEEP Co-Chair.

Ingmar Stelter, EUEI PDF, outlined key milestones in the history of the AEEP, including the first High-Level Meeting in Vienna in 2010; the launch of the RECP in 2010; the first AEEP Stakeholder Forum in Cape

Town in 2012; and subsequent National Energy Stakeholder Dialogues in Zambia, Cameroon, Ghana, Uganda and Djibouti, that discussed key gaps and strategies in terms of regulatory framework, energy access, and developing energy markets.

Philipp Mann, EUEI PDF, highlighted progress under four key action areas outlined in the RECP Strategy 2020: policy advisory services; active support for mobilizing private sector cooperation; facilitation of project development and financing; and technology, innovation and capacity development.

Among significant achievements, Mann noted support for policy and regulatory frameworks in five African countries, the development of regional renewable energy policy guidelines, and a policy toolkit for mini-grids, as well as the start of activities in the area of vocational training and higher education.

Achieving the AEEP 2020 Targets: Status Report 2014: Jon Marks, Chairman, Cross-border Information, consultant to EUEI PDF, presented the AEEP Status Report. He noted that the report aims not only to highlight progress towards the AEEP's political targets but also to identify areas where more action is needed to achieve common goals.

Marks noted that the two-year study builds on a 2012 baseline report that developed an initial set of indicators and has resulted in a database with a unique tracker for more than 2,700 generation and transmission of projects to help understand how AEEP targets are being reached.



Ingmar Stelter, EUEI PDF



Moderator **Wolfgang Moser**, Head of Unit VII.5d Development, Federal Ministry for European and International Affairs, Austria, and AEEP Co-Chair



John Marks, Chairman, Cross-border Information, consultant to EUEI PDF

Discussing some of the findings in relation to the key AEEP 2020 Targets on energy access, energy security, and renewable energy and energy efficiency, Marks noted that progress had been made on several fronts but that it is not evenly spread among Africa's diverse economies and societies. He highlighted the need for a continued focus on off-grid solutions, stating that results show that Africa has already exceeded some of the targets on renewables, such as solar.

Marks further noted that for other targets, such as the energy access target, a concerted effort by all actors is needed in order to accelerate developments and reach the AEEP 2020 target of providing access to energy to an additional 100 million Africans.

Marks highlighted that availability and reliability of centralized or independent datasets continue to present a formidable challenge for gathering overarching empirical data and are especially problematic when assessing indicators for energy access and energy efficiency. On next steps, he suggested developing more context-specific regional targets to take into account differences in the resource base and demographics across Africa.

During discussions, participants highlighted the links between energy access and economic opportunities, and the need for a greater focus on technical and financial support in order to reach the 2020 Targets. Noting that every small step counts, several speakers highlighted the potential gains to be achieved from increased awareness raising on energy conservation and the role of civil society in this.



Bernard Barandereka, Energy Expert, Infrastructure and Energy, AUC

SYNERGIES BETWEEN PIDA AND THE AEEP: This session aimed to discuss synergies and possible links between PIDA, an ambitious African programme aimed at delivering large-scale infrastructure projects across the continent, with almost one-third being in the energy sector, and the AEEP's 2020 Targets. The session was moderated by Franz Marré.

Bernard Barandereka, Energy Expert, Infrastructure and Energy, AUC, outlined the three phases of the PIDA initiative, noting its implementation requires an annual investment of US\$40 billion. He explained that PIDA's goal is to provide energy access to 100 million people by 2020 and 800 million by 2040, which requires diversifying the energy mix and incorporating renewables as key elements.

Barandereka highlighted proposals by African ministers of energy to harmonize regional and continent-wide energy policies, outlined a number of projects that are in progress, and called on the AEEP to help leverage funds to fill the financial shortfalls that currently exist. He also urged the AEEP to provide capacity building and training opportunities to enhance the achievement of PIDA's goals.

In the ensuing discussion participants commented on, *inter alia*: how to harmonize the efforts of regional parliamentary assemblies with the efforts of both the AEEP and the PIDA; the importance of the African Development Bank (AfDB) in leveraging financing for energy access in Africa; the need to involve civil society in energy policy discussions; the use of the Energy Charter as a model for cooperation; the absence of adequate energy data on the continent; and the need for the AEEP to set up mechanisms that address cross-border disputes relating to energy projects.



Participants during the discussion



Kandeh Yumkella, UN Special Representative, SE4ALL, during the discussion



Panel on “Chicken and Egg? – Enabling Environment and Energy Investment Projects.” L-R: **Jacob Waslander**, Head, Climate Change and Energy Division, Ministry of Foreign Affairs, the Netherlands; **Robert Pavel Oimeke**, Energy Regulatory Commission, Kenya; **Wichard von Harrach**, Neo Energies; **Albert Butare**, Africa Energy Services Group; **Klaus Rudischhauser**, European Commission; and Moderator **Mike Enskat**, Senior Programme Manager, GIZ

“CHICKEN AND EGG?” – ENABLING ENVIRONMENT AND ENERGY INVESTMENT PROJECTS

This session was moderated by Mike Enskat, Senior Programme Manager, GIZ, Germany, and aimed to explore how to best support public and private investments with a stable and conducive policy and regulatory framework. Introducing the panel, Enskat noted that the discussions would address ways to resolve the complex intersection between policy, private sector engagement and finance.

Robert Pavel Oimeke, Director, Renewable Energy, Energy Regulatory Commission, Kenya, outlined his country’s experience in first creating an enabling regulatory environment (the chicken) to attract investment (the egg) in the renewable energy sector. He highlighted the process of unifying disparate energy strategies at the national level to promote easier access to data and encourage investor-confidence.

Responding to a question on the landscape of the energy investment environment, Jacob Waslander, Head, Climate Change and Energy Division, Ministry of Foreign Affairs, the Netherlands, stated that in order to achieve energy access goals, committed people need to drive the process, projects have to be specific, simple and transparent, and challenges need to be approached one at a time to prevent prematurely giving up.

Wichard von Harrach, Partner, Neo Energies, compared the conditions on the two continents, noting that Europe’s uptake of renewables was largely driven by the favorable regulatory and financial environment. He discussed a 5 MW project in Tanzania, which he said demonstrates that grid parity is a viable strategy for many countries on the continent if an enabling financial framework is put in place.

Albert Butare, CEO, Africa Energy Services Group, discussed the promotion of small-scale renewable energy technologies in Rwanda, noting that the regulatory landscape and political commitment have improved significantly over the past 20 years.

Describing the current investment situation for medium- and large-scale projects, Butare said financial institutions are concerned about risk mitigation and capacity on the ground, and that these factors usually increase the cost to the end user. He suggested that to mitigate this, governments should focus on creating public-private partnerships and invest some funds to guarantee these kinds of projects. He also called for ideas to incentivize investors to finance small-scale projects in rural areas.

Klaus Rudischhauser, Deputy Director for Development and Regional Cooperation, European Commission, said Africa’s energy sector is riddled with contradictions, noting that the continent has the highest potential for renewable energy development in the world, but also has 600 million energy poor people. He stressed that addressing this gap requires the creation of instruments to attract investments in small-scale rural projects.

Rudischhauser further suggested that to transform the prevailing situation, all stakeholders should come together to tackle energy access, noting that the European Commission is concentrating its efforts on assisting governments to create enabling regulatory and financial environments, and bringing more political certainty to the arena.

Delegates then discussed the need to: assist fragile economies; develop an “ideas hub” to generate conversation on the creation of incentives for small-scale investment projects; and change behavior from conditionality-based proposals to action.

THEMATIC PARALLEL SESSIONS: On Wednesday afternoon, delegates convened in three parallel sessions addressing: energy security and regional integration; financing renewable energy projects; and energy access. The discussions in these sessions are summarized below. The summary of the session on energy access was provided by the AEEP Secretariat, as IISD Reporting Services did not cover this session.



Panel on "Energy Security and Regional Integration." L-R: **Elijah Sichone**, Executive Secretary, Regional Electricity Regulators Association of Southern Africa; **Daniel Schroth**, SE4All Africa-Hub Coordinator, African Development Bank; **Aboubakari Baba Moussa**, Director, Infrastructure and Energy Department, AUC; **Roberto Ridolfi**, European Commission; **Christoph Mayer**, Regional Director for Africa, Andritz Hydro, Austria; and **Babatunde Adeyemo**, Director, West African Power Pool.

ENERGY SECURITY AND REGIONAL

INTEGRATION: The aim of this session was to discuss the relevance of energy infrastructure development and regional integration, particularly through cross-border transmission lines and power pools, for energy security within Africa and, where appropriate, within Europe. The session was chaired by Aboubakari Baba Moussa, AUC, and moderated by Winfried Zarges, GIZ Office to the AUC.

Moussa opened the session by suggesting that regional integration in the energy sector in Africa was more a question of inter-sectoral coordination, than actual political integration. Zarges called on panelists to share their perspectives on whether regional integration drives energy security or vice versa.

Roberto Ridolfi, Director, Sustainable Growth and Development, European Commission, drew attention to the EU's support of various energy pools in Africa, and called for more viable small-scale projects to support. He stressed that it is "not a problem of money" but rather, of non-bankable projects.

Babatunde Adeyemo, Director, West African Power Pool, stressed that regional integration promotes energy security and described integration efforts in West Africa. He explained the process for the acceptance and roll-out of a regional energy project, noting that there are nine active projects, including one involving Côte d'Ivoire, Liberia, Sierra Leone and Guinea (the CLSG Project). He outlined the benefits of energy trading, stating that the region would soon have more regulated energy trade to reduce the cost to the end user.

Daniel Schroth, SE4ALL Africa-Hub Coordinator, AfDB, described the Bank's involvement in a number of regionally integrated projects including the CLSG Project. He called for more work on regional policy harmonization, risk mitigation and utility reform, and highlighted the importance of also assisting fragile states.

Elijah Sichone, Executive Secretary, Regional Electricity Regulators Association of Southern Africa, supported the case for regional integration promoting energy security, noting the benefits of integration as, among other things, resource optimization, market expansion, technological diversification, and cost savings. He called for strengthening regional institutions to enhance transboundary energy access, but noted the difficulties in harmonizing norms across regions.

Christoph Mayer, Regional Director for Africa, Andritz Hydro, Austria, listed factors that enhance regional integration including political stability, commercial and legal predictability, and inter-agency communication to build trust. He gave ECREEE as an example of a successful model now being replicated in East and Southern Africa.

Mayer stressed that integration is key to upgrading energy systems in Africa, and urged a specific focus on a detail-oriented process of regional integration that will ensure energy security for future generations.

Pascal Mavoula, Central Africa Power Pool, lamented the low rate of energy access in central Africa, drawing attention to the lack of inter-linkages between various hydropower projects and inadequate data on these projects. He acknowledged the collaboration between stakeholders in the region and the AfDB, noting that this may enhance further regional cooperation.

In the discussion, participants commented on a number of issues including the need to: develop a harmonized legal framework for integration; consider national sovereignty alongside regional integration; and move beyond the regional integration debate towards a focused energy finance discussion.

FINANCING RENEWABLE ENERGY PROJECTS:

The aim of this panel, which was co-organized by the AEEP Secretariat and the International Renewable Energy Agency (IRENA), was to discuss the implications of and for public and private financing and related instruments, including risk mitigation. The session was moderated by Wolfgang Moser and Johan van den Berg, CEO, South African Wind Energy Association.

In a welcome statement, Frank Wouters, Deputy Director General, IRENA, noted that 65% of African countries have renewable energy policies and targets in place, but that funding remains elusive. He attributed this to the perceived risk of renewables among investors, despite the lack of empirical evidence that fossil-based energy projects are less risky.

Wouters added that if just a fraction of funding from instruments such as green bonds could be accessed, it would help mitigate risk. He called for mobilizing local capital markets so as to attract other institutional investors.

Van den Berg then introduced the panel and asked them to offer their experiences and views on some of the specific challenges facing the financing of renewable energy projects.



Panel on "Financing Renewable Energy Projects." L-R: Moderator **Johan van den Berg**, CEO, South African Wind Energy Association; **Rashid Abdallah**, Regional Geothermal Programme Expert, AUC; **Helke Rüttgers**, Head of Division, ACP Policy and Portfolio, European Investment Bank; **Admassu Tadesse**, CEO and President, PTA Bank, Kenya; **Bernard Osawa**, Senior Project Manager, Frontier Investment, Denmark; and **Wichard von Harrach**, Neo Energies

Rashid Abdallah, Regional Geothermal Programme Expert, AUC, said the greatest challenges facing energy entrepreneurs include: the high cost of project development, including the cost of undertaking feasibility studies and other due diligence steps; political and "policy" risks; and insufficient know-how on scaling projects to foster investor confidence. He said the AUC has established a catalyst fund to mitigate such risks, enabling developers to access available financial instruments.

Wichard von Harrach said one of the limitations for operators is that the banking sector is not tailored to support meso-level projects and challenged financial institutions to seek ways to lower their transaction costs.

Admassu Tadesse, CEO and President, PTA Bank, Kenya, said that his institution is looking for bankable projects of any size, and has wind and solar projects ranging from 5 to 25 MW on its portfolio. He added that the real issue is not the absence of financial instruments but how to bring them together in the context of a particular project. He also challenged policy makers to tackle energy subsidies, saying they present a real barrier to investors in many countries.

Helke Rüttgers, Head of Division, ACP Policy and Portfolio, European Investment Bank (EIB), said the EIB has started to look at smaller projects, citing the Cape Verde Wind project, which she described as the Bank's first "small" ticket. She also noted that the SE4ALL initiative has forced institutions like hers to look at ways of supporting meso-level projects.

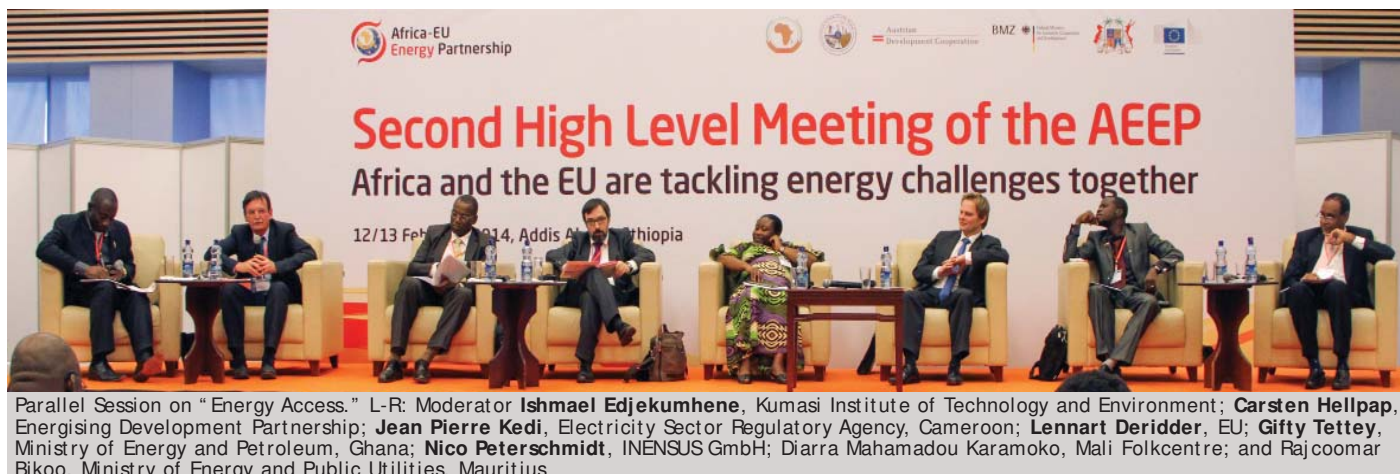
Responding to issues raised by the panel, one participant highlighted the importance of carbon financing in providing bridging funds to scale up small projects, but lamented that commercial banks decline to engage in such independent power producer projects, as they do not understand climate financing.

In response to a question raised about how the EIB can modify its rigorous vetting procedures to accommodate smaller projects, Rüttgers said the Bank has built in flexibility by delegating some of the responsibility for due diligence requirements to local banks. Bernard Osawa, Frontier Investment, remarked that, ultimately, it is better for smaller projects to comply with due diligence requirements right from the outset, with von Harrach adding that "you need to go even further and over-comply."

Recalling that his company went through a long and difficult process to secure equity despite having a convincing business model, von Harrach opined that the reason for this could be the low level of information, combined with preconceived ideas about the risks of investing in Africa. He noted that in the case of the Turkana project, it was very difficult to pin down what informed the funders' risk assessments, as "every time we addressed their concerns they came up with a new set of issues."

Tadesse observed that part of the problem could be the high expectations created at international meetings with the promise of "green finance," noting that in reality, there is a lot more financing available today and that his Bank's disbursements have reached record levels. He said this shows that there is new willingness among equity funds to invest in renewables and that the real challenge for many African countries is to build the necessary policy and regulatory environment.

Osawa emphasized the need to understand that governments and banks have very different perceptions of risk, noting that the risk assessments made by lenders are real because the political and policy context in many countries is very unpredictable. Van den Berg added that one golden rule is not to assume that politicians understand project financing, and emphasized the need for sensitizing policy makers about



where the bottlenecks lie from an investor's perspective, in order to help them understand why and where regulatory reform is needed.

Wrapping up the session, van den Berg asked the panel to reflect on how concessional financing might be blended with private capital so as to tap the liquidity in international money markets. Von Harrach suggested "tranching" as a promising approach, noting that it attracts different investors at different stages.

With regard to the role of public-private partnerships, Rüttgers commented that "if you want to go down the PPP road then every stakeholder has to do their homework," while Tadesse noted that sovereign support is always essential for the renewables sector, even in established markets such as Europe.

PARALLEL SESSION ON ENERGY ACCESS: The objective of this session was to discuss the lessons learnt, including successes and failures, from the roll-out and scale up of energy access business models and programmes. The session was chaired by Rajcoomar Bikoo, Acting Director General, Ministry of Energy and Public Utilities, Mauritius, and moderated by Ishmael Edjekumhene, KITE. The panelists were: Lennart Derrider, Head of Energy Policy, Development and Cooperation – EuropeAid, European Commission; Jean Pierre Kedi, Director General, Electricity Sector Regulatory Agency, Cameroon; Mahamadou Karamoko Diarra, Energy Access Coordinator, Mali Folkecenter, Mali; Nico Peterschmidt, CEO, Inensus, Senegal; Carsten Hellpap, Programme Manager, Energising Development Partnership, Germany; and Gifty Tettey, Deputy Director, Ministry of Energy and Petroleum, Ghana.

Discussions during the session focused on: sharing global and national experiences; and identifying barriers and best practices. The key messages that emerged from the session included: the need to balance electricity and non-electricity options, and grid and off-grid solutions, as the majority of people without access to energy will require off-grid solutions; the importance of stakeholder coordination, noting the role of the government, as well as of the SE4ALL initiative in achieving this; and the need to disseminate good practices, including of policy, regulation, technology and financing models, among stakeholders.

HIGH-LEVEL MINISTERIAL SEGMENT

The Ministerial segment of the Second AEEP HLM took place on Thursday, 13 February, moderated by Tumi Makgabo, South Africa. Participants included African energy ministers, EU ministers responsible for Africa-EU energy relations, representatives of the AUC and the European Commission, business leaders and heads of key international energy institutions.

OPENING SESSION: After opening remarks by Moderator Makgabo, participants viewed a short video charting the evolution of the AEEP from its launch at the Lisbon EU-Africa Summit in 2007 to the adoption of the 2020 Targets, and outlining some of its key achievements.

Welcome statements:

Alemayehu Tegenu, Minister of Water, Irrigation and Energy, Ethiopia, highlighted some of Ethiopia's achievements in enhancing energy access and stressed that the paradox of continuing energy poverty in a resource-rich continent can no longer be allowed to "rule our lives."

Elham Ibrahim recalled that the AEEP was specifically established to enhance access to energy with a special focus on



Moderator **Tumi Makgabo**, South Africa



Elham Ibrahim, Commissioner for Infrastructure and Energy, AUC

achieving the Millennium Development Goals in Africa. Lamenting that Africa continues to have the lowest rate of access to modern energy services, she highlighted a number of AUC initiatives, notably the Geothermal Risk Mitigation Facility, which is providing support for public and private sector development of geothermal resources in Eastern Africa.

Speaking via video message, Andris Piebalgs,

European Commissioner for Development Cooperation, reiterated the EU's commitment to providing energy access to 500 million people by 2030. He drew attention to the EU's engagement with the SE4ALL initiative, which he noted had complementary goals to those of the AEEP. He announced that the EU would make a further contribution of €5 million to the RECP.

Christian Schmidt, Deputy Minister, Federal Ministry of Economic Cooperation and Development, Germany, and Co-Chair of the AEEP, highlighted Germany's transformation from conventional energy sources to renewable energy, and drew attention to the country's support for energy projects



Christian Schmidt, Deputy Minister, Federal Ministry of Economic Cooperation and Development, Germany, and Co-Chair of the AEEP

and programmes in Africa. He called on delegates to focus on meeting the SE4ALL and AEEP goals and targets, and emphasized private sector involvement and multi-stakeholder dialogue to realize increased energy access.

Andreas Melan, Austrian Ambassador to Ethiopia, pledged the full cooperation of his government to meeting the goals of the SE4ALL initiative, and, in this regard, noted that talks are underway to fund an East Africa energy center to enhance cooperation and energy security in the region.

Keynote addresses and inspirational messages:

Lauding the AEEP as a true translation of the SE4ALL vision, Kandeh Yumkella, UN Special Representative, SE4ALL, described the dreams of African citizens for a decent life and the commitment of African leaders to lead their countries to middle income status, underlining that this cannot be achieved without energy.

Yumkella noted with regret that the current African position on the post-2015 agenda only mentions energy three times, and urged African governments to lobby for a stand-alone goal on access to sustainable energy. He dispelled the notion that energy access on the continent could be funded solely through development assistance and stressed that consistent messaging at high-level meetings was crucial for attracting the large amounts of investment needed to achieve Africa's energy goals.

Erastus Mwemba, Deputy Chairperson, AUC, reiterated that while the AEEP has been one of the most active EU-Africa partnerships, "we must not forget the issue is about eliminating extreme poverty." He noted that the financing gap for achieving the AEEP Targets is about US\$40 billion per year and called for concerted efforts to mobilize the required resources, including through leveraging other initiatives.



Andreas Melan, Austrian Ambassador to Ethiopia



Erastus Mwemba, Deputy Chairperson, AUC



Maria van der Hoeven, IEA

ACHIEVEMENTS OF AFRICA-EU COOPERATION IN THE ENERGY SECTOR AND "THE CRYSTAL BALL" - ENERGY CHALLENGES AND OPPORTUNITIES FACING EUROPE AND AFRICA IN THE 21ST CENTURY:

Alluding to the title of the session, Maria van der Hoeven, Executive Director, IEA, said the objective of this meeting does not require a crystal ball, but rather a vision and commitment to use available resources more effectively. She emphasized that while fossil fuels are important, green innovation and technology deployment are critical for Africa's energy future, as well as that of the EU. She underscored the role of training and capacity building in seizing such opportunities, highlighting some of IEA's activities to build capacity for energy statistics in Africa.

Christian Schmidt, Germany, outlined his country's contribution to the RECP. He underlined that Germany will continue to take energy as a priority area in its development support efforts, and will use its experience in developing green energy markets to help African countries offset the higher investment costs for renewables and strengthen their institutional and human capacities.

Fidel Marcos Mañe Ncogo Eyang, Delegated Minister of Energy, Equatorial Guinea, described his country's efforts to diversify its energy supplies by 2017, highlighting various solar and hydro-power projects and a power interconnectivity project, which will connect various towns to diversified energy products.

Omar Torbo Djerma, Secretary General, Ministry of Energy and Petroleum, Chad, lamented the underdevelopment of the energy sector in his country, which is characterized by a 10% rate of access to electricity and a high rate of charcoal consumption. In this regard, he reported that the creation of a renewable energy development agency will contribute to mobilizing the vast energy resources in the country, including through promoting rehabilitation and energy efficiency in power plants around the country.

Simon Trace, Practical Action, and Civil Society Focal Point for the AEEP, lamented the lack of data and a coherent strategy for delivering energy to the rural poor, calling for a commitment to reach the most vulnerable and marginalized communities who would not be reached in a business-as-usual scenario.



Fidel Marcos Mañe Ncogo Eyang, Delegated Minister of Energy, Equatorial Guinea



Trace outlined civil society's concerns for the work of the Partnership, including: the inability to track investments made to enhance off-grid capacity; the shortage of available financing for small-scale entrepreneurs; and the dearth of funding to CSOs working in the energy sector.

Responding to participants' questions, Eyang explained how Equatorial Guinea utilized its oil windfalls to expand electricity networks throughout the country, noting the country is on track



Omar Torbo Djerma, Chad

to achieve its energy access targets by 2017.

Djerma stressed the need for developing context-specific energy plans, noting that the needs of displaced populations are very different from those of settled agricultural communities.

Van der Hoeven said that the experiences of

Equatorial Guinea and Chad show the need to mobilize adequate funding and stressed the need to focus efforts on developing a sound investment climate to attract private and public-private investments.

In the ensuing general discussion, a delegate from France underscored the link between renewable energy and energy efficiency, and climate change mitigation, noting that this link will be a core issue as his country prepares to host the UN climate conference in 2015.

A delegate from Mali lauded Equatorial Guinea for its achievements, saying his country had developed numerous plans for the development of the energy sector, but that the current implementation rate is only 20% due to a lack of sustainable financing.

Schmidt stressed that state support is vital for crossing the investment threshold, and advised African governments to "just do it" by setting the agenda and utilizing any instruments that are available to them.

A delegate from Italy drew attention to the Italia-Africa initiative, explaining that this focuses on diversification of energy sources to increase energy security, within the broader framework of EU-Africa cooperation. He said preparations are underway for the first conference on this initiative to be held in Rome in 2015.

A private-sector participant drew attention to an exhibition showcasing the latest technological innovations taking place in parallel to the HLM, noting it demonstrates the commitment of private sector stakeholders, and decried the lack of matching enthusiasm from governments to facilitate private investors.

"THE TOOLBOX"- TAKING ACTION, MOBILIZING COMMITMENT, AND COORDINATING EFFORTS TOWARDS THE AEEP AND SE4ALL TARGETS:

Introducing the session, Moderator Makgabo, requested the panel to focus on how to meet the challenges to achieving the AEEP and SE4ALL's goals.

Elham Ibrahim stressed the harmonization of regulatory and policy frameworks in order to roll out large-scale regional and continental projects with the capacity to reach 100 million people. She called for governments to create an enabling environment to spur investor confidence, noting that this needs to be member-state driven. She drew attention to the AfDB's Africa50 Infrastructure Fund, saying this has the capacity to fund projects at the preparatory phase.

Stressing the importance of planning in order to ensure investment, Kandeh Yumkella described five tools that his agency will package for interested stakeholders: the Global Tracking Framework, the Investment Readiness Ranking, IRENA's RE-Map, the Energy Trilemma published by the World Energy Council based on the report on the utilities, and the World Economic Forum's report on the Energy Architecture Performance Index.

Acknowledging the need to transform the energy sector along the same lines as the mobile telephony sector, Yumkella drew attention to plans to engage commercial banks to raise the US\$600-800 billion in energy investments required each year.

Klaus Rudischhauser listed some elements within the European Commission's toolbox to assist in meeting energy access targets, including energy programming in bilateral relations, a technical assistance facility, the EU-Africa Infrastructure Trust Fund, equity funds for small-scale renewable energy development, and an energy facility for civil society rural electrification activities. Noting that more still needs to be done, he urged African governments to buy in to the energy sector by working on governance issues and creating favorable investment climates.

Stating that every loan is a signal to the investment community of a viable business, Tamsyn Barton, Director-General for Operations Outside the EU and Candidate Countries, EIB, outlined three elements that the Bank can contribute to in assisting countries to meet their energy access goals: sharing experiences from the EU; leveraging investment funds from the private sector; and assisting countries to scale up projects and programmes already in existence.

Juraj Chmiel, Special Envoy for the External Dimension of the EU, Czech Republic, called for more attention to be paid to the overlapping needs of ensuring food security and investing in renewable energy sources. He highlighted the immense pressures on land in both cases, but outlined some benefits of a food security-renewable energy generation mix, including additional income and savings for farmers who dedicate sections of their land to generating renewable energy.

In the discussion, delegates acknowledged the need for capacity building and for data collection for planning processes. Others spoke on energy-sector subsidies, with one suggesting that subsidies are better placed in renewable energy investments. Another delegate stressed the need to include national, regional and continental parliaments in the discussion, noting that they are responsible for implementation.



Panel on "The Toolbox" - Taking Action, Mobilizing Commitment, and Coordinating Efforts Towards the AEEP and SE4ALL Targets." L-R: **Kandeh Yumkella**, SE4ALL; Commissioner **Elham Ibrahim**, AUC; **Klaus Rudischhauser**, Deputy-Director General, DG Development and Cooperation, European Commission; **Juraj Chmiel**, Special Envoy for the External Dimension of the European Union, Czech Republic; **Tamsyn Barton**, Director-General for Operations Outside the EU and Candidate Countries, EIB; and Moderator **Tumi Makgabo**, South Africa.



Panel on "Business and Policy Leaders Roundtable." L-R: **Ernesto Marcias**, President, ARE; **Helen Tarnoy**, Founding and Managing Director, Aldwych International, United Kingdom; **John Abdulai Jinapor**, Deputy Minister for Energy and Petroleum, Ghana; **Ompi Aphane**, Deputy Director General for Policy, Planning and Clean Energy, Department of Energy, South Africa; **Frank Wouters**, Deputy Director-General, International Renewable Energy Agency (IRENA); and Moderator **Tumi Makgabo**, South Africa.

BUSINESS AND POLICY LEADERS ROUNDTABLE:

The objective of the roundtable was to discuss options for better and closer cooperation between the policy and the business sectors, in order to attract further private investments towards the AEEP 2020 Targets.

In his keynote address, Frank Wouters described the challenge facing the African continent as building a new energy infrastructure for one billion Africans, in just one generation. He said this will require mobilizing substantial resources in a risk-averse environment, but said the encouraging growth of the renewables sector, which grew by 230% between 2011 and 2012, shows there is a unique opportunity to accelerate investments.

Wouters noted that another advantage for the continent is its vast stock of cost-effective renewable resources, which means the continent can meet its own energy needs. He highlighted a number of IRENA initiatives to help kick-start innovative projects, including the African Clean Energy Corridor that aims to galvanize investment and optimize the renewable energy mix through a regional approach.

John Abdulai Jinapor, Deputy Minister for Energy and Petroleum, Ghana, said Africa's booming economies are further compounding the challenge of providing reliable, efficient and sustainable energy, but stressed that with the technological innovations currently available, it is "incomprehensible" that millions of people continue to suffer in energy poverty. He said his country's focused approach to energy development has enabled Ghana to increase access from just one-third to nearly 80% of the population in one decade.

Jinapor explained that in order to reach universal coverage, his government launched decentralized renewable energy bases and mini-grids targeting communities in remote areas. He highlighted some of the lessons learned, including the need to: take complementary demand-side measures to enhance energy efficiency; and ensure a favorable policy environment, such as attractive feed-in tariffs.

Ompi Aphane, Deputy Director-General for Policy, Planning and Clean Energy, Department of Energy, South Africa, outlined the policy landscape in South Africa, noting that expanding energy access is no longer a pressing issue, but rather related issues such as creating employment and ensuring affordability for poor populations, tackling wastage, and ensuring diversification and energy security within a regional context.

Aphane noted that in the process of establishing its renewable energy framework REIPPP, the country had been exploring all alternatives to traditional feed-in tariffs with a

view to encouraging competitiveness and addressing the needs of all stakeholders. He added that this way, an auction-based system had been put in place that has proven successful also in terms of creating local value addition. He stressed the need for African countries to find energy solutions that match their circumstances.

Ernesto Marcias, President, ARE, said expanding renewable energy is increasingly becoming a financial, rather than technological issue, as decentralized and off-grid solutions have become more viable. He called for a focus on users' needs when choosing from among the many available models and stressed the need for improved coordination among different stakeholders to scale up off-grid solutions.

Helen Tarnoy charted the development of the Lake Turkana Wind Power project, which is co-developed by her organization. She said that despite its strong project fundamentals that include "world class wind energy," a very cost-effective tariff, and strong support from the Kenyan Government, the 310 MW wind farm was 10 years in development before it was "discovered." She highlighted that putting together the funding package, amounting to €620 million, had been an extremely onerous process.

Tarnoy concluded that undertaking innovative projects is not for the "faint-hearted," but that it is the job of the independent power provider to manage such risk.

In the ensuing discussion, delegates, *inter alia*, noted: the importance of decentralizing the energy sector; the need for greater focus on countries that are investment-ready; the need for government buy-in in the renewable energy sector; the importance of flexible feed-in tariffs; and the advantages of an international legal instrument to protect investors from political and regulatory risks.

ADOPTION OF THE ADDIS ABABA COMMUNIQUÉ:

Franz Marré introduced the draft Communiqué, explaining the process that was used to develop the draft text and noting that the objective is to bring strong messages to African and European policy makers and other energy stakeholders. Moderator Moussa then took delegates through the recommendations and key messages, which the meeting adopted with some minor amendments.

In the Addis Ababa Communiqué, African Energy Ministers, EU Ministers responsible for Africa-EU energy relations, and representatives of the AUC and the European Commission agree, *inter alia*, that: addressing the energy challenges facing both continents requires a holistic perspective; enhancing energy efficiency offers potential for increased energy security and cost-effectiveness that has not been fully

explored and exploited, thereby constituting an important gap in the landscape of instruments for achieving the AEEP and SE4ALL targets; the AEEP targets can only be achieved by putting in place sound policy and regulatory environments and mobilizing public and private resources and capacities at all levels to promote energy market development; and substantial synergies and resource efficiencies can be tapped by exploring the potential of the nexus approach for integrating energy into other sectors.

The Communiqué acknowledges the contribution of various national, regional, bilateral and multilateral initiatives, programmes and projects implemented in the context of Africa-EU energy cooperation, including by non-state actors, in achieving the AEEP's 2020 Targets and the SE4ALL objectives. It also takes note of the first AEEP Status Report 2014 and commitments contained in the AEEP Action Programme for the post-2013 period to contribute to the achievement of the AEEP targets.

Among its recommendations, the HLM calls for:

- A substantial increase in efforts by both continents to achieve the AEEP 2020 Targets;
- Efforts to realize the full potential of the RECP as the AEEP's delivery mechanism to mobilize meso-scale renewable energy investments;
- Continued implementation of policy and regulatory reforms in Africa to create an enabling environment for increased private sector investments;
- Reinforcement of the dialogue between policy makers and stakeholders from the private sector, civil society and academia in the context of the AEEP targets; and
- Continued reporting and monitoring of progress towards achieving the AEEP Targets as well as the SE4ALL goals.

The Communiqué concludes with a call to Heads of State at the EU-Africa Summit scheduled for April 2014 to continue to provide political leadership on energy, take ambitious decisions that build upon the progress made under the AEEP, and ensure an integrated approach to addressing access to energy, water and food.

CLOSING OF THE SECOND AEEP HLM: In a brief wrap-up session, Wolfgang Moser provided some meeting highlights and lauded delegates for sending a strong message to the upcoming EU-Africa Summit through the Communiqué. Franz Marré presented Moser with a token of appreciation for his work as Co-Chair of the Partnership, at the conclusion of his term. Delegates then watched a video prepared by the young journalists that attended the conference.

In his concluding remarks, Alemayehu Tegenu noted that the meeting had been successful in taking stock of the Partnership, and urged members to work towards tangible successes to be shared at the third AEEP HLM. Klaus Rudischhauser called on delegates to work together to bridge the gap between the challenges to achieving energy access, and the opportunities present to end energy poverty in Africa.

Fidel Marcos Mañe Ncogo Eyang then gave a vote of thanks and the

second AEEP HLM concluded its deliberations at 7:28 pm.



Alemayehu Tegenu, Minister of Water, Irrigation and Energy, Ethiopia

UPCOMING MEETINGS

Thematic Debate of the UN General Assembly “Water, Sanitation and Sustainable Energy in the Post-2015 Development Agenda:”

This thematic debate will focus on key issues such as the main challenges facing the water, sanitation and energy sectors, hampering the achievement of the Millennium Development Goals, and how these challenges can be addressed in an integrated manner in the post-2015 development agenda. **dates:** 18-19 February, 2014 **venue:** UN Headquarters **location:** New York City, US **www:** <https://www.un.org/en/ga/president/68/settingthetstage/1wsse.shtml>

Solar & Off-grid Renewables Africa: This event aims to support and accelerate the deployment of solar and off-grid renewable energy in Africa, and break down the barriers to development by bringing together key stakeholders, including investors, policy makers, developers, energy companies, financiers, NGOs, manufacturers and suppliers. **dates:** 4-5 March 2014 **location:** Nairobi, Kenya **www:** <http://africa.solarenergyevents.com>

Workshop on International Standards in Support of Policies for Energy Efficiency and Renewable Energy:

Organized by the IEA, International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), this workshop is being convened to discuss how to boost stakeholder engagement in international standardization and to ensure that international standards support the transition towards more sustainable energy systems. Participation is by invitation only. **date:** 13 March 2014 **location:** Paris, Ile-De-France, France **www:** http://www.iea-4e.org/files/otherfiles/0000/0300/Flyer_Workshop_on_IS_for_energy_efficiency_Mar_2014.pdf

5th World Summit for Small Wind: The World Wind Energy Association and New Energy Husum are hosting this event, which will address the theme ‘Small Wind - Success Stories from all over the World’. It aims to present an overview of benefits and impacts of the small wind industry globally, as well as the framework and conditions that have led to small wind successes. **dates:** 20-22 March 2014 **location:** Husum, Schleswig-Holstein, Germany **contact:** Jean-Daniel Pitteloud **phone:** +49 228 36940-81 **e-mail:** jdp@wwindea.org **www:** http://www.wwindea.org/home/index.php?option=com_content&task=view&id=403&Itemid=40

Africa Photovoltaic Solar Energy Conference and Exhibition:

This event will provide an opportunity for stakeholders to discuss: increased potential for exploitation and use of solar energy in Africa; transfer of appropriate technologies to the African context; promotion of investment; development of trade and business linkages between African professionals and their counterparts in the world; establishment of business partnership agreements; and creation of technical, financial or commercial extension programmes. **dates:** 27-29 March 2014 **venue:** Durban International Convention Centre **location:** Durban, Kwazulu-Natal, South Africa **phone:** +39-055/500 21 74 ext. 204 or +49-(0)89/720 12 735 **e-mail:** info@africapvsec.com **www:** <http://www.africapvsec.info>

The Future of Energy Summit 2014: This invitation-only summit will gather decision-makers from the private and public sectors to discuss the future of energy markets, industry, finance and policy. The 2014 theme will be “Driving System Change” and topics to be discussed include the development of new grid systems, cyber-security, clean energy integration and the addition of electric vehicles to the grid. **dates:** 7-9 April 2014 **location:** New York City, US **www:** <http://about.bnef.com/summit/>

Fourth EU-Africa Summit: The Fourth EU-Africa Summit will bring together African and EU leaders, as well as the leaders of EU and African Union institutions. Under the theme “Investing in People, Prosperity and Peace,” participants will

discuss topics including peace, security, investment, climate change and migration. **dates:** 2-3 April 2014 **venue:** Council - Justus Lipsius Building, 175 rue de la Loi **location:** Brussels, Belgium **phone:** + 32 (0)22819000 **www:** <http://www.european-council.europa.eu/eu-africa-2014>

International Conference on Sustainability in the Water-Energy-Food Nexus: This conference will address linkages between water, energy and food security, seeking to assess available information, identify knowledge and gaps, share lessons, facilitate networks, and contribute to consensus on priorities. The conference is jointly sponsored and organized by the Global Water System Project, German Development Institute, the UN Environment Programme, the University of Bonn, the Center for Development Research, and the CGIAR Research Programme on Water, Land and Ecosystems. **dates:** 19-20 May 2014 **venue:** Maritim Hotel **location:** Bonn, Germany **www:** <http://wef-conference.gwsp.org/>

Local Renewables 2014 Conference: Themed “Shaping your solar city and region-practical solutions from planning to implementation,” this conference will offer an international forum for policy-makers, energy experts, energy services providers, researchers and business representatives to discuss the future of local renewable energy. **dates:** 23-24 October 2014 **location:** Freiburg, Germany **www:** <http://www.local-renewables-conference.org/>

South Africa International Renewable Energy Conference 2015 (SAIREC): The Government of South Africa together with the South African National Energy Development Institute and REN21 are hosting the South Africa International Renewable Energy Conference, to gather ministers, decision-makers, civil society, academia and the private sector, to discuss experiences and strategies for accelerating the global deployment of renewable energy. The event is aimed particularly at giving the African renewable energy industry opportunities to showcase its work and gain insights from other participants. **dates:** 4-7 October 2015 **location:** South Africa **e-mail:** secretariat@ren21.net **www:** http://ren21.net/Portals/0/documents/activities/IRECs/IREC%202015%20announcement_final.pdf

Second AEEP Stakeholder Forum: The next AEEP Stakeholder Forum is scheduled to take place in 2015, with the aim of contributing to strengthening the involvement of academia, non-governmental organizations and the private sector in achieving sustainable energy markets. **dates:** TBC **location:** TBC **www:** <http://www.aEEP-forum.org/>

GLOSSARY

AEEP	Africa-EU Energy Partnership
AfDB	African Development Bank
ARE	Alliance for Rural Electrification
AUC	African Union Commission
CSO	Civil Society Organization
ECOWAS	Economic Community Of West African States
ECREEE	ECOWAS Centre for Renewable Energy & Energy Efficiency
EUEI PDF	EU Energy Initiative Partnership Dialogue Facility
EIB	European Investment Bank
IEA	International Energy Agency
HLM	High-Level Meeting
KITE	Kumasi Institute of Technology, Energy and Environment
PIDA	The Programme for Infrastructure Development in Africa
RECP	Africa-EU Renewable Energy Cooperation Programme
REN21	Renewable Energy Policy Network for the 21 st Century
SE4ALL	Sustainable Energy for All



View of the AU headquarters in Addis Ababa, Ethiopia, venue for the meeting