

IRENA Activities, Events and Publications

16 April 2013

Activities and Events

December

IRENA conducted Renewables Readiness Assessments (RRAs) in Zambia (10-12 December), Swaziland (13-15 December) and The Gambia (16-19 December). The RRA process was introduced in two Southern African Development Community (SADC) countries, Swaziland and Zambia, to further test the RRA methodology and process with the involvement of the SADC Secretariat. Local consultants are working as project facilitators with the country RRA teams to complete the RRA templates and draft the countries' reports with the guidance of IRENA and SADC. The aim of these missions was the peer review of the RRA preliminary findings on methodology and process for further improvement, and to meet donors and other key stakeholders in order to complement the country RRA team's understanding at the operational level.

On 13 December, the Deputy Director-General travelled to Equatorial Guinea for the **7**th **Summit of African, Caribbean and Pacific (ACP) Heads of State and Government Meeting** on the major challenges facing ACP, and to devise innovative strategies for future action. At this high-level event, he gave a speech on "Development of Renewable Sources of Energy".

January

The Advisory Committee held its first meeting on the IRENA and Abu Dhabi Fund for Development (ADFD) project facility on 12 January, as the application period ended for its first funding cycle. As of the deadline, over 80 project summary applications had been submitted online for funding by the ADFD through the IRENA/ADFD project facility. The Advisory Committee discussed an appropriate approach for project review and the review of procedures. The Chair reported the outcome of this meeting to the third Assembly. (Please also see Forthcoming Events below for next steps).

Over 1,000 participants – representing nearly 140 countries, 74 organisations, and other stakeholders – gathered for the **third session of the Assembly of IRENA**, which took place on 13-14 January 2013 in Abu Dhabi, United Arab Emirates. At the Assembly, IRENA Member States adopted the medium-term strategy for the Agency, which provides a framework for its work in the coming years—serving as a centre of excellence, advisory resource and hub to promote and accelerate renewable energy deployment, and as an authoritative voice on renewable energy. There were announcements regarding membership by China, Iran, Singapore, Vanuatu and Zambia, and the Assembly also approved a budget of USD 29.7 million for 2013, comprising USD 18 million from regular contributions of Members and USD 11.7 million in voluntary contributions. Photos from the third Assembly are available here.

At the third session of the Assembly, IRENA launched its **global Renewable Energy Roadmap (REMAP 2030)** to double the share of renewable energy by 2030. The launch was accompanied by a working paper outlining the proposed process and progress to date. Preliminary findings suggest that, if progress continues at the current pace, renewable energy will account for 21% of the global energy mix in 2030, 9% below the 30% target. IRENA's initial analysis suggests that doubling the share of renewable energy in the global energy mix, while a significant challenge, will nevertheless be achievable if there is action at all levels.

During the third session of the Assembly, IRENA also launched its first set of 10 technology briefs. These briefs, produced by IRENA in collaboration with the International Energy Agency's Energy Technology Systems Analysis Programme (IEA-ETSAP), provide technical background information and analyse the market potential and barriers. The first set provides insights for policy makers on the following technologies: biomass co-firing, liquid biofuels, production of bio-ethylene, production of bio-methanol, electricity storage, thermal energy storage, concentrating solar power, solar photovoltaics, heat pumps, and water desalination.

On 15 January, IRENA organised an **expert meeting on IRENA's Institutional Publication.** The themes discussed included the defining features of an institutional publication, key prerequisites for such a publication to become an anchor unifying IRENA's work, and communication and dissemination strategies.

IRENA's third Assembly coincided with the opening of <u>Abu Dhabi Sustainability Week</u> (ADSW), a series of high-level energy and environment meetings in the UAE capital. IRENA's activities during the week included a booth and a busy schedule of presentations at the **World Future Energy Summit (WFES)**. During WFES and the **Abu Dhabi International Renewable Energy Conference (ADIREC)** that took place 15-17 January, IRENA operated a booth to display publications, multimedia and interactive products. The booth also had a dedicated space that featured a series of presentations of IRENA's projects and activities. The booth presentations created opportunities for in-depth discussions between IRENA experts and interested Member delegates and other visitors to WFES.

On 15 January, an event on the Renewables Readiness Assessment (RRA) provided an opportunity to illustrate how this process could assist participating countries in developing a well-articulated action plan for deploying renewable energy. It discussed how the actions identified by actors and stakeholders in countries could be supported to enable greater deployment of renewable energy sources in their countries. It also presented the methodology, highlighting the country-driven approach as well as the impact of the RRA process on the countries that may be interested in engaging with IRENA in this initiative.

IRENA partnered with the Renewable Energy Policy Network for the 21st Century (REN21) to build a qualitative and quantitative Renewable Energy Data Collection Framework (REDAF) to help improve the availability and accessibility of relevant data and to provide a platform for engaging country participation in data collection processes to attract investments. An event entitled "Renewable Energy Data to Attract Investment: Findings from the REDAF initiative" was held on 16 January. More than 40 individuals participated in the workshop, representing governmental and public institutions, regional organisations, research institutions and the private sector. Participants discussed challenges and opportunities for data collection at the local and regional level, and identified gaps that may impede access to data and information on renewable energy, particularly in developing countries. Insights gained from the workshop will help guide IRENA's programmatic activities in data collection and knowledge sharing in 2013.

On 17 January, IRENA hosted an event entitled "Innovation for Accelerating the Deployment of Renewable Energy Technology", which presented the Agency's work to provide Member Countries with practical guidance on the establishment of a policy framework for innovation in renewable energy. The innovation framework, based on IRENA's analysis in collaboration with the United States National Renewable Energy Laboratory (NREL), incorporates various elements, such as setting clear national objectives in relation to the energy sector, defining a national strategy for innovation, establishing a governance structure for innovation, and deploying appropriate policy instruments. Participants welcomed IRENA's activities in this field, including work on intellectual property rights (IPR), standardisation, technology transfer and cooperative research, development and demonstration (RD&D). Furthermore, the event stressed the importance of linking innovation to market opportunities in order to put innovative technologies onto the commercial stage. The slides presented as well as a summary of the event are available here.

IRENA and the European Investment Bank (EIB) agreed on 16 January in Abu Dhabi to promote renewable energy manufacturing in the Southern Mediterranean region. The aim of the cooperation is to jointly assess the region's capability to attract foreign investments for developing local renewable energy industry.

An event on 17 January on the Role of Renewable Energy in the Gulf Cooperation Council (GCC) provided information on the current GCC renewable energy plans, policies and projects, and the drivers and barriers affecting the deployment of renewable energy in the GCC. With the information presented, a discussion took place regarding how the role of renewable energy can be enhanced in the region.

IRENA participated in statistical capacity building workshops for statisticians of the Asia-Pacific Economic Cooperation (APEC) and Association of Southeast Asian Nations (ASEAN) countries in Bangkok (28-29 January) and for statisticians from the Middle East in Abu Dhabi (17-21 February). These workshops were also used for consultations with other international organisations active in energy statistics about the development of an IRENA statistics questionnaire to avoid the duplication of reporting efforts from countries. The development of the questionnaire is currently underway. The questionnaire will aim to capture the development of markets in both developed and developing countries, and to collect more detailed and more complete data on renewable energy than what is currently published internationally.

On 30 January, IRENA met with representatives of the United Nations High Commissioner for Refugees (UNHCR) at IRENA Headquarters to discuss UNHCR's "Light Years Ahead" initiative, which provides solar street lighting for safety, solar lanterns to allow for night-time study, and efficient cook stoves to refugee camps in Africa and elsewhere. It was agreed that IRENA could examine the renewable energy needs and technology options in UNHCR refugee camps.

February

IRENA took part in the Conference on Wind Power and Environmental Impacts held in Stockholm on 5-7 February. Around 200 researchers and businesses from Europe, the United States and Japan attended this conference organised by the Swedish Energy Agency and others. IRENA participated in a panel discussion that addressed a sustainable introduction of renewable energy sources. The conference focused on current research and discussions regarding the environmental impacts of wind power and gathered leading researchers and knowledge brokers who could engage in IRENA's project on the environmental impacts of large-scale deployment of renewable energy technologies. This project will aim to provide policy makers and project developers with a comprehensive overview of potential

environmental impacts, which may affect social acceptance of renewable energy, as well as to develop a communication tool for addressing popular misconceptions regarding renewable energy.

A call for updates to the joint IEA-IRENA policies and measures database was sent early February to all IRENA Members and Signatories that are not IEA members, asking them to provide a brief summary of the recent policies and measures that they have adopted and to update the existing contents of the database. Countries have been invited to submit this information, even after the original deadline for submission of 15 March.

The Deputy Director-General attended the **European Energy Network (EnR)** meeting in Lisbon, Portugal on 8 February where he presented the "Objectives and activities of IRENA" to a high-level group of attendees.

As part of its Scholarship Programme, IRENA's lecture series, Dr. Harish H. Hande, co-founder and managing director of SELCO India, detailed the link between poverty alleviation and sustainable energy, and he examined the means to increase access to electricity, emphasising which instruments can be used to promote entrepreneurship for a sustainable energy future for all. On 19 February, Dr. Silas M. Simiyu presented the "Successful Case Study of a Public-Private Partnership Promoting Renewable Energy in a Developing Country" to IRENA scholars at the Masdar Institute of Science and Technology. Dr. Simiyu is the Managing Director and CEO of the Geothermal Development Company, Chairman of the Geothermal Association of Kenya and Board of the International Geothermal Association. Using the geothermal energy resources in the Great Rift Valley of Kenya as an example, he explained how public-private partnership arrangements are effective in addressing the comprehensive barriers to implementing renewable energy technologies. The lectures can be viewed here.

A mission to Addis Ababa was conducted on 12-15 February in the framework of the Clean Energy Corridor (CEC) initiative. The CEC is IRENA's concept for attracting investment in renewable energy in East and Southern Africa based on a robust grid infrastructure. A strong buy-in from the different stakeholders and countries within the corridor is important for the realisation of the concept. The purpose of the meeting was to consult with the relevant electricity stakeholders based in Ethiopia, namely the African Union Commission (AUC), Eastern Africa Power Pool (EAPP), Ethiopian Electric Power Corporation (EEPCO) and the Ministry of Water and Energy of the Government of Ethiopia. This follows meetings already held with Southern African Power and Zimbabwe. The AUC, the New Partnership for Africa's Development (NEPAD) and the African Development Bank (AfDB) have developed the Programme for Infrastructure Development in Africa (PIDA), and the CEC fits well with the north-south (Cairo to Cape Town) component of PIDA's Power Transmission Project. The stakeholders that have met with IRENA have all recognised the CEC as a relevant initiative and support IRENA in exploring it further.

On 27 February, IRENA hosted an all-day meeting in Bonn, Germany, for the partners of the project on the socio-economic value creation of renewable energy. The project aims to analyse the value creation of large-scale solar and wind deployment. IRENA is leading and coordinating the activities carried out by several organisations and research institutions, including the Institute for the Diversification and Saving of Energy (IDEA), the United Kingdom Energy Research Centre (UKERC), the German Agency for International Cooperation (GIZ), the Institute of Economic Structures Research (GWS), the Fraunhofer Institute for System and Innovation Research (ISI), The Energy and Resources Institute (TERI), and the German Development Institute (DIE). The meeting addressed the different work packages, namely the analysis of existing evidence of macroeconomic impact of massive deployment of

renewable energy, the identification of policy design options to optimise economic value creation effects, and the existing policy tools and advisory services.

On 28 February, IRENA participated at the Southern African Development Community (SADC) Energy Thematic Group meeting in Gaborone, Botswana. The Group, which is comprised of the SADC Secretariat, Southern African Power Pool, Regional Electricity Regulators Association of Southern Africa and major development partners in the sector, serves as a technical coordinating and advisory body for the energy sector. Issues discussed included regional infrastructure projects, the formulation of the Regional Renewable Energy Strategic Action Plan (RESAP) and creation of the SADC Centre for Renewable Energy and Energy Efficiency.

March

As part of the Geothermal Energy Initiative in the Andes Region, IRENA in conjunction with the Latin American Energy Organization (OLADE) and with the support of experts from Iceland, Mexico, New Zealand, France and the International Geothermal Association (IGA) conducted a geothermal development workshop with Andean representatives from Bolivia, Chile, Colombia, Ecuador and Peru on 4-5 March in Reykjavik, Iceland. Discussions covered regulatory frameworks, capacity building, and methods of financing for geothermal projects, including how to structure risk-mitigation funds. Along with country presentations, experts at the event cited examples of best practices in geothermal energy development from Kenya and the Philippines. Andean governments are working with IRENA, the Latin America Energy Organization (OLADE) and the IGA to prepare a roadmap for the development of geothermal energy in this sub-region, which could provide a template for strategic planning in the wider region, including the eastern Caribbean.

The Global Renewable Energy Islands Network (GREIN), launched at IRENA's Assembly in January, continued to develop at the Pacific Energy Summit in Auckland, New Zealand. An all-day meeting on 24 March activated GREIN's interest clusters on renewable energy technology roadmaps for islands and renewable energy on power grids for islands. The meeting discussed priority activities for the interest clusters going forward. IRENA will be helping the clusters to formulate renewable roadmaps for three islands and to ensure grid stability with renewable power on five islands in the course of the first year. Participants include islands and countries with islands from the Pacific, Caribbean, and other regions.

The Global Atlas platform is expanding, and a number of datasets were recently included: solar maps of Namibia and Mali, the wind map of East Africa, global population density, protected areas of the world, topography and global landcover. The Atlas will progressively expand beyond solar and wind, to integrate bioenergy, hydropower and geothermal information. The first step is to collect advice on the datasets and methods that the Atlas should include in the future, and the Secretariat continues liaising with experts around the world for future Atlas development. Since its release at the third IRENA Assembly, the Global Atlas website has received more than 20,000 visits. Twenty-six additional countries joined the initiative recently, bringing the total number of signatories to 39. The Secretariat is in the process of contacting each country individually and assessing the scope of involvement in the initiative.

April

IRENA, in collaboration with the Sustainable Energy Industry Association of the Pacific Islands (SEIAPI), the Pacific Power Association (PPA), the Secretariat of the Pacific Community (SPC) and the North Pacific, African, Caribbean and Pacific Renewable Energy and Energy Efficiency Project (North-REP),

organised a technical workshop in the Republic of Palau, on 8-12 April. The workshop focused on integration of renewable energy into islands' electricity grids aiming to provide practical knowledge and hands-on experiences regarding technical guidelines for grid-connected photovoltaic system installation and the assessment of grid stability using dynamic modelling. Participants from north Pacific islands conferred on the importance of technical guidelines and grid stability assessments, and examined practical manuals and methodologies for photovoltaic installations and grid assessments. The workshop also provided an opportunity for participants to exchange experiences and knowledge in the area of renewable energy integration with island electricity grids.

Highlights of the Director-General's Activities

On 10 December the Director-General participated in the International Energy Agency (IEA)/G-8 Sherpas' Meeting on Key Issues facing the Global Energy Economy in Paris, France, where he took part in the session on Renewable Energy Development and Deployment.

The Director-General participated in a number of events during ADSW. On 15 January, he joined a panel of high-level speakers at a side event organised by the German Federal Environment Ministry (BMU) entitled "Energiewende globally? What needs to be done for a future renewable energy system?" The Director-General then participated in the Abu Dhabi International Renewable Energy Conference (ADIREC) Ministerial Panel on Sustainable Energy for All. This session reviewed the 2012 International Year of Sustainable Energy for All and looked forward to the challenges and opportunities for achieving the objectives of the initiative. He also contributed, alongside German Federal Minister H.E. Peter Altmaier, to a joint BMU, German Federal Ministry for Economic Cooperation and Development (BMZ), and World Bank side event on the Water and Energy Nexus. On 16 January, he addressed the First Energy Ministerial of South American and Arab countries (ASPA) where he drew parallels between the energy scenarios of both regions.

The Director-General attended the Annual Event of the European Wind Energy Association (EWEA) in Vienna, Austria on 4 February. In his keynote speech during the opening session, he highlighted how IRENA can help the industry diversify geographically by identifying new opportunities emerging around the globe, making the business case for wind, and assisting governments to create policies attractive to investment.

The 2013 Oslo Energy Forum "Creating New Growth - The Energy Choices" took place on 12-15 February. The Director-General was invited to take part in a panel at the Forum entitled "Understanding the Road Ahead". During this panel, he spoke about the increasingly competitive business case for renewables, and the potential for gain by transferring knowledge from fossil fuel producers to the renewable energy sector.

On 7-8 March, the Climate Parliament held an International Parliamentary Forum on "International Cooperation for the Renewable Energy Revolution" at the European Parliament in Brussels. The Director-General gave a keynote on the "Renewable Revolution and the role of Multilateral Agencies". The Director-General also addressed the European Renewable Energy Council (EREC) Board meeting.

The Director-General participated in the Pacific Leaders' Energy Summit, organised by the Tongan Government, on 21-22 March in Nuku'alofa, Tonga. The event enabled leaders from the Pacific islands to share their experiences in their efforts to accelerate the deployment of renewables, and to hear in

more detail the lessons Tonga has learned from TERM, the Tonga Renewable Energy Roadmap. The Director-General addressed the Summit and shared IRENA's progress in engagement in the Pacific and the Agency's plans for the future.

On 25-26 March, the New Zealand Government hosted the Pacific Energy Summit in Auckland, New Zealand. During the first plenary of the Summit, the Director-General made an address regarding renewable energy in the Pacific. He also moderated a Leaders' panel that discussed the outcome of the Tonga Pacific Leaders' Energy Summit and set the scene for the ensuing conversation. Prior to the Summit, the Director-General welcomed participants to the launch of the first two cluster groups for the IRENA Global Renewable Energy Islands Network on 24 March.

IRENA Publications

IRENA's publication <u>Africa's Renewable Future: the Path to Sustainable Growth</u> was presented during the third Assembly in January. Africa's rapid economic growth will need a massive investment in energy to be sustained. This report contends that Africa could fuel the majority of its future growth with renewable energy. Doing so would be economically competitive, would unlock economies of scale, and would offer substantial benefits in terms of equitable development, local value creation, energy security, and environmental sustainability. Such an unprecedented transformation requires a concerted effort by policy makers to develop enabling frameworks to spur investment and facilitate market development through sound policies and regional cooperation. *Africa's Renewable Future* showcases examples where this effort is already happening and can be replicated, as well as how IRENA is uniquely positioned to contribute to this work. The French version of the report, <u>L'Afrique et les énergies renouvelables: la voie vers la croissance durable</u>, was made available in March.

Renewable Energy Country Profiles for Asia were published during the third Assembly of IRENA. All the <u>country profiles</u> are available on the IRENA website. A series of profiles for Europe, Eurasia and North America is planned to be published in late June or early July. With their completion, the Renewable Energy Country Profiles will then cover the whole world.

The Renewable Readiness Assessment in Grenada was published in March 2013 and is available here. Like many countries in the Caribbean, Grenada is dependent on costly oil imports for its energy needs, including the generation of electricity. The transition to renewable energy could potentially support price reductions and improve the overall competitiveness of key sectors of the Grenadian economy, particularly tourism. The RRA Report provides the inputs and analysis to support the discussion on ways to move forward with the renewable energy agenda.

New IRENA analysis entitled *Renewable Power Generation Costs in 2012: An Overview*, showing that renewables can out-compete fossil fuels for power generation, was released at the third Assembly. Dramatic falls in costs are making renewable energy increasingly competitive with fossil fuels worldwide. The report – analysing 8,000 medium- to large-scale renewable power generation projects – is the most comprehensive analysis of the costs and performance of renewable power generation available and has been very positively received. The analysis highlights that the levelised cost of electricity (LCOE) is declining for wind, solar photovoltaics, concentrated solar power and some biomass technologies, while hydropower and geothermal electricity produced at good sites are still the least expensive ways to generate electricity. Despite this reality, an outdated perception that renewable energy is not competitive persists in the public energy debate, forming a significant barrier to renewable energy

deployment. To remove this barrier, IRENA's costing analysis work includes plans for a **Renewable Costing Alliance** that will raise awareness of falling costs as well as collect and share related data.

IRENA has completed a report entitled <u>International Standardisation in the Field of Renewable Energy</u>, which was released in March. The report is aimed at improving understanding of the landscape of standards and assessing the needs and gaps for standardisation of renewable energy technologies, with a focus on international standardisation. The report also presents a number of findings and related recommendations for policy-makers as well as for project developers to make the best use of standardisation to promote an accelerated deployment of renewable energy on a global scale. These recommendations concern knowledge dissemination, support for broader stakeholder engagement in standardisation, strategic framework for standardisation in the renewable energy sector, and specific projects related to standards development.

As part of its effort to promote renewable energy technology innovation, IRENA has studied the different types of innovation across the technology life cycle and has identified a step-by-step process to develop strategic innovation policy frameworks. The result of the study is presented in the report *Renewable Energy Innovation Policy* which is due to be released shortly. The report assesses three types of innovation modes (technology venturing, commercial scale-up and adaptation) and identifies the innovation capacity requirements and policy frameworks that support innovation capacity growth. One of the key findings highlights the importance of the innovation capacity, through which a country can benefit from flows of technology and can accumulate technological knowledge. Based on the findings on the frameworks of innovation policy, IRENA continues to look into how the frameworks can be practically applied at a country level to promote renewable energy technology innovation.

Some Forthcoming Activities

In June, the IRENA/ADFD Advisory Committee will hold its second meeting to discuss recommendations on the refinement of selection procedures and conditions to report to the fourth IRENA Assembly. The Panel of Experts completed its review and scoring of project summary applications made to the IRENA/ADFD project facility in March. By early April, the Advisory Committee completed its general project review. The Secretariat is now asking that the shortlisted applicants submit a full project proposal through the IRENA website from April to the beginning of June. During this period, the Secretariat will consolidate relevant stakeholder feedback on the refinement of procedures and conditions for funding.

On 16 April, IRENA is planning a half-day meeting as a side event to the fourth Clean Energy Ministerial in **New Delhi, India**, on both the **Global Atlas** and **the project on the socio-economic value creation of renewable energy**. For the Global Atlas, IRENA will discuss the activities of Indian institutions including the Ministry of New and Renewable Energy (MNRE), the Centre for Wind Energy Technology (CWET), and The Energy and Resources Institute (TERI). As for the Economic Value project, IRENA will present updates on the progress of the various work packages, discuss potential contribution of local institutions on socio-economic related activities, and seek the engagement of other institutions and countries.

On 17 April, IRENA is organising a session on its global Renewable Energy Roadmap (REMAP 2030) during the annual Liaison Delegates meeting of the World Business Council for Sustainable Development (WBCSD) in Montreux, Switzerland. The aim of this session is to present IRENA's

renewable energy roadmap to the manufacturing sector, discuss follow-up activities, and identify opportunities for private sector engagement in REMAP 2030.

The IRENA Scholarship Programme remains open for applications until 31 May 2013, for the 2013-2015 programme. Further information on the application process is available here.

On 27-31 May, IRENA is organising an advisory service workshop on small hydropower planning and development in conjunction with Kafue Gorge Regional Training Centre in Zambia. The workshop is an outcome of the Renewables Readiness Assessments and targets energy practitioners from Mozambique, Swaziland. The Gambia and Zambia.

On 3 June, a one-day workshop will highlight IRENA's activities on renewable energy in cities. The workshop will take place in Bonn, Germany, and is organised alongside the International Council for Local Environmental Initiatives' (ICLEI) Resilient Cities conference. The aim of this workshop is to present the results of renewable energy roadmap for cities, discuss follow-up activities with the various stakeholders, and identify opportunities to continue to provide input into IRENA's global Renewable Energy Roadmap (REMAP 2030). Furthermore, IRENA will showcase and disseminate its case studies on renewable energy policy in cities.

Governance and Administrative Issues/Events

Iraq, Belize, Tuvalu, Vanuatu, and Singapore have recently become **Members of the Agency**. As of today, **IRENA** has 109 Members and 51 Signatories/States in accession to the **IRENA** Statute.

IRENA has expanded its **social media presence** and is now **active on Facebook**. Follow us <u>here</u> to stay up-to-date on IRENA activities including events, publications, media, and news in the renewable energy sector.

The Secretariat has created an alert function for **procurement notices** – similar to the one already in place for new job postings – which allows Members and other interested parties to receive this public information automatically upon subscription. You can subscribe <u>here</u>.