

20 June 2013

INTERNATIONAL RENEWABLE ENERGY AGENCY Fifth meeting of the Council Abu Dhabi, 24 – 25 June 2013

Update on the Implementation of the 2013 Work Programme and Budget

- 1. The progress report of the Director-General provides an account of the progress the Agency has made over the past five months delivering on the organizational priorities identified by the Members at the third Assembly. While still at the early stages of the implementation, the Agency has made significant progress in advancing the agenda in all programmatic areas.
- 2. IRENA, in just over two years since its inception, has become a recognized global player that is increasingly used as a point of reference and called upon to assist countries in their efforts to secure a sustainable energy future. During this period, IRENA released over 40 publications, organized around 80 programmatic events that brought together some 3800 participants and was a sought after partner in several international initiatives. The impact of these efforts is becoming evident both in terms of recognition of the Agency, steady increase in membership and increased calls for IRENA's engagement with countries, regions and institutions.

Figure 1: Geographical Distribution of IRENA's Programmatic Events and Activities, 2011-2013



- 3. Some of the IRENA activities have become trademarks of the Agency and are proving to be a powerful tool for catalyzing action. For example, the countries that have undertaken the Renewables Readiness Assessments are developing concrete steps to accelerate the deployment of renewables. Niger is discussing the enactment of a RE law and Zambia is developing its framework for the development of small, mini- and micro-hydro generation projects. A pilot grid stability study in Palau, which concluded that a thirty-percent share of renewable generation could readily be installed on the island's power grid, was presented to the island's utility and political leaders, transforming their view of what is achievable. This has triggered a number of requests for the grid stability assessment in different islands.
- 4. IRENA's publications, such as renewables and employment and renewable energy cost analyses, are creating significant interest. Records show that these publications have been viewed on IRENA's website more than 170,000 times between January and May 2013.
- 5. IRENA is implementing its programmatic activities in partnership with global stakeholders including regional entities, policy makers, technical experts, the private sector, international organisations, R&D institutions, academia and civil society. Forging partnerships with these vital actors remains central to IRENA's efforts in promoting renewable energy and contributing to the agenda of sustainable development. With a complement of some 70 core staff, IRENA has organized workshops, worked with Member Countries that sought its assistance, partnered with relevant entities, published documents and participated in debates in national, regional and global fora.
- 6. This report provides a detailed account of progress on the implementation of the Work Programme to date and outlines plans for the remainder of the year 2013. It also provides information on the Agency's financial and human resources.

I. Strategic Management and Executive Direction

- 7. As of 15 June 2013, a total of 115 States and the European Union has ratified the IRENA Statute and deposited an instrument of ratification or accession. Some 45 additional States remain actively engaged, and many are undertaking procedures to join the Agency as the awareness of its work grows. Regular interaction with Members is maintained, and a number of high-level talks and participation in conferences, summits and other meetings has taken place in the first half of the year.
- 8. As part of its outreach, IRENA has been active in working with countries and organizations to maintain and expand the scope of the Agency's engagement. This included, among others, the participation in the Annual Event of the European Wind Energy Association (EWEA) in Vienna, the 2013 Oslo Energy Forum, Norway, the International Parliamentary Forum on International Cooperation for the Renewables Energy Revolution in Brussels, Belgium, the 65th session of the United Nations Economic Commission for Europe, the Annual Energy Forum of Sabanci University's International Energy and Climate Center in Istanbul, Turkey, and the OECD Round Table for Sustainable Development in Paris, France. IRENA was also invited to contribute to a

number of private sector conferences and meetings, including at the Messe Renewables Energy Forum in Hannover, Germany, EREC Board Meeting in Brussels, Belgium and AREVEA Executive Forum in Paris, France. The Director-General also undertook his first official visit to Italy where he met a number of high-level government officials and representatives of the private sector.

- 9. IRENA participated in the Pacific Leaders' Energy Summit, organized by the Tongan Government in Nuku'alofa, Tonga. The event enabled leaders from the Pacific islands to share their experience in their efforts to accelerate the deployment of renewables, and to hear in more detail the lessons Tonga has learnt from TERM, the Tonga Renewable Energy Roadmap. The Director-General addressed the Summit and shared with the Leaders the progress in IRENA's engagement in the Pacific and plans for the future. Following the Tonga Summit, the New Zealand Government hosted the Pacific Energy Summit in Auckland, which offered an opportunity to further discuss IRENA's engagement with the Pacific islands.
- 10. IRENA continued its engagement in global initiatives and contributed to broader discussions on sustainable development. These included the UN Economic and Social Council Integration Meeting in New York, USA, entitled "Achieving Sustainable Development: Integrating the Social, Economic and Environmental Dimensions", and a thematic debate on "Sustainable Development and Climate Change: Practical Solutions in the Energy-Water Nexus" held under the auspices of the President of the UN General Assembly in partnership with the United Arab Emirates. IRENA also took part in the Vienna Energy Forum in May 2013, Austria.
- 11. The UN Secretary-General invited the Director-General to join the newly formed Advisory Board for the Sustainable Energy for All initiative (SE4ALL), which has been established to provide strategic direction to the initiative. The Advisory Board consists of representatives from the private sector, civil society, financial institutions, governments, and UN and international organisations. As IRENA develops its function as the Renewable Energy Hub within the Initiative, this role will be a useful avenue for promoting the Agency's work with other SE4ALL stakeholders and for ensuring the complementarity of efforts.
- 12. On the occasion of the World Environment Day, the Renewables Club was launched in Berlin, Germany on 1 June. The Director-General was invited by the German Minister for Environment, Nature Conservation and Nuclear Safety, along with Ministers and high-level representatives from China, Denmark, France, Germany, India, Morocco, South Africa, Tonga, the United Arab Emirates, and the United Kingdom, to establish the Club. This high-level political alliance will support the work of IRENA, as well as secure further high-level political support, with a view to "scale up renewable energy deployment as an essential element of a sustainable and more prosperous future". The next Renewables Club meeting will be hosted by the United Arab Emirates on the sidelines of the fourth session of the IRENA Assembly in January 2014.
- 13. IRENA continues to implement the IRENA/Abu Dhabi Fund for Development (ADFD) project facility for renewable energy for development countries of USD 350 million in concessional loans in

seven funding cycles. In the first funding cycle, IRENA received over 80 project summary applications for the first tranche of USD 50 million. Following scoring and review by a Panel of Experts and a further review by the IRENA/ADFD Advisory Committee, 19 shortlisted applicants were invited to submit full project proposals. By 4 June 2013, 16 full project proposals were received, which will be shortlisted and reviewed and considered for final selection by the ADFD at the end of November 2013. The short-listed projects are from various regions, represent a diverse mix of renewable energy activities, address concerns about energy access, and offer innovative and potentially replicable solutions.

- 14. The Secretariat continues to support Members' decision-making processes by organizing the Agency's intergovernmental meetings and providing substantive inputs to these meetings. In 2013, the Secretariat organized the third session of the Assembly attended by heads of state and governments, Ministers, and other representatives of 137 countries, including 89 Members of IRENA, as well as 122 observers. Two Ministerial Roundtables were held during the third session of the Assembly, the first on Financing Renewables for Development, and the second on Renewable Energy Costs and Benefits. A number of informal thematic side-events on renewable energy topics were also held on the margins of the Assembly. In addition, IRENA in cooperation with the Financial Times, invited key decision makers in renewable energy to a joint question time event that was broadcasted live on the internet. The Secretariat is organizing the fifth meeting of the Council with the participation of Council members and over 70 other Members. Meetings of the Programme and Strategy Committee, as well as Administration and Finance Committee are being organized prior to the fifth Council meeting.
- 15. The Secretariat is following up on the implementation of the third Assembly decision aiming at a progressive integration of official UN languages to advance the work of the Agency, based on reasonable and cost-effective use of resources. Interpretation services for the UN languages currently well-represented among the Agency's membership (Arabic, English, French, and Spanish) continue to be provided at governing body meetings financed from the UAE government bid. In addition, the Secretariat is currently reviewing the cost and administrative requirements for the translation of major sessional documents from English into Arabic, French and Spanish. The Secretariat is also identifying interpretation and translation requirements in connection with the programmatic and communication activities. Both elements will be included, as per Assembly decision, in the proposed Work Programme and Budget for consideration at the fourth Assembly.
- 16. Development of REmember, an e-platform designed to enhance cooperation with the IRENA membership, is underway. It is envisaged that the platform will include online workspaces, a documents library, a global renewable energy events calendar and a centralized IRENA mailbox for all communication from the Secretariat, among other features. An initial demonstrative phase of the platform for Members to provide initial feedback will take place around the IRENA Council with a side event that will highlight the main features of REmember.

- 17. The IRENA Fund for Developing Country Representatives (FDCR) allows inclusiveness in Agency activities by enabling the fullest possible participation, based on available funds, of Least Developed Countries (LDCs) and Small Island Developing States (SIDS) in governing body meetings. During 2012, a total of USD 840,000 was received from Armenia, Finland, Germany, Iraq, Madagascar, and the United Arab Emirates, with the UAE as the largest contributor with over USD 730,000. Some USD 443,000 has been utilized to cover the participation of eligible countries in the third and fourth Council and related committee meetings as well as the third Assembly earlier this year, leaving the Fund at about USD 400,000 in January 2013. As it is expected that approximately USD 170,000 will be necessary for the upcoming fifth and sixth Council meetings and approximately USD 500,000 for the meeting of the fourth Assembly in January 2014, the Secretariat has issued another call for contributions in April 2013 inviting Members to contribute to the Fund in order to avoid potential future shortfalls.
- 18. In the context of the Medium-term Strategy and empowered by the goal of becoming an authoritative global voice for renewable energy, IRENA has taken a number of steps in the first half of 2013 to develop a robust and resilient institutional message. This has included efforts under the "Voice of Renewables" project, which aims to raise awareness about IRENA among key stakeholders and the general public, along with disseminating the core message that renewables are feasible and cost-effective.
- 19. Intensified communications and outreach activities in January 2013, including numerous media interviews by the Director-General and Deputy Director-General and daily press releases and website news articles around the third session of the Assembly of IRENA, produced a significant, highly visible impact in the global media. Based on global media monitoring, the Assembly and other IRENA activities that followed it at the World Future Energy Summit in January 2013 generated 31 television interviews and some 7,500 items of print, online and broadcast media coverage within the first five days following those events. Campaigns were designed to highlight specific IRENA projects, such as the Global Renewable Energy Atlas and REMAP 2030, to relevant target audiences. Intensified interest was also recorded on the IRENA website, which hosted a special landing page with daily updates on IRENA's activities in the period around the Assembly. The intensified communications effort also ensured key messages were disseminated, as well as a strong visual presence for IRENA at key locations around Abu Dhabi during the same period. Work has continued to build on this success in subsequent months, with the Director-General giving interviews to CNN and several other media outlets, and examination of potential partnerships and expanded future activities in the education sector.
- 20. Meanwhile, IRENA has worked to ensure consistent application of high quality standards, including increasing systematization of external peer review, technical and editorial review and branding guidelines. Website content has also continued to develop, with a view to building the Agency's profile at the same time as disseminating key messages to promote renewable energy. It is envisaged that a new website with a greater focus on content and ease of use will be in place prior to the fourth Assembly in January 2014.

- 21. Periodic IRENA Bulletins are being disseminated to Members with a view to enhancing communication and cooperation between the Secretariat and the membership, especially on programmatic matters. Based on the positive feedback received from countries, the Secretariat continues to provide these concise updates, which have expanded over time, on a regular basis.
- 22. Progress has been made towards ensuring that IRENA is granted the privileges and immunities it requires to conduct its work. The Secretariat has been engaged in consultation with Members with regard to the ratification of the Agreement on Privileges and Immunities or the establishment of other methods for recognizing IRENA's status under national law. IRENA has also been working closely with the Government of the UAE to establish the necessary guidelines for the implementation the Headquarters Agreement. Furthermore, the IRENA Secretariat has been working closely with the Government of the United States to establish the necessary legal basis for the opening of IRENA's New York office, and it is hoped that the necessary legal procedures required for the opening of the office will be completed later this year.
- 23. Pursuant to Staff Regulation 9.2, staff have formed a staff representative body, so that staff/management relationship and interaction is now formalized. The staff representative body is being consulted on relevant issues, including the selection of arbitrators for administration of justice and issues related to staff welfare.
- 24. As of this year, IRENA has operationalized the Programme Management Office (PMO), a tool that assists in project-related tasks and follow up on project activities through completion. The PMO will enable project managers to monitor and report on project activities, problems and requirements to executive management as a strategic tool in advancing toward consistent and focused implementation of programmatic goals and objectives.

II. Programme of Work

a. Knowledge, Policy and Finance Centre

- 25. The Knowledge, Policy and Finance Centre (KPFC) is IRENA's central knowledge repository and a centre of excellence for renewables policy and finance issues. KPFC's information collection and analysis enables IRENA to inform and advise its Members and to disseminate information to the public. It is also a central repository of IRENA's internal knowledge to inform and support the work of all divisions, as well as to provide critical knowledge products to IRENA's Members. KPFC implements its programmatic activities in close cooperation with other programmatic divisions.
- 26. Evidence of broad social and economic value creation can strengthen the argument for renewable energy deployment and raise awareness about its benefits. IRENA is conducting and disseminating such analysis through its projects on the socio-economic impact of renewable energy, focusing on economic value creation and renewable energy employment.

- 27. IRENA is leading and coordinating the econValue project which analyses the value creation of large-scale solar and wind deployment. The report will contribute to filling the knowledge gap on the actual socio-economic impacts and opportunities that the development of a domestic renewable energy industry can create. The study will also identify policy design options to optimize economic value creation effects and assess existing policy tools to measure them. Part of the analysis will address the socio-economic impacts of renewable energy deployment roadmaps within REMAP initiative. The econValue project is a multiyear initiative that begins with the scope defined for 2013 and expands in following years to include additional technologies and socio-economic variables. The project currently includes several organizations and research institutions, including DIE, IDAE, UKERC, Fraunhofer ISI, GIZ, GWS, and TERI. Through sustained engagement in the field, IRENA aims to become the inclusive platform for expert institutions and individuals addressing the socio-economic impacts of renewable energy deployment.
- 28. Among other socio-economic benefits, job creation represents an important incentive for countries to engage in the development of renewable energy. In June 2012, the report "Renewable Energy Jobs and access", which specifically focused on the employment dimension of projects intended to improve rural energy access, was published and has since, been widely disseminated and cited. Building on this success, IRENA is finalizing the report "Renewable energy and Jobs" to cover all the employment aspects of renewable energy deployment. It will assess the employment impacts in a structured and coherent way across different segments of the value chain. Based on best practices, recommendations for policy-makers will be formulated to support the creation of enabling conditions that maximize job creation potential. This study provided the analysis for the sidebar on jobs that IRENA contributed to the latest REN21 Global Status Report 2013. In it, IRENA estimates global renewable energy employment, direct and indirect, at 5.7 million in 2012. The "Renewable Energy and Jobs" report will also form the basis of the forthcoming IRENA-RE Jobs conference to be held during the World Future Energy Summit 2014. IRENA's cooperation with REN21 and the UAE's Ministry of Foreign Affairs further extended to the joint publication of the MENA Status Report 2013. The regular monitoring and assessing of job creation will be one of IRENA's essential contributions to address the existing knowledge gap in the field.
- 29. Cities are growing at an unprecedented pace, with the number of people living in cities expected to increase from 3.5 billion in 2011 to 6.3 billion in 2050. With economic growth and rising income levels, energy use in cities is projected to surge in the coming years. They already account for 67% of world's primary energy demand and 70% of CO2 emissions. In order to address this challenge, policy makers at the national and local level are recognizing the important role that renewable energy can play in this transition. IRENA collaborated with the International Council for Local Environmental Initiatives (ICLEI) to publish the 'Renewable Energy Policy in Cities: Selected Case Studies', a series of seven case studies covering diverse themes ranging from renewable energy potential analysis to the establishment of local RE industries and the creation of cluster initiatives. The work was presented during the World Future Energy Summit 2013 session on "Cities and Community Power". Moreover, it was featured, alongside IRENA's work on renewable energy roadmap for cities during ICLEI's Resilient Cities conference in Bonn in May 2013. As part of its Renewable Energy Policies in Cities

series, IRENA will publish additional case studies in July 2013. These will focus on transport and deployment approaches. In the future, the work on cities will contribute to the elaboration of a guidebook for policy makers that aims to facilitate effective policy formulation at the city-level to support renewable energy deployment.

- 30. In the field of mapping the renewable energy resources, IRENA is building the largest information network on renewable energy resource data, the Global Renewable Energy Atlas. The Atlas had 24,000 users since its launch, and 500 users created their own project maps using the Atlas. Thirty-nine countries have signed the statement of interest to participate in the initiative and additional countries are nominating focal points bringing the total to 55. In May 2013, the Steering Committee of the Global Bioenergy Partnership (GBEP) endorsed the creation of a joined activity group on bioenergy with the Global Atlas. In June 2013, the geothermal sector welcomed the creation of the geothermal component of the Atlas during an international workshop that involved global geothermal associations and networks. A second geothermal workshop will take place later in 2013. The initiative will progressively be expanded to include capacity building and to mobilize technical assistance.
- 31. Decreasing costs have led renewable energy technologies to become the most cost-competitive option for off-grid electrification. The key findings and recommendations derived from the first International Off-grid Renewable Energy Conference (IOREC), co-organized by IRENA in Accra, Ghana, will be published in June 2013 and discussed during the fifth meeting of the IRENA Council. Following the success of the first Conference in promoting dialogue between the public and private sector as well as in facilitating cross-regional exchange of best practices, IOREC is expected to be held on a biennial basis. Furthermore, the work on deployment of renewable energy towards achieving energy access will be extended in the future to cover other essential aspects, such as the analysis of the mini-grid business model and various financing models.
- 32. In its efforts to assess and monitor best practices in renewable energy policy designs, IRENA has finalized the report on "Renewable Energy Auctions in Developing Countries". In it, auction schemes are assessed, further illustrated by country case studies (Brazil, China, Morocco, Peru, and South Africa). The study aims to share best practices with policy makers regarding the type and design of auction schemes. The analysis benefited from the input and feedback from experts and policy-makers who participated in the second Policy Day organized by IRENA at the margins of the 3rd General Assembly in collaboration with the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). The event brought together over 90 participants from 37 countries who focused on different tariff schemes with experiences from Germany, Cyprus, Malaysia and South Africa.
- 33. Policy design assessments currently carried out by IRENA will provide the basis for discussions between policy makers and experts at the forthcoming Policy Day, which will be organized alongside the fourth Assembly in January 2014. The focus will be on critical success factors in renewable energy target setting, adaptation of policy instruments to evolving market conditions, and criteria for evaluation of renewable energy policies.

- 34. In response to an invitation by the Middle East North Africa Renewable Energy Conference (MENAREC5) process held in Marrakech, Morocco, on 15-16 May 2012, IRENA has begun a study evaluating the economic impacts of current energy policies in the context of renewable energy deployment. This project will explore the potential for RE deployment in the presence of an energy pricing regime that rectifies some of the market distortions by eliminating fossil fuel subsidies, with a special focus on four selected countries of North Africa and the Middle East. The focus of the study will be the development of a framework to allow the development of best practice guidelines on how best design and implement effective subsidy reform.
- 35. IRENA's mandate for the promotion of renewable energy is closely linked to the three pillars of sustainability social, economic and environmental. This holistic approach is also reflected in the Nexus paradigm, which promotes consideration of the inter-linkages between the use of water, energy and food by policy makers. Such a framework highlights the importance of moving towards an integrated management of the three systems to achieve green growth. In this context, IRENA is developing a study that includes a state of the art review of the existing knowledge on the topic to highlight the important role and benefits of renewable energy in the Nexus. IRENA will collaborate with the governments of Germany and the UAE and the Qatar Environment and Energy Research Institute (QEERI) to develop a methodology to estimate the contribution of renewable energy in the Nexus. The initiative will be discussed at the fifth meeting of the IRENA Council to gather feedback from the countries on the major issues to be addressed in this project.
- 36. Work is underway on the Debunking the Renewable Energy Myths, with a completion of desk review of the variety of sources to identify the most common renewable energy myths. Furthermore, a questionnaire was sent to a large number of renewable energy industry associations and civil society groups to identify efforts already underway to counter the persistent myths on renewable energy.

b. IRENA Innovation and Technology Centre

- 37. IRENA's Innovation and Technology Centre (IITC) provides cutting-edge information on renewable energy technology and innovation to identify new pathways for transition to a sustainable energy future. IITC stays abreast of the latest developments and translate them into practical, policy-friendly tools for IRENA's Members. In the implementation of its programmatic activities, IITC feeds in, and benefits from the work of other programmatic divisions.
- 38. IRENA's global roadmap for renewable energy, REMAP 2030, is designed to demonstrate possible pathways and priority actions for meeting the aspirational target articulated in the Sustainable Energy for All (SE4ALL) initiative of doubling the share of renewables in the global energy mix by 2030. It is the result of a collaborative process between IRENA, countries and other stakeholders. REMAP 2030 is developed along two parallel tracks of work: 1) a country-based analysis complemented with regional analysis to identify actions on technology deployment, investment and policies, and 2) sector-based technology roadmaps to identify the sector-specific opportunities across multiple countries and regions required to achieve the doubling target.

- 39. IRENA has started a detailed assessment of renewable energy potentials in 25 countries accounting for more than 70% of global energy use. REMAP is being discussed with national experts and REMAP focal points, as well as in various fora such as the International Energy Agency Renewable Energy Working Party, the IEA Energy Technology Systems Analysis Programme, the World Business Council for Sustainable Development, the UNFCCC Ad-hoc group on the Durban Platform for Enhanced Action and the Renewables for Cities workshop. REMAP will also be presented at the International Energy Modelling workshop in Paris on 19 June. It is envisaged that the draft REMAP 2030 will be presented to the sixth meeting of the Council, and launched at the fourth Assembly in January 2014.
- 40. An important part of REMAP is the identification for deployment of renewable energy use in the end-use sector. In this context, IRENA is developing a number of roadmaps to inform REMAP. With a third of the global energy consumption, the manufacturing industry is a crucial sector for achieving a doubling of the renewable energy share by 2030. Based on a detailed quantitative analysis of renewable energy potential in the global manufacturing industry and two stakeholder workshops, IRENA's first technology roadmap "Doubling the global share of renewable energy by 2030: The crucial role of the global manufacturing industry" will be launched at the fifth Council. The roadmap provides technology, regional and subsector overview of the techno-economic potential of renewable energy. Furthermore, it suggests seven areas of action where policy makers and industry can work together to accelerate the deployment of renewables.
- 41. As a background document to IRENA's technology roadmaps on electricity storage and renewable energy integration, IRENA is publishing a guidebook for decision makers on smart grid technologies, "Smart grid and Renewables: A Guide for Effective Deployment". This publication provides a step-by-step guide for decision makers on how to enable higher shares of renewable power generation through smart grid technologies. The report also provides an easy-to-read overview of all smart grid technologies available to support renewable energy integration into the grid.
- 42. Pacific leaders requested for IRENA support in development of roadmaps for the region. In response, IRENA has completed fifteen Pacific Island Country overviews and developed a strategy document to support the roadmap development. The results of this study will be published shortly, and will form the basis for the development of a regional roadmap for the Pacific region. Furthermore, IRENA, in cooperation with GIZ, is supporting the development of the Nauru renewable energy roadmap.
- 43. IRENA is continuing with the development of technology briefs and several are in the final stages of preparation, including the ones on hydropower, biomass heat and power, and ocean energy technologies. In cooperation with IEA/ETSAP, IRENA is finalizing technology briefs on biomass logistics, renewable energy integration, and waste-to-energy.
- 44. Grid stability is a main concern for island policy makers and utilities alike and studies can help show the necessary measures for ensuring it. IRENA has conducted technical training on dynamic modelling for Pacific Power Authority and IRENA staff in February in Bonn. Subsequently, a pilot

study was conducted on the main island of Palau. The findings were presented in a workshop and the participants considered the study to be of high practical relevance. Subsequently, several requests for grid stability studies have been received from the Pacific and the Caribbean islands. Discussions are also underway with a number of institutions, including the University of Darmstadt, to develop methodological guidelines for grid stability assessments.

- 45. The 12th World Wind Energy Conference took place in Cuba in June 2013. The Conference outcome statement calls for close cooperation with IRENA in the implementation of its work programme. In the sidelines of the Conference, IRENA organized a side event around grid stability, Project Navigator and GREIN.
- 46. Following the successful launch of the power pool assessment tools for continental SADC and ECOWAS countries, similar tools are under development for Northern, Central, and East African countries. This work is done on cooperation with the Technical University of Stockholm. IRENA is at present piloting the draft tools to assess renewable investment options for respective power pools, and the first results will be presented at the Africa Clean Energy Corridor meeting 22-23 June in Abu Dhabi.
- 47. Upon request, IRENA supports countries in the context of its scenario and strategy work. In 2013. This included mission a mission to Fukushima to advise on reconstruction of disaster stricken areas, dialogue with Latin American countries on scenarios and strategies in Uruguay, and a presentation of renewable energy outlook to UNFCCC negotiators during the meeting of the Ad-hoc Working group on the Durban Platform for Enhanced Action. Following the release of Africa power pool analyses and capacity building workshops requests have been received to strengthen the support for energy planning in Africa and efforts are ongoing to make this happen.
- 48. The report "Renewable Power Generation Costs in 2012: An Overview" has generated a significant level of interest, and it is one of the most downloaded IRENA publication in 2013 with some 300,000 views to date. IRENA's costing data was widely cited in the media and was used in the development of the REN21 Global Status Report and the IPCC's 5th Assessment Report. In July 2013, new analysis of the costs of conventional and advanced biofuels, biogas and electrification options for transport will be released. The findings suggests that the outlook for renewables in transport to 2020 could see an increasing range of advanced biofuels and electrification options for cars becoming competitive with fossil fuels, if current policy support is enhanced and expanded.
- 49. IRENA has also launched its Renewable Costing Alliance, aimed at acquiring and exchanging the latest data on the costs and performance of renewable energy technologies in a wide range of conditions. Following a number of outreach activities and webinars, the first meeting of the Alliance took place in June 2013 in Bonn. Initial feedback indicates a significant interest in the Alliance, especially from the private sector and finance institutions.

- 50. In the first quarter of 2013 IRENA launched a study on needs and gaps in standardization for renewable energy, which received wide attention. The results from this study were presented in different fora, including in a webinar organized by the Clean Energy Solutions Center in May 2013. Following this report, ISO's Strategic Advisory Group on Renewable Energy and Energy Efficiency (SAG-E) has requested support in their further development and deployment of their energy standards programme. The work on standards continues in cooperation with other organizations, including UNIDO, RCREEE, ECREEE, the International Electrotechnical Commission (IEC), and the Germany Metrology Institute (PTB).
- 51. IRENA is supporting activities to assure reliable and safe PV systems deployment in the Pacific Islands through adoption of harmonized technical guidelines by national utilities and energy regulatory bodies across the region. Two meetings on PV grid integration guidelines in the Pacific have been held in the region. In collaboration with regional stakeholders, a technical workshop was held from 10-12 April in Palau. A second meeting to disseminate and obtain feedback on IRENA's work in this field took place on the sidelines of the SIDS-DOCK meeting in Fiji 8 May. As a result, most utilities in the Northern Pacific have agreed to adopt sound technical guidelines regionally developed for PV systems in islands.
- 52. IRENA's working paper, "Renewable Energy Innovation Policy: Success Criteria and Strategies", was developed to assist countries with policy development to strengthen renewable energy innovation, primarily through a discussion of design criteria for innovation policy frameworks. The working paper identifies broad success criteria for innovation policy in the sector and suggests strategic policy approaches to advance renewable energy technology innovation in the context of feasible options, competition for resources, and national economic development goals.
- 53. As part of the effort to build user-friendly tools to assist countries in the development of renewable energy technology projects and investments, IRENA is developing guidelines for renewable energy project development. The draft guidelines are now being discussed with external experts, and are planned to be piloted in the coming months. Upon completion, the guidelines will be made available to countries in a form of interactive IT tool, the Project Navigator. It is envisaged that the Navigator will contain technical concepts for specific technologies, with off-shore wind and PV under development, as well as a financial component.

c. Country Support and Partnerships

54. The Country Support and Partnerships (CSP) division supports countries in the development and implementation of national and regional renewable energy strategies. Upon request, CSP assists countries with their Renewables Readiness Assessments, advise on follow-up actions and supports key capacity-building efforts using an effective needs assessment process. It also provides a platform for cooperation between countries, regions, organisations and institutions. In its work, CSP draws on the knowledge and expertise available in other programmatic divisions.

- 55. IRENA continues to support the countries in undertaking their Renewables Readiness Assessments (RRA). At present, a number of RRA are underway in different regions and in varied stages of implementation. These include Mongolia, Fiji, Philippines, Oman, Mauritania and Nicaragua. In addition, RRAs for The Gambia, Niger, Swaziland and Zambia are in the final stages of completion. While RRAs are undertaken in countries individually, the experience gained has a much broader impact. Following the completion of respective RRAs, IRENA hosted a workshop for county experts from The Gambia, Mozambique, Zambia and Swaziland to discuss the best way forward to harnessing their small hydro potential. In addition, RRA outcomes were used to improve the methodology for future implementation and to provide input for the Agency's future programmatic priorities, as well as to identify areas where countries can share experiences.
- 56. IRENA is also developing a network of country practitioners who are experienced in RRA methodology and who could participate in RRAs in countries that could benefit from their valuable expertise. These experts are forming a part of the Renewable Energy Policy Advisory Network (REPAN), developed in cooperation with the Clean Energy Solutions Center. REPAN was also used to respond to several requests for advice received from countries.
- 57. Solutions to the limitations of rural energy access around the world require use of both centralized and decentralized power systems. Mini-grids and other decentralized solutions may be more attractive than larger, centralized solutions in rural areas as they can often be deployed more rapidly than grid solutions and they are customizable to local contexts and needs. Even in areas with the prospect of future power system development, mini-grids can play an important role of providing near-term electrification. IRENA is examining the deployment of renewable energy powered mini-grids in the Philippines, India, Indonesia and Thailand with the primary focus on how to scale-up their deployment at the regional and sub-regional levels. It is anticipated that this experience will be transferrable to other regions and used for cross regional cooperation, especially between Asia and Africa.
- 58. The Africa Clean Energy Corridor (CEC) initiative was launched at IRENA's third Assembly in January 2013 to accelerate the adoption of renewable power options in Eastern and Southern Africa. The initiative seeks to obtain high-level political support for a renewable energy Action Agenda, which IRENA is developing together with major stakeholders in the region. A two-day workshop has been organized by IRENA in Abu Dhabi in June 2013, convening major stakeholders from Eastern and Southern Africa, including government energy ministries, electrical generation and transmission companies, regional power pools, multilateral financial institutions and regional political institutions. Workshop conclusions will be used as the basis to identify key strategies for moving forward with the Corridor. Key themes of the workshop include transition from renewable energy resource assessments to renewable power projects, the business case for regional renewable power options, and priorities for strengthening the Eastern and Southern Africa transmission grids to integrate high shares of renewables. It is envisaged that the strategy group will advise IRENA on the preparation of an Action Agenda to be adopted by African ministers and leaders.

- 59. IRENA held a workshop to launch the Geothermal Initiative in the Andes, in collaboration with OLADE and the International Geothermal Association. The workshop took place in Reykjavik, Iceland in March 2013. Experts from Iceland, Mexico, New Zealand and France shared lessons and expertise with Andean representatives. The discussions covered regulatory frameworks, capacity building and methods of financing for geothermal projects, including how to structure risk-mitigation funds. Andean governments are also working with IRENA to prepare a roadmap for the development of geothermal energy in the sub-region, which could provide a template for wider regional clean energy strategies, including in the eastern Caribbean.
- 60. In cooperation with the Ministry of Industry, Energy and Mining of the Republic of Uruguay and OLADE, IRENA organized the first IRENA-OLADE Seminar on Renewable Energy Challenges and Opportunities in the Latin America Region in Montevideo, Uruguay in June 2013. The Seminar's objective was to bring together government authorities and experts from 19 countries in the region, as well as those from partnering organizations, to discuss ways to accelerate the deployment of renewable energy technologies in Latin America. The Participants shared best practices, experiences, and results of on-going projects in the region. The Seminar provided an opportunity to get a concrete feedback on the expectations of countries in the region on IRENA's future programmatic activities. A similar dialogue is taking place with CARICOM and the Central America Integration System (SICA) which will be taken into account in defining regional priorities for the biennial Work Programme.
- 61. In preparation for the sub-regional conference in Southeast Europe, an organizing workshop was held in Vienna in May 2013 to identify themes, speakers and logistical requirements for the main conference to be hosted by Montenegro in October 2013. Agreed themes include priorities for developing RE resource potential, policies and strategies for strengthening the transmission network to accommodate more renewable power, and means of mobilizing required investment in renewable power and associated power grid enhancements. An organizing Committee has been formed, comprised of officials and utilities from countries in Southeast Europe, the European Commission, and multilateral agencies with interests in the region. The Committee will assist in all aspects of the preparations for the Conference.
- 62. The Global Renewable Energy Islands Network (GREIN) was launched at IRENA's third Assembly in January 2013, following a call from ministers and other officials from 48 countries at the "Renewables and Islands" meeting in Malta in September 2012. GREIN provides a platform for pooling knowledge, sharing best practices and seeking innovative solutions to accelerate the uptake of clean and cost-effective renewable energy technologies on islands. GREIN is intended to work through autonomous interest clusters, led by representatives from a range of relevant regional partners. A questionnaire distributed during the Assembly elicited expressions of interest from over 30 countries, spanning the full range of proposed interest clusters. Two clusters, on renewable energy roadmaps and grid integration, were activated in March in the margins of the Pacific Leaders Summit in Auckland, New Zealand, and a third, on renewable energy for tourism, is to be activated later in

2013. Several additional clusters are also under consideration, including on renewable energy resource assessment, waste-to-energy systems and desalination systems.

- 63. IRENA's capacity building efforts were focused on providing concrete assistance based on specific needs. To assist the development of geothermal in the Andean countries, IRENA is facilitating the transfer of knowledge from countries with extensive experience on geothermal to those who are in the nascent stages of its development. A regional capacity building initiative, supported by Germany and United Arab Emirates is in progress. In this context, IRENA is actively engaged with 11 Pacific Islands and has identified areas of priority for capacity building to enable greater uptake of renewables. They include a study of capacity building needs for renewable energy market development in the Pacific Islands, training and certification for solar PV and building local capacity for off grid markets.
- 64. In 2013, six new partners have joined IRENA's Renewable Energy Learning Platform (IRELP), including the Renewable Energy Policy Network for the 21st Century (REN21), Institut National de L'Energie Solaire (INES), the European Energy Centre, the Clean Energy Solutions Centre, the Latin American Energy Organization (OLADE) and the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), bringing the total number of partners to 22. IRELP currently has active users in 189 countries worldwide. Major improvements to the website are ongoing to provide a more user-friendly interface. The completion of IRELP's newest database for renewable energy volunteering, apprenticeship and internship opportunities, is expected to be complete in June. Following this, and in response to ongoing requests, the website will be restructured to include a Knowledge Centre, Career Centre and Curriculum Center, in order to provide more support for renewable energy curriculum development and career guidance to complement existing renewable energy education opportunities.
- 65. In June 2013, the first group of 18 IRENA Scholars graduated from the Masdar Institute of Science and Technology in Abu Dhabi, United Arab Emirates. The selection process for the third group of IRENA Scholars is currently in progress and final decisions regarding acceptance will be made by late July. Some 40 eligible applicants have been shortlisted, originating from 18 developing countries.

d. Administration and Management Services

- 66. In 2013, Administration and Management Services (AMS) continued its work in ensuring the delivery of concerted support services for the Agency's substantive activities. It continues to ensure efficient, transparent and accountable functioning of Human Resources, Finance, ICT, Procurement and Travel. All policies, procedures and related forms have been made available to all staff on IRENA's intranet, REsource, and staff are being provided with training to ensure proper application and accountability.
- 67. In its continuing efforts to rationalise administrative processes in the Agency, the Director-General promulgated a revised Delegation of Authority Manual in February 2013. The Manual defines the

principles under which authority is delegated to Secretariat officials and ensures accountability at all levels.

- 68. Enterprise Resource Planning system (ERP) is being implemented to automate the approved policies and procedures of Finance, Human Resources, Procurement and Travel along with the promulgated delegation of authorities for smooth, efficient, transparent and auditable functioning of the Division. Requirement analysis, functional requirement mapping documents and functional design documentation phases have been completed successfully while development of the application is in progress.
- 69. In order to benefit from the latest technology, thus improving overall efficiencies in the Agency, Information and Communications Technology Section has upgraded all IRENA computers with Windows 8, Office 2013 and Lync 2013, which provide a number of new features, performance enhancements, improved security storage spaces, and innovative and dynamic desktop applications.
- 70. Recruitment of staff remains a priority, and a number of positions have already been filled. Out of the total 81 approved posts, 76 are currently either filled or under active recruitment. The staff on board are from 41 nationalities, out of which 47 % are females and 53 % are males. In addition, there are 3 staff on loan to IRENA, two from the United Arab Emirates and one from Japan. The Agency has also established an Internship and Junior professionals Associate programmes to enable young and upcoming professionals to gain experience in Renewable Energy and administrative fields in IRENA and, at the same time, for the Agency to benefit from fresh young talent.
- 71. More than 3000 applications were received in response to various vacancies announced during 2013 with the average number of applicants per vacancy continuing to increase compared to previous years, demonstrating continuing interest in employment with the Agency. To ensure a transparent process and selection of the best candidates for the vacant positions, candidates are being assessed through a standardised process involving a panel of staff members at appropriate levels. All recommendations are reviewed and approved by the Director-General before the final selection and appointments are made.
- 72. Pursuant to Staff Regulation 2.9, the Staff Performance Appraisal System has been successfully completed for with timely delivery of 2012 performance appraisals and establishment of 2013 performance indicators.
- 73. A Training needs Assessment Survey was conducted for all IRENA Personnel, and a number of training sessions have been conducted on various subjects such as health insurance, welfare and wellbeing, Windows 8 and Microsoft office applications as well as English writing skills. Also, an Ethics Awareness training for all personnel in Abu Dhabi was conducted, and similar session is planned to be delivered in Bonn. More training will be delivered during the year to continue to enhance overall knowledge of all personnel.

- 74. As part of its outreach activities, IRENA participated in the UAE in four career fairs to promote IRENA's activities and programs with a focus on careers in Renewable Energy among universities, students and other organizations and participating entities.
- 75. Work is ongoing in preparation for IRENA's permanent Headquarters offices at the new complex in Masdar City. The construction of the complex has commenced, with the move planned to take place at the end of 2014.
- 76. The Procurement Section, in cooperation with programmatic divisions has developed a 2013 procurement plan for the Agency to ensure the coordination and cost-effectiveness of its activities across all divisions. The Section also continues to maintain a database of national and international vendors. In order to ensure transparency and competitiveness, procurement opportunities are being posted on IRENA's website and the United Nations Global Market (UNGM) to procure services and equipment and to enter into Long-Term Agreements where appropriate. During 2013, 12 such contracts were entered in a form of Long Term Agreements (LTAs) for various services, in addition to 3 project agreements with international institutions.
- 77. In an effort to benefit from experiences on treasury matters with other international organizations, IRENA has joined the United Nations System Treasury Network as an observer to stay abreast of the developments in this area. With a view to increasing investments as per the approved investment policy, the Division has also met with a number of financial institutions.
- 78. The Division worked closely with the External Auditors during the audit of 2012 financial statements and the Auditors have now issued an unqualified audit opinion as reflected in "Audited Financial Statements of IRENA for 2012" (C/5/3).
- 79. The total approved budget of IRENA for 2013 is US\$ 29.7 million, of which US\$ 18 million has been assessed through contributions from all Members in addition to the voluntary contributions US\$ 7.4 million from the Government of the United Arab Emirates; and US\$ 4.3 million from the Government of Germany. As of 31 May 2013, US\$ 8.1 million have been received under the core budget from 39 Members, representing about 45% of the anticipated income through assessed contributions (including application for credit for surplus carried over from previous periods). Of the US\$ 7.4 million committed by the UAE and US\$ 4.3 million committed by Germany, US\$ 3.9 million and US\$ 2.15 million have been received respectively. In addition, US\$ 1.1 million have been received as other voluntary contributions from the UAE, Germany, Japan, and Iceland.
- 80. The Agency is actively engaged in implementing its work programme for 2013. As reflected in Table 3 below, from an approved 2013 budget amounting to \$29.7 million, the Agency has expended and committed \$20.1 million or 68% of the overall budget as at 31 May 2013.

Level	Approved	Filled and Under Recruitment
ASG	1	1
D-2	1	1
D-1	4	4
P-5	17	15
P-4	11	10
P-3	22	22
P-2/1	2	2
Sub-total Professional and above	52	55
General Services	23	21
Total	81	76

Table 1: Approved and filled/under recruitment posts by level as of 31 May 2013

Figure 2: Staffing Status as of 31 May 2013



Figure 3: Gender Balance (based on filled posts) as of 31 May 2013



Figure 4: IRENA Staff Nationalities (based on filled posts) as of 31 May 2013



Table 2: Loaned Staff

Division	Title	Loaned by
SMED	Liaison and Protocol Officer	UAE
IITC	Bioenergy Analyst	Japan
AMS	Human Resources Officer	UAE



Figure 5: Status of Contributions to the 2013 Core Budget:

Figure 6: Value of Assessed contributions for the 2013 Core Budget, (Amounts received and outstanding)



Figure 7: Number of Countries Contributing to the 2013 Core Budget, (Contributions received and outstanding)



2013 WP Components and utilization, in thousands US\$			
	2013	Expenditure and	Implementation rate
	Approved Budget	Commitments as of 31 May 2013	%
Assessed Contributions (Core Budget)	18,000	14,624	81%
Voluntary Contributions from the UAE:			
Operations	2,900	793	27%
Research	2,900	696	24%
Governing Bodies	1,600	1,203	75%
Subtotal UAE Contributions	7,400	2,692	36%
Voluntary Contributions from Germany:			
Innovation and Technology	4,300	2,824	66%
Subtotal German Contributions	4,300	2,824	66%
Total Voluntary Contributions	11,700	5,516	47%
	,		
Grand Total	29,700	20,140	68%
2013 WP Resource requirements by Object of expenditure, in thousand US\$			
Object of Ermonditure	2013	Expenditure and Commitments as	Implementation rate
Object of Expenditure	Proposed Budget	of 31 May 2013	%
Total Staff Costs	15,690	14,125	90%
Total Non-Staff Costs	14,010	6,015	43%
- Consultants, Interns,	14,010	0,015	4570
Project & Seconded Personnel	4,910	2,959	60%
Programme and Expert Meetings	4,470	1,386	31%
- Travel of Staff	690	305	44%
- Contractual Services	2,290	1,016	44%
	2,270	1,010	
- General Onerating Expenses	1 570	319	20%
 General Operating Expenses Furniture and Equipment 	1,570 80	319 30	20% 38%

Table 3: Status of 2013 Work Programme Implementation