

**INTERNATIONAL RENEWABLE ENERGY AGENCY**

Second meeting of the Council

Abu Dhabi, 13 and 14 November 2011

**Report of the Director-General on the Implementation of the  
Work Programme and Budget for 2011**

The annual report of the Director-General for 2011 on the activities of the Agency has been prepared in accordance with Article XI.E.3. of the IRENA Statute.

It provides an account of the progress made to date in the implementation of the Work Programme and Budget for 2011, and outlines the plans for the rest of 2011. It also provides information on the human and financial resources of the Agency.

In accordance with Article X.F.4 the document will be considered by the Council before submission to the Assembly.

## Table of Contents

<i>Introduction</i> .....	2
<i>Strategic management</i> .....	3
<i>Programme of Work</i> .....	8
a) Knowledge Management and Technology Cooperation (KMTC).....	8
b) Policy Advisory Services and Capacity Building (PACB).....	11
c) IRENA Innovation and Technology Centre (IITC) .....	15
d) Administration and Management Support Services .....	18
<i>Conclusion</i> .....	19
<i>ANNEX I: Human Resources and Budgetary</i> .....	20
<i>Approved and filled posts</i> .....	20
<i>Figure 1: Staffing Status as of 16 October 2011</i> .....	20
<i>Figure 2: Gender Balance as of 16 October 2011</i> .....	20
<i>Figure 3: IRENA Staff Nationalities, Fixed term and Secondees, as of 16 October 2011</i> .....	21
<i>Table 1: Approved and filled posts by level</i> .....	21
<i>Table 2: Seconded staff</i> .....	22
<i>Table 3(a): Programme Budget for 2011, in thousand USD</i> .....	23
<i>Table 3(b): Components and 2011 Approved Appropriations, in thousand US\$</i> .....	24
<i>Table 3(c): Resource requirements by object of expenditure, in thousand USD</i> .....	25
<i>Figure 4: Value of contributions to the IRENA 2011 core budget, received and outstanding</i> .....	26
<i>Figure 5: Number of countries contributing to the IRENA 2011 core budget, received and outstanding</i> .....	26
<i>ANNEX II: Status of contributions (USD)</i> .....	27
<i>Table 4: Contributions to IRENA Budget 2011:</i> .....	27
<i>Figure 6: Contributions to the IRENA 2011 core budget by origin</i> .....	32
<i>Figure 7: Contributions to the IRENA 2011 core budget by status</i> .....	32

## Introduction

1. This report is submitted pursuant to Article XI/E.3 of the IRENA Statute. It provides an account of the progress made to date in the implementation of the Work Programme and Budget for 2011 and outlines the plans for the rest of 2011. It also provides information on the human and financial resources of the Agency.
2. In its Decision PC.4/DC.6, the Preparatory Commission stated that a 2011 Work Programme and Budget would be “developed in due time before the first session of the Assembly”, until which point the organisation would continue to follow the programmatic agenda set out in the Work Programme’s ad hoc Budget for 2010. The Work Programme and Budget for 2011 were adopted by the Assembly on 4 April 2011 (A/1/DC/8). The Decision stipulated financial resources for 2011, including the sums already utilised during the Preparatory Commission period from January to March; it also set out an ambitious agenda for implementation by the Agency during the remaining nine months of 2011. This agenda included ensuring a successful transition from the Preparatory Commission to the Agency and the further development of institutional foundations in parallel with implementation of the Work Programme.
3. The framework for 2011 is one of refocusing and consolidating strategies and support structures to assist the Agency in its long-term mission of accelerating the uptake of renewable energy technologies and of transitioning countries to a future where renewable energy is central to energy planning. This framework is being implemented through three substantive sub-programmes: first, the Knowledge Management and Technology Cooperation sub-programme, which is charged with the creation of an accessible and state-of-the-art knowledge base to facilitate a greater role for renewable energy; second, the Policy Advisory Services and Capacity Building sub-programme, which stimulates an enabling environment for the uptake of renewable energy; and third, the Innovation and Technology sub-programme, which aims to create a framework for technology support, to identify cost reduction potentials and to explore the wider use of standards.

### Strategic management

4. The first three months of 2011 were dedicated to addressing the risks and challenges faced by the organisation during the preparatory stage, with efforts also being made to institutionalise policies, systems and processes in preparation for transition to the Agency. During this period, the organisation underwent two audits; an exceptional audit conducted by Ernst and Young that covered the period from January to October 2010, and the second by the Office of the Auditor-General of Norway. Both audits attested that the organisation had made significant progress both in addressing problems and in institutionalising the policies and systems required for effective and efficient long-term management.
5. Pursuant to Assembly Decision A/1/DC/2, immediate action was taken to implement the arrangements for the transfer of the assets and liabilities of the Commission to IRENA. This included, inter alia, the issuance of new employment contracts for staff and other personnel in compliance with the relevant regulations adopted by the Assembly and with the decisions taken by the Assembly with respect to the Budget and Work Programme. Furthermore, a Liquidator's office was established and, at the time of writing, the Liquidator is in the process of completing the final closure of the Commission's accounts in accordance with the Interim Financial Regulations (PC.2/DC.4) for the Preparatory Commission.
6. A significant amount of IRENA's resources have been dedicated to the establishment and development of strategic partnerships and relationships. . As of mid-October 2011, 148 states and the European Union have signed the Statute of IRENA. A total of 84 states and the European Union have become a Member of the Agency by depositing an instrument of ratification or accession. IRENA has continued to maintain regular interaction with Members and Signatories to the Statute, including Ministers and other government officials. At headquarters, the Director-General has held meetings with the representatives of Member States and regional groups present in Abu Dhabi to ensure that embassies receive regular feedback on progress and developments. IRENA has also maintained regular contact with the host country authorities and with academic and research institutions.
7. By participating in events and maintaining contacts with entities such as the Clean Energy Ministerial (CEM), the Intergovernmental Panel on Climate Change (IPCC), the Renewable Energy Policy Network for the 21<sup>st</sup> Century (REN21), the Renewable Energy and Energy Efficiency Partnership (REEEP), the Global Green Growth Forum (Denmark) and the Global Green Growth Institute (Korea), the Director-General has explored possible areas of

cooperation and the potential for strategic partnerships. Steps have also been taken to formalise relationships and collaborative frameworks with international and regional organisations, including the International Energy Agency (IEA) and the Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) of the Economic Community of West African States (ECOWAS).

8. The Director-General has been invited by the United Nations Secretary-General to join his High-Level Group on Sustainable Energy for All, which comprises leaders from business, governments, international organisations and civil society. The Group was formed to advise on an effective strategy to achieve the goal of sustainable energy for all by 2030 through three interlinked global targets: universal access to modern energy services; doubling of energy efficiency; and doubling of the share of renewable energy in the world energy supply. The Director-General has also joined the REN21 Steering Committee.
9. Through the decisions of its first Assembly, the Agency was mandated to play a strong role regionally and globally to support countries in accelerating the adoption of renewable energy as a key component of national, regional and sub-regional development plans. The Agency organised the IRENA/Africa Consultative Forum on 8 and 9 July 2011 in Abu Dhabi with the aim of launching a strategic partnership to accelerate adoption of renewable energy to support Africa's development. The participants, comprising over 25 Ministers, government representatives from 60 countries including 43 from Africa, regional entities and other partners, agreed on the way forward in terms of accelerating implementation policies and initiatives on renewable energy in Africa; they also decided that IRENA would be the key inter-governmental forum for Africa in this respect. The Abu Dhabi communiqué on renewable energy for accelerating Africa's development was adopted by the High Level Forum and gives IRENA a strong base for institutionalising cooperation with all African countries in carrying forward the mutually complementary goals of the African Union and its Member States. The event also presented an opportunity for exchange of information and discussions with participating experts, and a number of expert and technical meetings took place on the margins of the Forum related to resource assessment potential, renewable energy statistics, renewable energy policy and capacity building needs.
10. The Director-General also participated in the review of the implementation process of the Tonga Energy Road Map (TERM) 2010-2020. This meeting offered an opportunity to meet with a number of regional officials and representatives of regional organisations, as well as with donor countries and institutions. In addition to strengthened support to the TERM, it was

agreed that IRENA would begin renewable readiness activities in the Pacific. The first expert meeting will take place on 26-28 October 2011 in Sydney, Australia. The Director-General also continues to explore the possibilities of cooperation with different governmental entities, such as the New Energy and Industrial Technology Development Organization (NEDO) (Japan), the Global Green Growth Institute (Korea) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (the German agency for international cooperation).

11. By taking part in meetings, including the Pacific Leaders Forum(6-7 September 2011), the Paris-Nairobi Initiative, the Dubai Global Energy Forum, the *Financial Times* Global Energy Leaders Summit (28-29 June 2011), the launch of the report on Renewable Energy of the IPCC, the Vienna Energy Forum, the International Hydropower Association World Congress and the European Renewable Energy Council (EREC), IRENA has been able to contribute to discussions of vital importance to its mandate and to promote a spirit of cooperation with different organisations, institutions and constituencies. The Director-General has also actively fostered meaningful engagement with the private sector, one such initiative being the preparation for the establishment of a Business Council for IRENA.
12. An important milestone took place on 7 October 2011 with the official opening of the IRENA Innovation and Technology Centre. The ceremony was attended by over 200 participants, including a number of high-level officials from Germany, Senegal and the United Arab Emirates (UAE).
13. To increase outreach and communication efforts, the Director-General has been interviewed several times by local and international media, including television channels such as the BBC, CNN, NHK, Dubai One and a number of newspapers, journals and technical publications. The IRENA website has been redesigned to reflect the organisation's change in status from Preparatory Commission to Agency. The essential elements of the new site are in place and further work is being done to reinforce the content. A concept for a new delegates' area on the website has been developed to provide clearer and easier access to relevant information. Technical implementation of this part of the website is currently under way and a new site is expected to be launched shortly.
14. Following the adoption of a new IRENA logo, a branding exercise was undertaken and a handbook of branding guidelines developed. A communications strategy addressing the core organisational structure of IRENA and supporting the implementation of the work programme is in the final stages of development. As part of this strategy, and to ensure rigorous

consistency in published outputs, a publications policy has been developed, the implementation of which is overseen by a publications board, with sub-programmes being responsible for ensuring that a consolidated list of publications is kept both current and accurate.

15. To provide a brief yet comprehensive picture of the state of renewable energy, Renewable Energy Country Profiles are being developed for publication on the IRENA website. These are based on information gathered from a variety of sources and include energy supply, electrical capacity, energy access, policies, targets, investment climate, projects and endowment in renewable energy resources. Information is analysed by IRENA and reviewed by country focal points prior to publication. The Country Profiles at present focus on two regions where the main Work Programme activities are taking place: the Pacific Island countries and Africa. The Pacific Island Country Profiles have been completed, and the African Country Profiles will be completed shortly. The current Country Profiles will be regularly updated and improved as new and additional information becomes available.
16. Preparations are under way for IRENA's participation in COP 17 in Durban, South Africa. IRENA expects to organise six workshops for journalists on different renewable energy-related topics. At the request of, and in partnership with, the South African Ministry for Energy, IRENA will also facilitate a renewable energy roundtable.
17. During 2011 the Secretariat has provided substantive and secretarial support to intergovernmental meetings, including one Assembly session, which was preceded by the final meetings of the Preparatory Commission, the Administrative Committee, and five meetings of the Legal and Governance Working Groups. To date, the Secretariat has also supported one meeting of the Council, one meeting of the Governance and Legal Committee and a Policy and Strategy Committee hosted by the government of Malaysia. In the coming months, support will be provided to three additional Committee meetings and to the second meeting of the Council.
18. Measures have been taken to further strengthen internal management systems. A Senior Management Group (SMG) has been established to ensure regular and systematic interaction among the senior managers of the Agency. Chaired by the Director-General, it comprises all Directors and other senior officials as necessary. SMG meetings help ensure that information is shared and that strategic decisions affecting programmatic, managerial and administrative areas are made in an inclusive and transparent manner. To enable a thorough review and

approval process for all projects undertaken within the IRENA Programme of Work, a Project Review and Approval Group (PRAG) has been established. This is chaired by the Director-General and comprises Directors, managers of respective projects as required and ex officio members of the relevant areas of administration and management. PRAG facilitates coordination between divisions and ensures that the projects proposed are in line with the Agency's priorities and within the allocated budgetary provisions. The Group has reviewed all projects expected to be implemented this year and has decided on their order of priority within the Agency's strategic aims and financial means. This mechanism will facilitate overall monitoring of the implementation of the Work Programme, foster synergy among different sub-programmes and strengthen the impact of these undertakings.

19. Pursuant to a decision by the Assembly, the interim Headquarters Agreement was extended, mutatis mutandis, by an exchange of letters between the Agency and the UAE Ministry of Foreign Affairs. This Agreement will remain in force until the final Headquarters Agreement has been signed.

## **Programme of Work**

### **a) Knowledge Management and Technology Cooperation (KMTC)**

20. Within the vision of creating a credible, authoritative and easily accessible knowledge framework to facilitate decision making on the part of IRENA Members, the Knowledge Management and Technology Cooperation (KMTC) sub-programme has begun work on systemising the global knowledge on renewable energy. A comprehensive mapping of existing data and information, identification of gaps where IRENA could contribute in the future and identification of potential partnerships in this context are ongoing. Consolidation and evaluation of existing information on renewable energy is the first step in this process. In an effort to map resource potentials, KMTC has identified over 1,000 atlases, national and other, containing useful information. This information will be integrated into the interactive global atlas of renewable potentials.
21. In this context, IRENA has benefited from the work done by the Clean Energy Ministerial (CEM) on the development of the global renewable energy atlas on wind and solar potential. The CEM Multilateral Working Group (MWG), which includes Denmark, Germany and Spain as lead countries and involves the leading institutes in the field, brings a strong scientific backing to the development of the global atlas. IRENA, in cooperation with the core technical team of CEM, which includes the World Meteorological Organization (WMO), the German Aerospace Centre (DLR), the National Renewable Energy Centre (CENER) of Spain, the National Renewable Energy Laboratory (NREL) of the United States, the Danish National Laboratory for Sustainable Energy (Risø/DTU) and other major stakeholders, is at present focusing on wind and solar information with a view to gradually integrating all sources of renewable energy. Work packages and deliverables have been defined to achieve concrete operational outcomes, and a governing structure is being established. A prototype for the atlas will be demonstrated at the second IRENA Assembly. This prototype would also be discussed with the countries in the end-user focus group on the margins of the second IRENA Assembly in January 2012, so as to bring in their perspective and help define services required from the interface.
22. Renewable energy markets and investments are growing at a rapid pace, and policies and measures have been framed by a large number of countries to provide an impetus to the deployment of renewable energy. Against this backdrop of increased interest from countries in harnessing renewable energy, IRENA is assessing the best ways of providing reliable and easily understandable information on renewable energy so that countries can assess the

effectiveness and efficiency of their own renewable energy policies. In this context, a report covering statistics, energy planning, macroeconomics and renewable energy policy, has been developed. The report is intended to be the basis of discussions among experts and institutions on a possible framework for developing renewable energy indicators, leading to the preparation of a concept paper on methodology. The expert meeting is scheduled for January 2012 in Abu Dhabi.

23. In an effort to develop its own knowledge management strategy, IRENA has reviewed the strategies in four well known international knowledge organisations: the United Nations Development Programme, World Bank, World Health Organisation and the International Fund for Agricultural Development. Collaboration with the American Productivity and Quality centre, a member-based not-for-profit organisation, is also under discussion so that best practices in knowledge management can be identified and their applicability to IRENA assessed. In parallel, work was initiated to assess the current sources of knowledge and to identify possible IRENA knowledge products to fill the existing gaps. These elements will contribute to the finalisation of the knowledge strategy which is expected to be completed in 2012.
24. During discussions within the IRENA-Africa High-Level Consultative Forum in July 2011, it was decided that IRENA would cooperate with regional economic organisations and governments to develop a concrete and practical approach to supporting the knowledge, technology, capacity and policy needs of African countries. It was also decided that, to better understand the opportunities and constraints that countries face, a collaborative process of renewable energy readiness would be initiated to provide an objective assessment of the status of renewable energy opportunities and to identify pathways to address gaps.
25. IRENA is in the process of developing a framework of objective indicators to assess the renewable energy readiness of participating Member Countries from Africa and the Pacific Islands. This includes the development of a set of indicators that would be used to assess the policy frameworks of countries through the lens of market enablers. These indicators would capture the broad parameters, such as potentials, technologies, policy and regulations, and investor activity to provide not only an “as-is” analysis but also a gap-analysis of the measures required to facilitate increased deployment of renewable energy in the energy mix.
26. To develop a methodology for carrying out Renewables Readiness Assessments (RRA), IRENA has partnered with the International Institute for Sustainable Development (IISD). A

three-stage process has been put in place, comprising a review of literature and stakeholder mapping, barrier analysis and regional profiling, and pilot testing of the methodology in four countries in Africa, Latin America and the Caribbean, and Oceania. An informal discussion with experts and stakeholders on the proposed criteria for assessments took place on the margins at the opening of the IRENA Innovation and Technology Centre (IITC) in Bonn on 7 October 2011. The feedback received will be included in the preparations for the piloting of the RRA methodology in Mozambique and Senegal, currently under way. The findings of the pilot study will be shared with other countries in respective regions on the margins of the second IRENA Assembly in January 2012.

27. IRENA is collaborating with the Global Wind Energy Council to conduct an assessment of the type of policy environment in which the development of wind power could be successfully promoted. This assessment will be used as an input to a multi-stakeholder workshop aiming to design concrete action plans for replicating successful approaches to other technologies. This approach, if successful, will be used as a prototype for engaging with global industry associations to cover other technology areas.
28. To map the various multilateral and bilateral initiatives in renewable energy technology cooperation in IRENA Member States and analyse key success factors in technology cooperation, a survey of best practices is under way. In addition, IRENA and the US National Renewable Energy Laboratory are jointly organising a workshop on best practices in renewable energy technology cooperation that will take place in November 2011. The workshop will identify and highlight various best practices and discuss ways of disseminating them, the role of IRENA in this process, and the development of modalities for technology cooperation. The outcome of this workshop would be the basis of an IRENA report on best practices and also provide a possible framework for promoting technology cooperation.
29. In cooperation with E+Co and SELCO of India, IRENA is organising a grassroots workshop and a practitioners meeting to provide training and foster learning among participating entrepreneurs from Africa, Asia and Latin America. Concrete inputs are expected to help develop modalities for building enterprise-driven solutions to facilitate technology transfer. The workshop will take place in November 2011.
30. IRENA also contributed to the annual renewables REN21 Global Status Report (GSR), both as a direct contributor and as a member of a peer review team. IRENA further collaborated with REN21 in an effort to broaden the REN21 GSR for 2011 by reaching out to Member

Countries through technical focal points to obtain information for possible inclusion in future GSRs.

**b) Policy Advisory Services and Capacity Building (PACB)**

31. Effective and efficient support policies have proven to exert a substantial influence on the market for renewables. To determine the success factors and good practices of renewable energy policy advice, identify the gaps and opportunities, and explore the areas where IRENA can add value to existing initiatives, PACB carried out a global mapping of over 40 different institutions that provide advice on renewable energy support policies to governments and other relevant actors. This mapping has revealed interesting findings in terms of trends, knowledge and information gaps, the different types of services currently used and the stakeholders involved.
32. PACB has held discussions with IRENA Members to better understand their domestic needs and priorities and to draw lessons from their experiences with technical assistance in policy advice. A meeting with experts from African governments was held on the margins of the IRENA-Africa High-Level Consultative Forum in July 2011. A similar meeting with government officials from Pacific Island countries is planned for October 2011 in Sydney. Attendees will have the opportunity to explain country-specific conditions hampering renewable energy deployment and provide concrete recommendations regarding IRENA's role in promoting enabling policy frameworks.
33. Peer-to-peer policy advice has started in response to a concrete request from Cyprus on the design of renewable energy tariff-setting mechanisms.
34. PACB initiated a series of policy briefs that aim to communicate to Member Countries the knowledge, gaps and advice related to specific subjects, as well as to propose a particular course of action. The two policy briefs, which will be published by the end of 2011, include the job creation potential of renewables, and the impacts of increased renewable energy deployment on a country's economy. A third policy brief evaluating a different assessment methodology for renewable energy support policies will be published early 2012.
35. To provide Member Countries with the most reliable and up-to-date information on global renewable energy policies while avoiding duplication of work, IRENA has concluded an agreement with the International Energy Agency (IEA) to establish a joint IEA/IRENA Global Renewable Energy Policies and Measures Database. In countries that are not IEA

members, IRENA will be responsible for collecting data through country technical focal points.

36. PACB is conducting an analysis of policies and measures to overcome barriers to rural electrification, which is being coordinated by the Global Network on Energy for Sustainable Development (GNESD) and includes case studies from Bariloche (Argentina and Peru), AFREPREN (Kenya) and TERI (India). The study is based on a thorough assessment of the lessons learned from past experiences with rural electrification programmes and aims to identify successful practices with a high replicability potential, to share this knowledge with IRENA Member Countries and to support governments in the design of energy access programmes. The study includes an analysis of the conditions for successful implementation, the contributions made by programmes to rural livelihoods and recommendations for “best practice” approaches adapted to national conditions. The output of the project activity is a report providing regional overviews for Africa, Asia and Latin America regarding experiences with renewable energy-based rural electrification. The findings, expected to be finalised in March 2012, will be presented to IRENA policy stakeholders and to a wider audience in printed format.
37. The enterprise-driven model to improve access to sustainable energy services, particularly in rural areas, has become very popular in recent years. Using a bottom-up approach, such innovative businesses have been able to provide reliable, affordable and environmentally sustainable energy to homes and business. Nevertheless, RE entrepreneurs, particularly in rural areas, still face a multitude of barriers. In this context, IRENA will host a one-day practitioners meeting in Bangalore, India, in November 2011. The purpose of the workshop is to explore how governments and entrepreneurs can work together to better enable renewable energy entrepreneurship and to discuss the creation of a rural renewable energy market. This meeting aims to address the main issues faced by local renewable energy entrepreneurs, and will cover factors related to financing, capacity and skills, policies and regulations, as well as public awareness and demand for new technologies. Recommendations for policy makers will be synthesised in a report and widely disseminated in 2012.
38. PACB is conducting a study on renewable energy jobs in the context of access to energy in developing countries. The study will analyse the impact of access to energy initiatives (on job creation and skills) and explore measures and policy frameworks that enable and boost job creation in this context. The study is coordinated by IRENA and will draw from the various contributions and case studies provided by the United Nations Development Programme

(UNDP), the Global Village Energy Partnership (GVEP), the Alliance for Rural Electrification (ARE), E+Co, and the GIZ. The study will provide policy makers with concrete renewable energy solutions promoting energy access, ways of supporting such initiatives and evidence on the potential socio-economic benefits. The study is expected to be completed by the end of December 2011.

39. In collaboration with Basel Agency for Sustainable Energy (BASE), IRENA is conducting a comprehensive study on the financial flows and mechanisms for renewable energy projects and companies in six developing countries: Brazil, Egypt, India, Mexico, Thailand, and South Africa. Based on an assessment of the public and private investments currently flowing into the renewable energy sector, an evaluation of different financial mechanisms is being conducted, including mechanisms implemented by banking/local financing institutions, guarantee mechanisms, business development and small enterprise support, and private equity and venture capital finance models and funds. The study will include case studies of large-scale renewable energy projects in Mexico, Kenya, South Africa and the Philippines and a series of concrete recommendations on how appropriate financing mechanisms can most effectively overcome existing market barriers, together with the enabling conditions needed to ensure their successful implementation.
40. At its first meeting, the Council agreed on a timetable for the first project cycle of the Abu Dhabi Fund for Development. In accordance with Decision PC4/DC4 on “Selection procedures for projects applying for funding from the Abu Dhabi Fund for Development”, PACB is drawing up a standard format and guidelines to facilitate the drafting of project proposals and their comparability, and announce the call for project proposals.
41. IRENA is evaluating programmatic approaches to promoting a massive deployment of RE. This includes producing a synthesis of recent developments in the international climate finance dialogue, discussions on potentially innovative mechanisms to support renewable energy development and massive scale-up—specific approaches that promote a holistic vision combining policy, capacity building and multiple sources of finance. This evaluation will serve as a basis for the development of IRENA’s position on up-scaling RE for consultations and discussion in different international forums and initiatives.
42. The process for the development of IRENA’s capacity-building strategy has started. The strategy will lay the foundation for building future programmatic capacity-building services for IRENA’s Member Countries. It will take into account the recommendations drawn from

the assessment of programmatic approaches and Member Countries' needs. To analyse the latter, a workshop with African government officials was held on the margins of the IRENA-Africa High-Level Consultative Forum in July 2011. Participants discussed ongoing initiatives, experiences, skills and capacity challenges to the development of the RE sector in their countries and provided recommendations for capacity-building activities to be carried out by IRENA. A similar workshop will be held with the government representatives of Pacific Island countries in October 2011, in Sydney, Australia. Capacity needs assessments will also be carried out during the KMTC renewable energy readiness assessments in Senegal (November 2011) and Mozambique (December 2011).

43. Because of the increase in the use of renewable energy, fast-paced technological developments and the variety of possible applications offered, there is an increased demand for specialised and highly qualified human resources in this field. However, education and training opportunities are limited, and recent studies have shown that the education sector is falling short of satisfying the demands of the labour market. To facilitate access to existing educational opportunities, IRENA is developing the IRENA Renewable Energy Learning Partnership (IRELP). IRELP will provide a platform for exchange among renewable energy and education experts, in support of education and training efforts. The concept has been discussed with the main educational and training stakeholders in the field of renewable energy, including the Renewables Academy (RENAC), the Centre for Energy-Related, Environmental and Technological Research (CIEMAT), the Clean Energy Project Analysis Software (RETScreen), the Renewable Energy and Energy Efficiency Partnership (REEEP), the United Nations Environment Programme (UNEP), the National Renewable Energy Laboratory (NREL) and industry associations. Discussions regarding collaboration in specific areas are on-going with potential partners including RETScreen, NREL, E+Co, the Global Bioenergy Partnership (GBEP), GIZ and the United Nations Industrial Development Organization (UNIDO).
44. A call for applications for the IRENA Scholarship Programme closed in May 2011, and a total of 20 scholarships have been awarded. IRENA has developed a lecture programme for the IRENA scholars, and a first lecture on the socio-economic impact of renewable energy was delivered by an internationally renowned expert on the subject in October 2011. Two additional lectures are envisaged before the end of 2011

**c) IRENA Innovation and Technology Centre (IITC)**

45. To assist governments in their efforts to develop efficient and effective renewable energy technology and innovation strategies, the IRENA Innovation and Technology Centre (IITC) is collecting and analysing data on scenarios and strategies, with the aim of transforming them into policy-relevant information for decision makers. This information will be also used in the renewables readiness assessments conducted by KMTC. A background paper on the representation of renewables in energy scenarios in Africa was presented at the IRENA-Africa High-Level Consultative Forum in July 2011. The outcomes of the discussions at the Forum were discussed in the expert meeting that took place on 29-31 August 2011. IITC is expanding its work in this context in cooperation with Cape Town University and the Royal Institute of Technology-Stockholm (KTH-Stockholm). This work will include electricity sector modelling at the country level and power pools in different regions in Africa. The report on African scenarios is expected to be launched at the second Assembly in January 2011.
46. A similar undertaking is under way for the Pacific Island region. An expert workshop on Renewable Energy Uptake in the Pacific Islands will take place from 26 to 28 October in Sydney, Australia. The workshop, organised in partnership with the World Bank and the Australian government, will bring together over 60 participants from government institutions, international organisations and the private sector in renewable energy technology deployment in the islands.
47. IRENA and the IEA Renewable Energy Technology Deployment (RETD) Implementing Agreement held a workshop in IITC on 29 June 2011. The workshop addressed the impact of existing and emerging factors that are likely to influence energy scenarios for the period 2015-2050 and their possible implications for renewable energy outlooks and policy needs in the short term. The workshop provided valuable insights into strategic scenario and systems analysis needs and also into the role that IRENA and RETD could play in meeting policy makers' information and advisory needs. A summary of the findings is available on the password-protected part of the IRENA website.
48. In an effort to facilitate greater deployment of renewable energy in developing countries through technology transfer and dissemination, IITC has established contacts with the World Intellectual Property Organization (WIPO), UNEP, and the Organization of Economic Development and Cooperation (OECD) so that it can tap into their resources on patents and identify avenues for their dissemination. As a result, the joint IRENA-WIPO website on

patent search is under development. The website will include tools to simplify search functions and utilities. A background document on desalination was prepared and shared with WIPO as a test case for patent search functions. A meeting to present the outcome of these efforts and explain the use of the tools is planned for early 2012.

49. In cooperation with the Energy Technology Systems Analysis Program of the International Energy Agency (IEA-ETSAP), IITC is developing renewable technology fact sheets on best practice uses of renewable energy technology for different types of end use. Technology fact sheets will provide Members with concise, policy-relevant and objective information that may assist in the development of national renewable energy strategies and the evaluation of related project proposals. Five fact sheets are expected to be completed during 2011.
50. To support the innovation process, IITC is developing a paper on success criteria for innovation policies with a focus on design criteria for policy frameworks that reduce cost and accelerate the innovation process. The paper will analyse past experiences with the aim of designing guidelines that would cover the full technology chain. This paper is expected to be completed by December 2011.
51. IITC has begun work on technology road mapping with the aim of identifying prospects and technological barriers, as well as financing, development and policy needs. A working paper on the use of renewable energy in the manufacturing industry has been completed in cooperation with UNIDO and the Secretariat of the Pacific Community (SPC). A second study on the use of renewable energy in the manufacturing sector in Africa is under preparation. These documents will be used as the basis for discussion with a broad range of stakeholders, including governments, the private sector and technology providers. This discussion is expected to result in a shared vision of how to deploy renewables in the manufacturing industry. The roadmap will be finalised in the first half of 2012.
52. In the context of promoting assessment of environmental impacts in renewables planning, IITC will work with UNEP in addressing the issue of the conservation of migratory species and the development of wind farms and power lines at the international level. Discussion in this respect is at a nascent stage, and future cooperation will be discussed in an upcoming roundtable organised by UNEP/CMS.
53. To gain a better understanding of the costs and potentials of cost reductions related to technology development and market deployment, IITC is collaborating with relevant stakeholders and also investigating possible sources of information and data with the aim of

producing a report on power generation both with respect to supply and end-use technologies. A number of cost indicators are being assessed, such as equipment and project cost and the levelised cost of electricity (LCOE). Regional differences in equipment cost, resource quality, the cost of capital and other key parameters are also being analysed. Two draft working papers discussing the cost of large-scale photovoltaic and concentrated solar power have been completed, and similar papers addressing wind, hydro and bioenergy power generation are under development. These analyses will be complemented with country-specific data collected from 12 countries in different regions. This information will assist the Member Countries in better understanding the cost and possible cost trends for the coming years. The working papers and the information collected from countries are expected to be published in 2012.

54. On 6 October 2011, a workshop on "Renewables—Competitiveness and Innovation" was held. The workshop included discussions on the economics of renewables, competitiveness, costs and benefits, and innovation for accelerated development. IRENA presented the draft results of its power sector-costing study and received favourable feedback from the participating experts. The workshop was attended by over 100 participants, including experts from different areas of governments and the private sector. The outcomes of the discussions will be used as a basis for further development of IITC activities aimed at improving understanding of the cost and the potential for cost reduction through technology development and market deployment.
55. IITC has identified the International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO) as key partners for cooperation on renewable energy issues, and initial meetings have already taken place. An analysis of gaps and needs is under way and should be completed in the first half of 2012.
56. On 7 October 2011, IITC was officially opened. All posts have been advertised and staff are gradually being recruited. A full complement of staff is expected to be on board by the end of 2011. IITC's interim premises are fully operational with the necessary office space, equipment and technology in place, and administrative arrangements are being finalised for the full implementation of the Host Country Agreement.

**d) Administration and Management Support Services**

57. The Director-General has taken concrete initiatives to establish a framework of transparent, accountable and efficient processes across all the functions of the agency for clear identifications of roles, responsibilities, authorities and accountabilities for smooth execution of the activities in Human Resources, Finance, Procurement and Information Technology. As part of his continuous efforts to improve internal control on financial management, the Director-General has established the Contracts Review Committee to provide advice on proposed contracts having a value over USD 150,000. The Director-General has also issued directives on the Staff Regulations and Provisional Staff Rules, the Interim Financial Regulations and Provisional Financial Procedures and the Code of Conduct.
58. A number of initiatives have been introduced to put in place coordinated administrative operations to ensure the delivery of concerted management support services, including the development of forms and work flows, the clarification of delegation of authorities and segregation of duties in line with the Financial and Staff Rules, and the building of capacity by recruiting and training new staff. To establish transparent, accountable and efficient processes, a project on the Design and Documentation of Business Policies and Procedures (DDBP) was launched at the beginning of October with the help of an external company. A Progress Review Committee, chaired by the Director-General and comprising key staff from Legal and Support Services, has been established to review, monitor and approve its outcomes. Initial steps have been taken to explore the development of an appropriate Enterprise Resource Planning (ERP) system to improve work processes, reporting capabilities and monitoring of activities and the use of resources.
59. Recruitment of staff remains a priority, and a number of positions have already been filled, with the remaining vacancies currently either in the process of being filled or advertised. The number of applications in response to advertisements has indicated an encouraging extent of interest in the work of the Agency. To ensure a transparent selection process that would result in the selection of the best candidates for the vacant positions, third-party consultants were invited to conduct the first review and shortlisting of the candidates. Candidates are being selected through a standardised process involving the panel of staff members at appropriate levels and HR. All recommendations are reviewed and approved by the Director-General before the final selection and appointments are made.

61. At the time of writing, the recruitment process for 19 posts has been finalised, of which 16 offers of the employment have been issued and two more are being negotiated with the successful candidates. To streamline the recruitment process efficiently, online submission of applications system has been developed on the website. The additional 14 positions have been disseminated using the new online system.
62. In an effort to enhance internal communication and knowledge sharing, and to streamline the work and approval processes, IRENA has established an intranet: REsource. This platform allows for effective office collaboration through electronic means by providing a virtual office space for working within and between offices and duty stations. REsource provides easy, secured and integrated access to information, and ensures coherence within the Secretariat through improved, regular communication. In addition, IRENA's office in Bonn is now virtually part of the Secretariat's IT structures and systems through secured and efficient connectivity. This also provides cost-effective and efficient communication between the two duty stations.
63. Finally, pursuant to Decision A/1/DC/4 on the Establishment of the Staff Provident Fund of the International Renewable Energy Agency, the Director-General has appointed two executive management representatives and another two members were elected by staff as their representatives, thus completing the membership of the Board. The first meeting of the Management Board took place on 5 October 2011.

### **Conclusion**

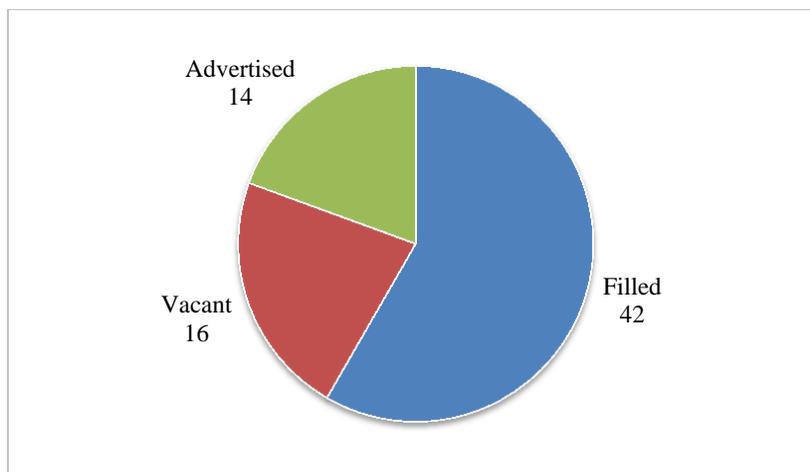
64. In spite of the limited time available for the implementation of the programmatic activities in 2011, achievements have been significant. The coming months will be marked by a surge in finalising the programmatic activities, as well as continuous efforts to engage with different stakeholders. Efforts to recruit skilled personnel for vacant positions and to further enhance support structures will continue. The ability to meet all the objectives and expected achievements, set out in the Work Programme and Budget for 2011, will depend not only on the dedication and tireless work of IRENA staff, but also on the continuous support of the Members and cooperation on the part of a wide range of actors and stakeholders.

**ANNEX I: Human Resources and Budgetary**

***Approved and filled posts***

Of the total 72 posts approved by the Work Programme, 42 are currently filled and 14 are advertised at the time of writing, with a deadline for applications on 31 October.

*Figure 1: Staffing Status as of 16 October 2011*



*Figure 2: Gender Balance as of 16 October 2011*

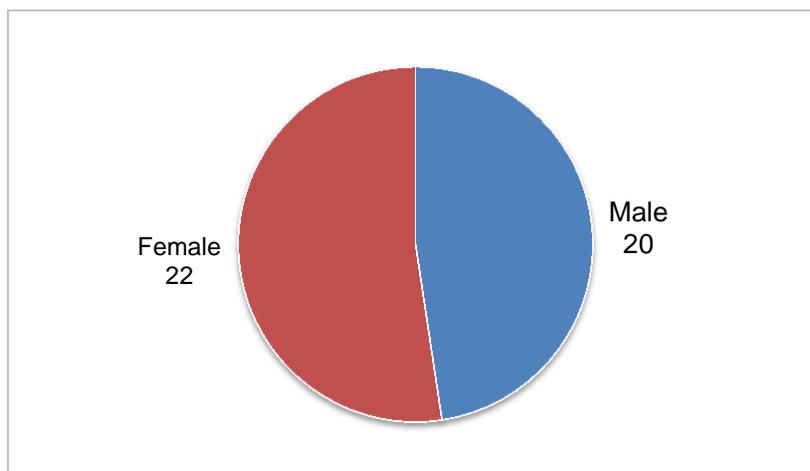


Figure 3: IRENA Staff Nationalities, Fixed term and Secondees, as of 16 October 2011

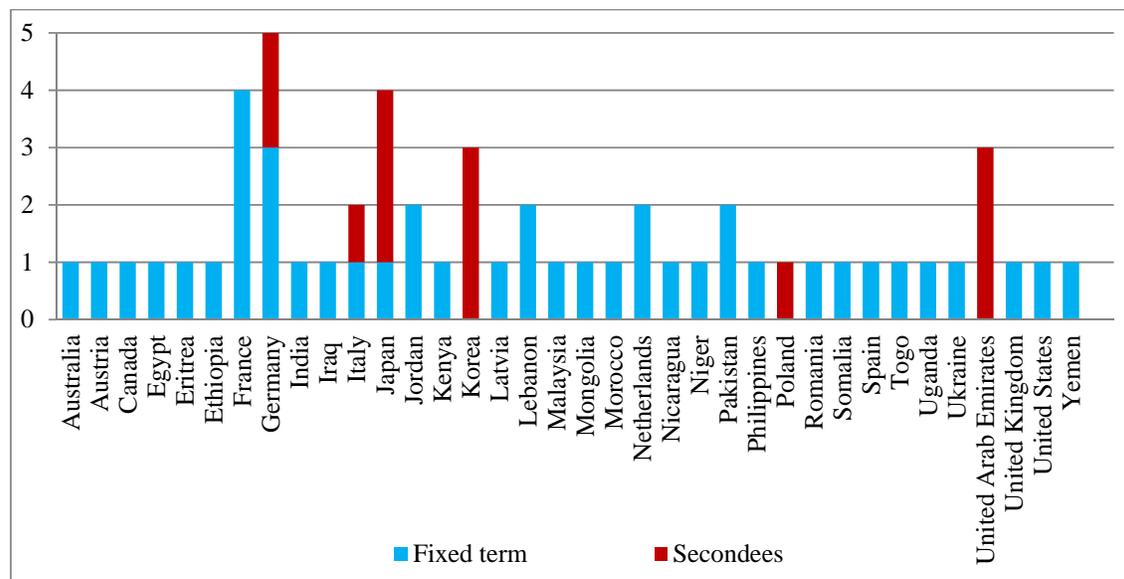


Table 1: Approved and filled posts by level

Level	Approved	Filled
ASG	1	1
D-2	1	0
D-1	4	3
P-5	17	11
P-4	6	3
P-3	20	14
P-2/1	3	2
<i>Sub-total Professional and above</i>	<b>52</b>	<b>34</b>
General Services	20	8
<b>Total</b>	<b>72</b>	<b>42</b>

Table 2: Seconded staff

<b>Division</b>	<b>Title</b>	<b>Seconded by</b>
<b>SMED</b>	Project Officer, General Management	Poland
	Legal Officer	Germany
<b>KMTC</b>	Senior Project Officer - Technology Cooperation	Japan
	Project Officer, Cooperation Network	Japan
	Project Officer, Energy Statistics	Republic of Korea
	Project Officer, Energy Statistics	Republic of Korea
<b>PACB</b>	Project Manager, Policy	Republic of Korea
	Project Officer, Energy Policy	Italy
	Project Officer, Renewable Energy Policy	Germany
<b>IITC</b>	Project Officer, Innovation and Technology	Japan
<b>AMS</b>	Human Resources Officer	UAE
	Human Resources Officer	UAE
	Liaison Officer	UAE

Table 3(a): Programme Budget for 2011, in thousand USD

	Approved Budget		
	Jan-Mar 2011	Apr-Dec 2011	Total
<b>Assessed contributions (core budget)</b>	<b>1,619</b>	<b>11,641</b>	<b>13,260</b>
<b>Voluntary contributions from the UAE bid</b>			
Operations	60	2,840	2,900
Research		2,900	2,900
Workshops and conferences		1,600	1,600
Information Technology	145	1,003	1,148
<i>Subtotal UAE bid</i>	<i>206</i>	<i>8,343</i>	<i>8,548</i>
Voluntary contributions from Germany	-	3,100	3,100
Voluntary contributions from Austria <sup>1</sup>	-	-	
<b>Total voluntary contributions</b>	<b>206</b>	<b>11,443</b>	<b>11,648</b>
<b>Grand total</b>	<b>1,825</b>	<b>23,084</b>	<b>24,908</b>

<sup>1</sup> Resources are subject to voluntary contributions to be granted by Austria, pending ratification.

Table 3(b): Components and 2011 Approved Appropriations, in thousand US\$

Component	2011 Approved Appropriation	Expenditures and Obligations	Estimated Unobligated Requirements Oct-Dec	Total	Utilisation Rate
1. Strategic Management	5,543	3,323	872	4,195	75.68%
2. Programme of Work	13,369	6,467	4,521	10,988	82.20%
<i>KMTC</i>	5,759	3,260	1,502	4,762	82.69%
<i>PACB</i>	4,510	1,976	1,519	3,495	77.51%
<i>IITC</i>	3,100	1,232	1,499	2,731	88.11%
3. AMS	3,249	1,879	463	2,341	72.07%
<i>Provided directly by UAE</i>					
Policy-making organs	1,600	1,600	-	1,600	100.00%
Information Technology	1,148	1,148	-	1,148	100.00%
<b>Grand Total</b>	<b>24,908</b>	<b>14,417</b>	<b>5,856</b>	<b>20,273</b>	<b>81.39%</b>

Table 3(c): Resource requirements by object of expenditure, in thousand USD

Object of expenditure	2011 Approved Budget	Expenditure and Estimated Obligations	Expenditure and Estimated Obligations %
<i>April to December 2011</i>			
Posts	7,183	3,457	48%
Other staff costs	50		0%
Consultants	1,560	2,106	135%
Seconded personnel	584	762	130%
Experts	615	634	103%
Travel of staff	479	387	81%
Contractual services	765	959	125%
General operating expenses	200	368	184%
Hospitality	5	7	147%
Supplies and materials	200	238	119%
Subtotal:	11,641	8,918	77%
<i>January to March 2011</i>			
	1,619	1,902	117%
<b>Total</b>	<b>13,260</b>	<b>10,819</b>	<b>82%</b>

Figure 4: Value of contributions to the IRENA 2011 core budget, received and outstanding

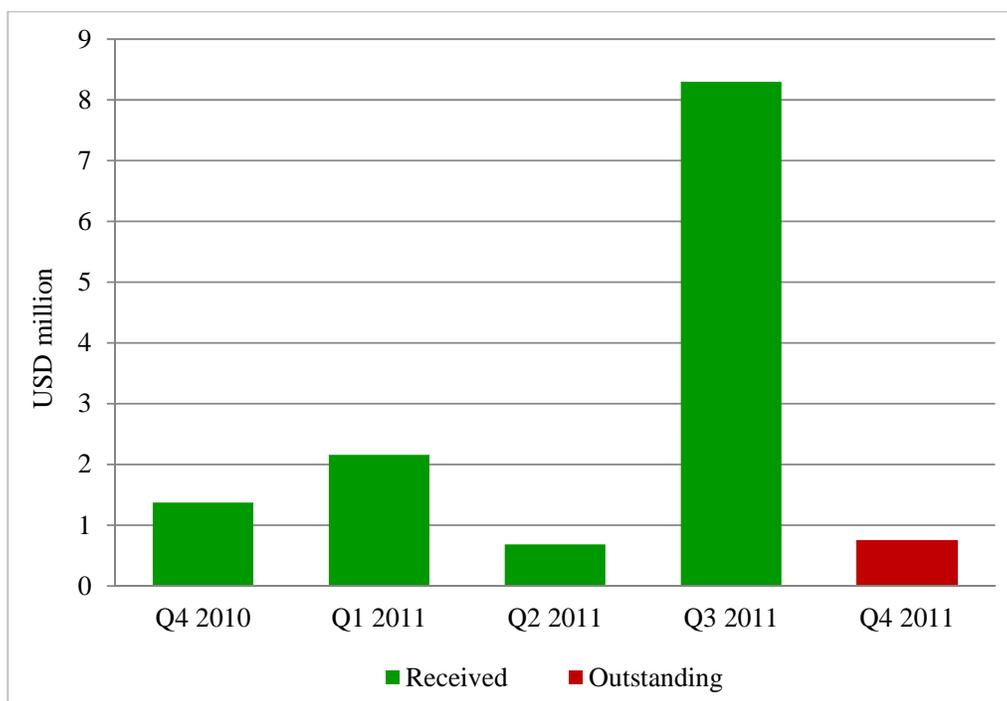
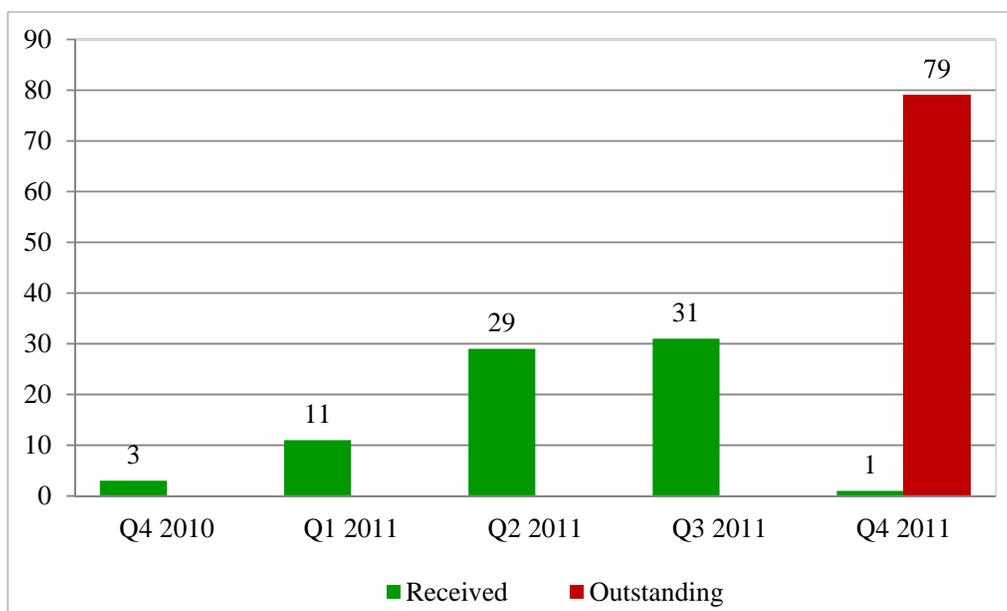


Figure 5: Number of countries contributing to the IRENA 2011 core budget, received and outstanding



## ANNEX II: Status of contributions (USD)

Table 4: Contributions to IRENA Budget 2011<sup>2</sup>:

Country/Organisation	Assessed Contributions to IRENA 2011 (USD) <sup>3</sup>	Received Contributions (USD)	Additional Contributions Received (USD) <sup>4</sup>
Afghanistan*	642	-	-
Albania	1,606	-	-
Algeria*	20,555	-	-
Angola*	1,326	1,326	-
Antigua and Barbuda	321	321.00	-
Argentina*	46,089	46,089.00	-
Armenia	803	-	-
Australia	310,418	310,418	249.52
Austria*	136,661	-	-
Azerbaijan*	2,409	2,394.00	-
Bahrain*	6,263	6,238.00	-
Bangladesh	1,326	-	-
Belarus	6,745	6,745.00	-
Benin*	482	-	-
Bosnia and Herzegovina	2,248	2,248.00	-
Brunei Darussalam	4,496	4,439.77	-
Bulgaria	6,102	6,102.00	-
Burkina Faso*	482	-	-
Cambodia*	482	325.00	-
Cameroon	1,766	-	-
Cape Verde	133	-	-
Central African Republic*	133	-	-
Chad*	321	-	-
Chile*	37,899	-	-
Colombia*	23,125	-	-
Comoros*	133	-	-
Congo*	482	482	38.76
Costa Rica*	5,460	-	-
Cote D'Ivoire*	1,606	1,606	17.87
Croatia	15,577	-	-
Cyprus	7,387	7,362.00	-

<sup>2</sup> Table 4 excludes UAE BID and German voluntary contribution for IITC.

<sup>3</sup> As stipulated in Decision A/1/DC/8 of 4 April 2011 on the Work Programme and Budget for 2011, Annex II IRENA Scale of Contributions for 2011.

<sup>4</sup> Funds received in 2011 in addition to the assessed contribution.

Country/Organisation	Assessed Contributions to IRENA 2011 (USD) <sup>3</sup>	Received Contributions (USD)	Additional Contributions Received (USD) <sup>4</sup>
Czech Republic	56,045	32,657.00	-
Democratic Republic of the Congo*	482	-	-
Denmark	118,193	118,183.00	-
Djibouti	133	-	-
Dominican Republic	6,745	-	-
Ecuador	6,424	6,399.00	-
Egypt*	15,095	-	-
Eritrea	133	-	-
Estonia*	6,424	-	-
Ethiopia*	1,285	-	-
European Union	-	686,680.97	-
Fiji	642	623.00	-
Finland	90,893	90,893.00	-
France	983,284	655,523.00	-
Gabon*	2,248	-	-
Gambia	133	-	-
Georgia	964	949.00	-
Germany	1,287,599	1,287,599.00	-
Ghana*	964	-	-
Greece*	110,967	-	-
Grenada	133	-	-
Guatemala*	4,496	-	-
Guinea*	321	-	-
Guinea-Bissau*	133	118.00	-
Honduras*	1,285	-	-
Iceland	6,745	6,710.00	-
India	85,754	85,739.00	-
Iran (Islamic Republic of) *	37,417	-	-
Iraq*	3,212	3,197.00	-
Ireland*	79,973	79,973	6,510.00
Israel	61,666	-	-
Italy*	802,782	-	-
Japan	2,012,175	2,012,175.00	-
Jordan*	2,248	2,205.37	-
Kazakhstan*	12,205	-	-
Kenya	1,927	1,902.00	-
Kiribati*	133	-	-

Country/Organisation	Assessed Contributions to IRENA 2011 (USD) <sup>3</sup>	Received Contributions (USD)	Additional Contributions Received (USD) <sup>4</sup>
Kuwait*	42,235	-	-
Kyrgyzstan*	133	-	-
Latvia	6,102	6,102	-
Lebanon*	5,299	-	-
Lesotho	133	-	-
Liberia*	133	-	-
Libyan Arab Jamahiriya*	20,716	-	-
Liechtenstein	1,445	1,430.00	-
Lithuania	10,438	10,406.50	-
Luxembourg	14,453	14,442.00	-
Madagascar*	482	-	-
Malaysia	40,629	40,629	-
Maldives	133	133	-
Mali	482	482	33.37
Malta	2,730	-	-
Marshall Islands	133	-	-
Mauritania*	133	133	1,024.54
Mauritius	1,766	1,751.00	-
Mexico	378,347	378,347.00	-
Monaco	482	482.00	-
Mongolia	321	-	-
Montenegro	642	-	-
Morocco*	9,314	-	-
Mozambique	482	482.00	-
Nauru	133	108.00	-
Nepal*	964	-	-
Netherlands	297,892	297,892.00	-
Nicaragua	482	482	25.00
Niger	321	282.65	-
Nigeria	12,526	-	-
New Zealand <sup>5</sup>	-	-	-
Norway	139,873	139,873	75,143.00
Oman	13,811	-	-
Pakistan*	13,168	-	-
Palau	133	133	-
Panama*	3,533	3,508.00	-
Papua New Guinea*	321	-	-

<sup>5</sup> New Zealand became a Member on 1 May 2011.

Country/Organisation	Assessed Contributions to IRENA 2011 (USD) <sup>3</sup>	Received Contributions (USD)	Additional Contributions Received (USD) <sup>4</sup>
Peru*	14,453	-	-
Philippines	14,453	14,438.00	-
Poland	132,967	132,942.00	-
Portugal	82,061	-	-
Qatar	21,679	21,679.00	-
Republic of Korea	362,930	362,910.00	-
Republic of Moldova	321	-	-
Romania	28,424	-	-
Rwanda*	133	-	-
Saint Lucia <sup>6</sup>	-	-	118.00
Saint Vincent and the Grenadines*	133	-	-
Samoa	133	-	-
Sao Tome and Principe*	133	-	-
Senegal	964	-	-
Serbia	5,942	5,942.00	-
Seychelles	321	321.00	-
Sierra Leone	133	-	-
Slovakia	22,804	22,782.50	-
Slovenia	16,541	-	-
Somalia*	133	133	0.38
South Africa	61,827	61,827.00	-
Spain	510,190	510,190.00	-
Sri Lanka	3,051	3,051.00	-
Sudan	1,326	-	-
Swaziland	482	-	-
Sweden	170,866	170,866.00	-
Switzerland	181,465	181,440.00	-
Syrian Arab Republic*	4,015	-	-
Tajikistan*	321	-	-
The former Yugoslav Republic of Macedonia	1,124	-	-
Timor-Leste*	133	-	-
Togo	133	-	-
Tonga	133	108.00	-
Tunisia	4,818	-	-
Turkey*	99,083	99,083.00	-
Uganda*	964	-	-

<sup>6</sup>Neither a Member of IRENA nor a Signatory of the Statute

Country/Organisation	Assessed Contributions to IRENA 2011 (USD) <sup>3</sup>	Received Contributions (USD)	Additional Contributions Received (USD) <sup>4</sup>
United Arab Emirates	62,790	62,790	437,210.00
United Kingdom of Great Britain and Northern Ireland*	1,060,527	1,060,527.00	-
United Republic of Tanzania*	1,326	1,168.05	-
United States of America	2,917,200	2,917,200.00	-
Uruguay	4,336	-	-
Uzbekistan*	1,606	-	-
Vanuatu*	133	-	-
Yemen*	1,326	-	-
Zambia*	642	627.00	-
Zimbabwe*	482	457.00	-
<b>Total</b>	<b>13,260,000.00</b>	<b>11,995,201.81<sup>7</sup></b>	<b>520,370.44</b>

**Total contributions: USD 12,515,572.25**

\* Signatories that have not yet ratified the IRENA Statute (as of 16 October 2011).

<sup>7</sup> This total includes the EU contribution as requested by Decision A/1/DC/8 of 4 April 2011 on the Work Programme and Budget for 2011, Annex II.

Figure 6: Contributions to the IRENA 2011 core budget by origin

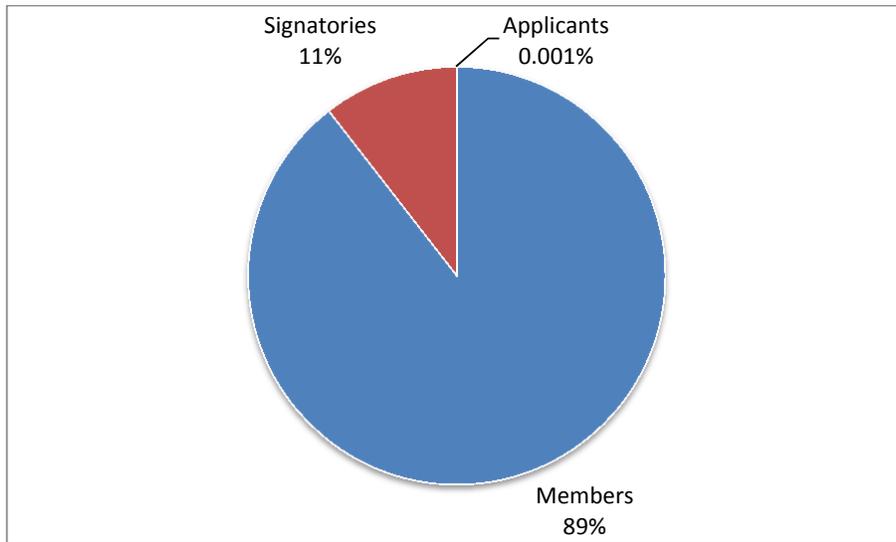


Figure 7: Contributions to the IRENA 2011 core budget by status

