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INTERNATIONAL RENEWABLE ENERGY AGENCY

First Session of the Assembly Abu Dhabi, 4 - 5 April 2011 Agenda item 17

Decision regarding the Work Programme and Budget for 2011

The Assembly,

Affirming its determination to strengthen the role, capacity, effectiveness and efficiency of the International Renewable Energy Agency in order to realize its full potential and to respond effectively to the needs of Members, in accordance with the purposes and principles of the IRENA Statute, pursuant to the relevant provisions thereof,

Recalling the Preparatory Commission decision PC.4/DC.6 regarding the Provisional Work Programme and Budget for the Preparatory Commission for 2011,

Recalling Article XII of the Statute on the budget of the International Renewable Energy Agency,

Noting that a number of Members have already contributed to the budget of the Commission in 2011, as provided for in the Indicative IRENA Voluntary Scale of Assessment in decision PC.4/DC.6,

Recognizing that the transitional nature of 2011 results in numerous Signatories not having ratified the Statute and become members of IRENA,

Having considered the Work Programme and Budget for 2011 as proposed in PC.5/DC.7/Corr.1/Rev.1,

Noting that the establishment of the IRENA Liaison Office in Vienna has been put on hold,

Taking into account the views expressed by the Members during the consideration of this item,

Acting pursuant to Article IX, paragraph A of the IRENA Statute,

1. *Decides* to adopt the Work Programme and Budget of the organisation as contained in Annex I, comprising,

• Core budget of USD 13.26 million to cover the core activities and administrative costs;

• Voluntary contributions resulting from the UAE bid implementation agreement of up to USD 2.9 million for operations, up to USD 2.9 million for research and USD 1.6 million for workshops and conferences; and

• Voluntary contributions for the operations of the IRENA Innovation and Technology Centre (IITC) in Bonn granted by Germany of up to USD 3.1 million;

2. *Decides* that, for the purpose of facilitating the transition from the Preparatory Commission to the International Renewable Energy Agency (hereinafter the "Agency"), both Members and Signatories will contribute the resources needed to finance the core budget in 2011;

3. Decides that the appropriation of USD 13.26 million for the Agency's core budget and activities pursuant to Financial Regulation 6.1 will include USD 11,423,170 in contributions from Members and USD 1,836,830 in contributions from Signatories;

4. *Decides* that any core budget cash surplus at the close of financial year 2011 shall be apportioned among Members and contributing Signatories, in proportion to their contributions for 2011, notwithstanding Financial Regulation 4.5 (a);

5. *Underlines* that the Members' contributions shall be mandatory, in accordance with Article XII of the Statute and in accordance with the scale of contributions attached in Annex II;

6. *Invites* the Signatories to voluntarily contribute to the core budget, guided by the scale of assessment adopted by the Preparatory Commission in PC.4/DC.6;

7. *Authorises* the Director-General to make transfers between appropriations sub-programmes up to the limit of 15 per cent of the amount appropriated for the sub-programme in question;

8. *Urges* the Council and the Director-General:

• to further clarify and set priorities for the 2011 work programme, including the estimated costs for sub-programmes and activities;

• to prepare a Strategic Framework for 2012-2015 that clearly defines vision, strategic direction, objectives and activities for consideration at the second session of the Assembly;

• to begin development of a results-oriented 2012 Work Programme and Budget.

A/1/DC/8

ANNEX I

Proposed Work Programme and Budget for 2011

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Overview

Prospects for Renewable Energy Use

- 1. As renewable energy technologies continue to evolve and improve as a result of large scale research and development (R&D) investment and the introduction of new enabling policy frameworks, and as prices continue to fall in relation to conventional energy, the prospect of a global transition to a clean, environmentally sustainable, economically feasible and reliable energy system is coming closer to fruition.
- 2. Substantial changes in renewable energy markets, investments, policies and industries are taking place rapidly, reflecting the increasing significance of renewable energy relative to conventional energy sources. The seminal REN 21 Global Status Report details progress in this regard and concludes that by 2010 renewable energy had reached a clear tipping point in the context of global energy supply. Renewables comprised one quarter of global power capacity from all sources, and delivered 18 per cent of global electricity supply in 2009. Investment in new renewable power capacity in both 2008 and 2009 represented over half of total global investment in new power generation. Moreover, by 2010, more than 100 countries had enacted policy targets or promotional policies related to renewable energy.
- 3. The increasing global interest in renewable energy is driven by the three defining challenges of:
 - a) responding to the looming threat of growing greenhouse gas emissions and climate change with irreversible negative global consequences;
 - b) achieving energy security to safeguard and drive economic progress; and
 - c) providing energy access to the millions of energy poor throughout the developing world for a more productive and secure future without the risk of hugely increasing greenhouse gas emissions.
- 4. The current energy system, based largely on carbon fuels, which distorts energy markets, externalises its real costs to society at large and relies on immense subsidies to remain competitive, is increasingly unsustainable. At the same time, foresighted governments around the world have begun to increase investments in R&D for clean energy, develop and implement enabling policy frameworks to encourage the rapid uptake of renewable energy, and enact legislation or non-binding targets capping and pricing carbon emissions. The prospects for a global transition to renewable energy have never been better, but at the same time technical, economic, trade and financial barriers continue to inhibit the deployment of renewable energy technologies.
- 5. It is within this general context that governments have taken the decision to create the International Renewable Energy Agency (IRENA) as an international

organisation with global reach, to act as the focal point for international cooperation and to underpin the effort to dramatically increase the deployment of renewable energy technologies in energy systems around the world. The fact that, within two years of its founding, IRENA has already gained 149 Signatories and 63 ratifications, attests to the high expectation that the international community has of this new, fledgling organisation.

- 6. IRENA enters an institutional universe already populated by a plethora of research, advocacy, sectoral, regional and issue-based institutions and organisations devoted to renewable energy. It is within this institutional landscape that IRENA, acting at the behest of its members, must develop and position itself as an inclusive global platform stimulating international cooperation, bringing all stakeholders to the global policy dialogue, and developing concerted and effective strategies for the necessary transition to a renewables-based energy future.
- 7. In doing so, IRENA must effectively leverage its comparative advantage as the unique and universal intergovernmental framework dedicated to the promotion of renewable energy. The strength of IRENA lies in the united ambition of Member States around the world, and its role must be found in the translation of the unique legitimacy that comes from its intergovernmental nature and structure and the fact that its Statute has been ratified by parliaments around the world. This legitimacy brings with it a potentially unparalleled convening power and authority. Such a potential can only be realized if IRENA develops as an inclusive, accountable and innovative organisation. The challenge is to create a forward looking partnership of all advocates of future global sustainability and the central role of renewable energy in the transition to sustainable growth and development.
- 8. In charting its way forward, IRENA will be guided by the visionary perspective of its founding Statute which provides that IRENA shall:
 - a) analyse renewable energy policies;
 - b) participate in the global renewable energy dialogue, disseminate information and increase awareness;
 - c) provide (upon request) relevant advice on policies and financing for renewable energy;
 - d) offer capacity building, including training and education;
 - e) prepare an overview of policy instruments, technologies and equipment and assess success-failure factors;
 - f) improve pertinent knowledge and technology transfer, promote local capacity and competence and international cooperation;
 - g) stimulate and encourage research, including socio-economic issues, and foster research networks and joint R&D;
 - h) provide information about the development and deployment of national and international technical standards in relation to renewable energy; and
 - i) disseminate information and increase public awareness on the benefits and potential offered by renewable energy.

9. The guidance of the Statute and the decisions of Member governments to establish a programme framework that encompasses the three key thematic areas of Knowledge Management, Policy and Capacity Building and Innovation and Technology provide an effective vehicle to carry forward the vision of the Statute and the ambition of Member countries.

Strategic positioning of IRENA

- 10. IRENA's mission is to support the transition to a future essentially based on renewable energy, ensuring that renewable energy grows rapidly in the national energy mix in all countries, and to assist countries to identify, map out, design and implement the best route to that destination. This requires a solid understanding of the political, economic, policy and regulatory environment in which renewable energy must compete, as well as of the existing and emerging technological possibilities and business models. It also requires working with and mobilising a rapidly-expanding stakeholder community and drawing on its knowledge, experience and resources.
- 11. IRENA must remain comparatively lean and nimble, providing a range of wellunderstood services that complement what other players in the renewable energy and intergovernmental community can offer; for instance, to the global climate change debate, while acting as an advocate for renewables within the larger international system. IRENA must be the source of the latest thinking, distilled, adapted and offered to the Member countries, facilitating contact with such sources of technical assistance as Members require. It will leverage its comparative advantage and legitimacy as an intergovernmental framework to build partnerships with actors in the field. The private sector perspective will be invaluable in the definition of adequate policy making processes in IRENA, and effective interaction is required with intergovernmental policy organs.
- 12. IRENA will be a neutral player, assisting its Members in navigating among the variety of actors, offering them advice on renewable energy and proposing solutions to their energy needs. To do this, IRENA must stay on top of the complex world of renewable energy as it develops and evolves. It must become the "turn-to" organisation for any country wishing to know the latest developments in policy, regulation, institutional arrangements, financial mechanisms or technologies related to renewable energy. For this, it must monitor the field closely and keep its membership abreast of developments as they occur through in-depth reports, best practices and policy briefs.
- 13. IRENA's focus with its developing country Members must be to help them map out how to make the transition to an energy mix in which renewables find their optimal place. For that, it must understand what enabling conditions need to be put in place and which obstacles removed, what mix of solutions responds best to a country's

circumstances, and how countries might gain access to those who can best assist them. IRENA can help with clear information on all of these. Social and economic development and poverty eradication are the first and overriding priorities of developing countries. As for developed Member countries, IRENA is not just a way to mitigate global climate change and a door to new markets for knowledge and technology, but also a means to overcome obstacles to renewables at home, increasing energy security and creating green jobs. IRENA will identify modalities to support developed countries in meeting such challenges.

Framework of the IRENA Programme 2011

- 14. The 4th session of the Preparatory Commission for IRENA decided, *inter alia*, that "Based on the 2010 Work Programme and Budget, and the draft 2011 Work Programme and Budget of the Preparatory Commission (PC/WG.PRO/WP.13/Rev.2), the Secretariat and the new management team shall together develop a 2011 Work Programme and Budget with greater clarity in strategic direction, in due time before the first session of the Assembly with a view to its adoption at that session. Such Work Programme and Budget shall strive to match outputs to required resources (e.g. funding, personnel) to achieve such outputs so as to facilitate ease of budgetary planning and oversight." (PC.4/DC.6, III.2)
- 15. In accordance with the above decision, the Secretariat has prepared the following proposed Work Programme and Budget for consideration and approval by the Assembly. The strategic framework for 2011 will be one of re-focusing and consolidating strategies and support structures in order to respond in future to the challenges and opportunities outlined in the preceding sections. The overall strategy envisions IRENA achieving its objectives and addressing the needs of its Members through an integrated package of services. This approach will be designed to facilitate accelerated uptake of renewable energy technologies and to promote transitioning of countries to a future where renewable energy is central to energy planning. Its approach will consist of the following steps:
 - Knowledge and consensus building for action;
 - Provision of tools for decision making on renewable energy policies;
 - Support for policy implementation; and
 - Global branding and positioning of IRENA.
- 16. The approach will be implemented through three substantive sub-programmes and establishment of an administration and management support structure through 2011. To ensure accountability, the organisational structure is aligned with the programme structure, as shown in the Annexes:

- i. Knowledge Management and Technology Cooperation
- ii. Policy Advisory Services and Capacity Building
- *iii.* Innovation and Technology
- iv. Administrative and Management Support

Proposed Programme Budget for 2011

Table 1.Estimates of expenditure (in USD)

				Interim
		Estimated	Estimated	Director-
	Indicative	Expenditures	Requirements	General's
	Budget	Jan-Mar 2011	Apr-Dec 2011	Proposal 2011
Assessed Contributions (Core budget)	13,260,000	1,619,200	11,640,800	13,260,000
Voluntary contributions from the UAE bid				
Operations	2,900,000	60,200	2,839,800	2,900,000
Research	2,900,000	-	2,900,000	2,900,000
Workshops and conferences	1,600,000	-	1,600,000	1,600,000
Information Technology	<u>1,148,300</u>	<u>145,300</u>	<u>1,003,000</u>	<u>1,148,300</u>
Sub-Total UAE bid	8,548,300	205,500	8,342,800	8,548,300
Voluntary contributions from Germany	3,100,000	-	3,100,000	3,100,000
Voluntary contributions from Austria ¹	-	-	-	-
Total Voluntary contributions	11,648,300	205,500	11,442,800	11,648,300
Grand Total	24,908,300	1,824,700	23,083,600	24,908,300

¹ Resources are subject to voluntary contributions to be granted by Austria, pending ratification.

Subtotal C	5,503,100	7,100,000	12,603,100
Sub-programme 3. Innovation and Technology		<u>3,100,000</u> 6	<u>3,100,000</u>
Sub-programme 2. Policy Advisory Services and Capacity Building	2,203,100	2,000,0005	4,203,100
Sub-programme 1. Knowledge Management and Technology Cooperation	3,300,000	2,000,0004	5,300,000
C. Programme of Work			
A. Policymaking Organs B. Strategic Management	- 3,285,600	$1,600,000^2$ $1,739,800^3$	1,600,000 5,025,400
Component	Core budget	Voluntary Contributions	Total
	April to Decer		
	Estimated Req	uirements	

Table 2.Resource requirements by component (in USD)

² Non-post resource requirements for servicing the Commission are provided by the host country. Post requirements are reflected under Strategic Management.

³ Includes resource requirements for UAE bid contribution, but excludes resource requirements for the IRENA Liaison Office in Vienna.

⁴ UAE bid contribution

⁵ UAE bid contribution

⁶ Resource requirements for Sub-programme 3 will be funded by the German Government.

Table 3.Post requirements

	2011				
Category	Core	Voluntary Contributions	Total Posts		
Professional and above					
ASG	1	-	1		
D-2	1	-	1		
D-1	3	1	4		
P-5	14	3	17		
P-4	5	1	6		
P-3	17	3	20		
P-2/1	3	-	3		
Subtotal	44	8	52		
General Service					
Principal Level	1	-	1		
Other Level	17	2	19		
Subtotal	18	2	20		
Total	62	10	72		

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Table 4. Resource requirements by object of expenditure and source of funds

(1) Core budget (in USD)

Object of expenditure	2011 Estimated Requirements
Estimated requirements: April to December 2011	
Posts ⁷	7,183,300
Other staff costs	50,000
Consultants	1,560,100
Seconded personnel ⁸	584,100
Experts	615,000
Travel of staff	478,800
Contractual services	765,000
General operating expenses	200,000
Hospitality	5,000
Supplies and materials	199,500
Subtotal:	11,640,800
Estimated expenditures: January to March 2011	1,619,200
Total Core Requirements 2011	13,260,000

(2) Voluntary Contributions (in USD)

	2011 Estimated Requirements
Estimated requirements: April to December 2011	
Voluntary contributions from the UAE bid	8,342,800
Voluntary contributions from Germany	3,100,000
Sub-total:	11,442,800
Estimated expenditures: January to March 2011	205,500
Total Voluntary Contributions 2011	11,648,300
Total (1) and (2)	24,908,300

⁷ The costs of established or continuing posts are based on United Nations standard salaries costs, the relevant post adjustment and common staff cost rates, as appropriate, and calculated at 75% since the proposal covers only nine months in 2011. New posts are costed at 50% of established or continuing post costs to take into account recruitment delays.

⁸ Seconded personnel are provided daily and monthly subsistence allowance from core budget.

- 17. The proposed core budget requirements for the period April to December 2011 totals \$11,640,800, comprised of \$7,183,300 for 62 core posts and \$4,457,500 for various non-post requirements, including general temporary assistance, consultants, seconded personnel, expert group meetings, travel of staff, contractual services, supplies and materials and information technology. It is assumed that the services of 16 personnel seconded from 2010 will be continued. The distribution of the core budget requirements, by component, for the last nine months of 2011 is as follows:
 - a. \$3,285,600 under Strategic Management, comprising \$2,405,300 for 20 posts (1 ASG, 1 D-2, 5 P-5, 1 P-4, 4 P-3, 1 P-2 and 7 GS/OL) and \$880,300 for non-post requirements;
 - b. \$5,503,100 under Programme of Work, comprising \$2,900,400 for 23 posts (2 D-1, 6 P-5, 3 P-4, 8 P-3, and 4 GS) and \$2,602,700 for non-post requirements;
 - c. \$2,852,100 under programme support, comprising \$1,877,600 for 19 posts (1 D-1, 3 P-5, 1 P-4, 5 P-3, 2 P-2, 1 GS/PL and 6 GS/OL) and \$974,500 for non-post requirements.
- 18. For the period April to December 2011, the amount of \$11,648,300 is proposed to be funded from voluntary contributions as follows:
 - a. \$8,342,800 from the UAE bid to provide for information technology requirements, and strategic management and programme activities; and,
 - b. \$3,100,000 from the German voluntary contributions to provide \$965,300 for ten posts (1 D-1, 3 P-5, 1 P-4, 3 P-3 and 2 GS/OL) and \$ 2,134,700 for non-post requirements such as consultants, workshops and conferences, travel of staff, contractual services, support for office automation equipment and supplies.

A. Policymaking organs

Voluntary Contributions: \$1,600,000

- 19. The principal policymaking organ of the Agency is the Assembly. It is composed of all Members of the Agency. It meets in regular annual sessions unless it decides otherwise. The Assembly includes one representative for each Member. Representatives may be accompanied by alternates and advisors. The IRENA core budget does not cover the costs of delegations' participation at the Assembly. The first session of the Assembly will be held in April 2011.
- 20. The Secretariat assists the Assembly and its subsidiary bodies in the performance of their functions. The core resource requirements for this support are included under Strategic Management in Part B below.

B. Strategic Management

Core Resource requirements: \$3,285,600 Voluntary Contributions: \$1,739,800

Table 5.	Objectives,	expected	accomplishments,	indicators	of	achievement	and
	performance	e measures					

Programme	
Expected accomplishment in 2011	Indicators of achievement
(a) Provision of support to Members of	i. Timely delivery of documentation
the governing bodies of IRENA	ii. Effective Secretariat support to inter- governmental meetings
(b) Improved quality in the formulation and implementation of the Programme of Work	i. Recognition by States Parties of an effective programme formulation, implementation and evaluation
(c) Timely and adequate mobilisation of financial resources	i. Percentage of resources mobilised in a timely manner to implement the Programme of Work
(d) Visibility of IRENA as the global voice for renewable energy	i. Effective strategy for communication to all major partners
	ii. Growing recognition of IRENA among renewable energy stakeholders

Objectives: To effectively and efficiently manage the Agency and its Work **Programme**

Governance

21. The Secretariat will focus on enhancing support to the Assembly and other governing bodies, ensuring accountability and transparency to the entire membership and partners, and building credibility and confidence in IRENA as the primary convener of dialogue and partnership building in the field of renewable energy.

Communication and Outreach

22. A robust and integrated communications strategy will be articulated and implemented to support IRENA's aim of becoming the global voice for renewable energy, while promoting a swift transition towards its sustainable use. Within the context of a broad communications umbrella for IRENA, there will be a focus on communications and marketing, whose complementary but distinct roles should add to and multiply the value of every aspect and activity of the organisation. Three key target areas are being addressed which will come under the broader communications and outreach strategy, namely: development of a communications strategy, communication products designed to support programmes, and a global campaign to support the 2012 International Year of Sustainable Energy for All. Communications products will be developed to support programmes. Outreach will be undertaken at global renewable energy initiatives such as the Interstate Renewable Energy Council (IREC), the World Future Energy Summit (WFES), the Clean Energy Ministerial (CEM), and regional forums, especially in Africa, Asia-Pacific and Latin America and the Caribbean, and global events such as Rio+20.

Strategic Planning

23. The entire thrust of the 2011 Programme is aimed at laying the groundwork for a longer-term IRENA strategic plan. This will be developed through the Director-General's Office and prepared for presentation at the next session of the Assembly.

Strategic Partnerships

24. As highlighted throughout this document, IRENA's eventual success will depend on its ability to galvanise critical partnerships with all of the key players in the renewable energy field. While individual sub-programmes will be responsible for developing and strengthening partnerships within the context of their defined activities, the Director-General will take lead responsibility for forging major long-term relationships with key players in the field.

Management of the Agency

25. The Director-General has overall responsibility for providing leadership to carry out the Agency's mandate and is also responsible for the efficient and effective management of the Agency and its Work Programme. The Office of the Director-

General provides support in the timely discharge of his/her responsibilities and in the management of the Office, including monitoring the resources of the Office and streamlining the Office's management systems. It also monitors the implementation of the programme of work and acts as the focal point for information on all aspects of the work of the Office. Strategic Management also includes an internal audit function. The internal auditor will assure that sub-programmes and activities are executed effectively and that internal control and risk management measures are in place to enable rapid response and reaction as required or appropriate. A Legal Advisor will, *inter alia*, prepare and review agreements and contracts to ensure requisite compliance and protect the interests of IRENA.

Outputs

26. During 2011, the following final outputs will be delivered:

- a. Servicing of intergovernmental and expert bodies:
 - Substantive servicing of meetings of the Preparatory Commission and of the Assembly, the Council, and subsidiary bodies (six-seven meetings);
 - Parliamentary documentation: Reports to the Preparatory Commission and to the Assembly, the Council, and subsidiary bodies (approx. 30 reports), delegates' website portal.
- b. Management and oversight:
 - Overall management: Direction, guidance and policy clearance of all programmatic and administrative actions;
 - Planning and strategic management: Five year strategic plan; annual work plan; annual proposed budget;
 - Communications: Six key publications including the Annual Report, newsletters, information documents; development of a communications strategy; toolkits in collaboration with sub-programmes; show reel of different elements of renewable energy; Project Learning Network in collaboration with the Knowledge Management and Technology Cooperation sub-programme; representational materials; media database; one media workshop; and one "Puffersphere" for interactive visual display;
 - Audits: Audit facilitated and written management response showing actions taken to implement audit recommendations provided;

• Evaluations: Coordination and management of the evaluation of subprogrammes and activities. Evaluation reports for completed activities and written management responses to evaluation findings.

Category	Resources 2011	Posts 2011
Core budget		
Post	2,405,300	20
Non-post	880,300	
Subtotal	3,285,600	
Voluntary contributions		
UAE government bid	1,739,800	
Subtotal	1,739,800	
Total	5,025,400	20

Table 6.Resource requirements: Strategic Management (in USD)

- 27. The amount of \$3,285,600 will provide \$2,405,300 for 20 posts (1 ASG, 1 D-2, 5 P-5, 1 P-4, 4 P-3, 1 P-2 and 7 GS/OL).
- 28. The Assistant Secretary-General serves as the Director-General of IRENA and is responsible for the formulation of the Agency's management policies and has overall responsibility for achieving the objectives of the Organisation. In addition, the Director-General is responsible for maintaining close liaison with host country authorities and Members on all substantive aspects, as well as financial, budgetary, personnel and common support services matters. Moreover, he or she provides strategic guidance and management oversight concerning the implementation of the goals and activities of IRENA.
- 29. In discharging the foregoing responsibilities, the Director-General is supported by his/her immediate Office, which is proposed to be comprised of a Deputy Director-General at the D-2 level, and staff in the immediate office: 1 P-5, 1 P-3, 1 P-2 and 3 General Service staff. To achieve the objectives and expected results in 2011, as well as to enable the delivery of the outputs listed above, the following units are also proposed to be established under Strategic Management, as shown in the Organisational Chart presented in Annex 1. These are:
 - a. Communication and Outreach: 1 P-5 and 1 GS

- b. Legal Advisor: 1 P-5
- c. Governing Body Support and Conference Servicing: 1 P-5, 2 P-3, 1 GS
- d. Internal Audit: 1 P-4, 1 GS
- e. Host Country Liaison and Protocol: 1 P-3
- f. Programme Budget Coordination and Evaluation: 1 P-5 and 1 GS
- 30. The amount of \$880,300 for non-post resources would provide for:
 - a. Consultants to avail themselves of specialised expertise in policy and substantive areas;
 - b. Seconded personnel;
 - c. Travel of staff;
 - d. External printing of six key publications, including Annual Report, newsletters, information documents and toolkits;
 - e. Communications, including dissemination of materials, side events and media workshop;
 - f. Project Learning Network and one "Puffersphere" high impact projection interactive display;
 - g. Supplies and communications materials; and
 - h. Hospitality.
- 31. Voluntary contributions resources of \$1,739,800 from the UAE bid are utilized to assist in strategic stakeholder consultations, experts, outreach and meeting and conferences. The organizational and resource requirements for the IRENA Liaison Office in Vienna will be determined at a later stage.

C. Programme of work

	April to December 2011					
	Core	2	Voluntary		Total	
	Resources	Posts	Resources	Posts	Resources	Posts
Sub-programme						
Sub-programme 1.						
Knowledge Management and Technology Cooperation	3,300,000	14	2,000,000	-	5,300,000	14
Sub-programme 2.						
Policy Advisory Services and Capacity Building	2,203,100	9	2,000,000	_	4,203,100	9
Sub-programme 3.						
Innovation and Technology	-		3,100,000	10	3,100,000	10
Total	5,503,100	23	7,100,000	10	12,603,100	33

Table 7.Resource requirements by sub-programme (in USD)

Sub-programme 1: Knowledge Management and Technology Cooperation

Core Resource requirements: \$3,300,000 Voluntary contributions: \$2,000,000

Table 8.Objectives, expected accomplishments, indicators of achievement and
performance measures

Objective: To facilitate transition to an increased role of renewable energy				
Expected accomplishment in 2011 Indicators of achievement				
(a) Systematisation of relevant global knowledge on renewable energy	i. Strategic knowledge sources and gaps identified, strategic partnerships in place and corresponding action plans proposed, starting with potentials, statistics and renewable energy indicators			
	ii. Draft strategy document for knowledge development and management prepared			
(b) Regional collaboration among countries on renewable energy built to address the challenges of climate change,	i. Process design and collaboration mechanism for the renewable energy readiness assessment for Africa and the Pacific islands finalised			
energy security and energy access	ii. Agreement on convening intergovernmental consultations in four regions			
(c) Platforms for engaging with stakeholders from industry, civil society	i. Conceptual framework for engaging with stakeholders finalised			
and technical experts initiated	ii. First consultative meetings of the networks held			
(d) North-South and South-South technology cooperation to strengthen and enhance existing scientific and technical capabilities promoted	i. Key stakeholders engaged in discussions on technology cooperation strategies			

External factors

The sub-programme is expected to achieve its objectives and anticipated accomplishments on the assumption that there will be a willingness of countries to engage with IRENA to build a long-term plan of action for increasing the deployment of renewable energy.

32. Knowledge management is central to the promotion and facilitation of change and development. Member countries established IRENA to facilitate the rapid development and deployment of renewable energy, thus demonstrating a strong commitment to a sustainable, clean energy future. Building on this commitment,

IRENA will work with regional forums of countries and develop strategic stakeholder partnerships to galvanise action towards increasing the role of renewable energy, based on a sound knowledge of the potential of renewable energy technologies and the mechanisms and approaches available for accelerating their deployment.

- 33. The process will entail assessment of existing policy frameworks and priorities/ needs of the region, facilitating regional roadmaps for mainstreaming renewable energy, and ultimately developing consensus-based action plans and enabling frameworks. The sub-programme will aim to create processes and systems that facilitate knowledge sharing across global and regional networks comprised of governmental and non-state stakeholders. It will be developed in partnership with international organisations, such as financing institutions, the private sector, United Nations entities, regional economic communities, civil society and other stakeholders. IRENA will also play an important role in articulating the priorities of developing countries in strategy formulation for the International Year of Sustainable Energy for All in 2012.
- 34. *Systematisation of relevant global knowledge on renewable energy*. There are many existing forums, networks and partnerships, as well as governments, creating knowledge in the field of renewable energy, but the experience and knowledge available is dispersed and needs to be developed, systematised, and made accessible in a usable format for formulating policies to increase the role of renewable energy. Three activities are planned:
 - Activity 1: Mapping existing sources of knowledge to foster partnerships; gap analysis to identify IRENA value addition and a knowledge development strategy. IRENA will undertake a mapping of renewable energy knowledge repositories to identify key sources of research, best practices, tools and methodologies, and technical and institutional resources. A report will be prepared, including identification of knowledge gaps and opportunities for enhancing knowledge accessibility and systematisation, for discussion and potential future collaboration with key actors in renewable energy knowledge development and dissemination. This work will form the basis of a strategy for knowledge development and future IRENA activities.
 - Activity 2: Targeting studies on: global mapping of resource potential; systems for obtaining reliable energy statistics; and renewable energy indicators. Knowledge of energy potentials for renewable technologies is the basis for planning the energy transition. IRENA will develop services for countries to use existing information on potentials in energy planning. In 2011, it will set up partnerships and the architecture for a renewable energy potential information system, feeding into the renewables readiness assessments.

Based on IEA data, and expanding the dataset with UN information and research, IRENA will provide an updated renewable energy statistics database detailed per country and per technology, as a basis for monitoring progress of renewable energy developments and informing IRENA stakeholders.

In 2011, the concept of reliable renewable energy indicators will be developed and discussed with technical experts, to ultimately enable tracking of renewable energy trends, checking whether targets have been met, and assessing effectiveness of policies.

- Activity 3: Collaborating in the production of global and regional assessment reports led by key partners. Through its Member countries, network of partners, research initiatives, renewable readiness assessments, etc., IRENA will have the knowledge assets to make substantial contributions to headline reports on the renewable energy sector. Consultations will be undertaken in 2011 with key partners with a view to future collaboration.
- 35. *Promotion of regional consensus to adopt renewable energy through strategic interventions*. Regional economic and political forums will be a primary entry point to initiate discussing policy interventions at regional and country levels. They will provide platforms for building regional roadmaps for renewable energy, information sharing, policy advice, facilitating North-South and South-South cooperation and partnerships. Two activities are planned:
 - Activity 1: Identifying regional forums for engagement, such as ongoing renewable energy initiatives of the African Union and its Conference of Energy Ministers of Africa, and with the Pacific Islands regional forums; also identifying partners in Latin America and the Caribbean and Asia-Pacific, and building regional engagement strategies. The sub-programme will strengthen IRENA's knowledge base on key regional institutions, policy frameworks and renewable energy initiatives to identify potential opportunities for collaboration with members and other partners in targeted regions. IRENA missions to these regions will be undertaken to engage potential partners in dialogue on collaboration opportunities, and to chart a strategy to promote broader intergovernmental consultation on renewable energy issues in the region.
 - Activity 2: Preparing renewable energy readiness reports to provide input to regional renewable energy action plans and bringing together partners that can support the action plan implementation, including providing solutions for energy access. The renewable readiness reports will provide an assessment of existing policy structures and institutional contexts in the region. They will help identify the elements that could be built upon to have an effective and efficient policy framework to support market development, as an important input for decision

makers. In 2011 this activity will include consultations with regional partners and completion of the design for the assessment process.

- 36. *Provision of complementarity to intergovernmental consensus building through cooperation networks with other stakeholders*. Establishment of cooperation networks with industry, civil society and experts will provide an interface to cooperate with governments as they take forward their regional and national agendas on renewable energy. They offer a unique opportunity to organise dialogue between governments and external stakeholders, as well as disseminating and obtaining feedback on IRENA's technical and policy analysis work. The involvement of the renewable energy industry will be critical, and an ongoing dialogue between the industry and governments is a key factor of success. Civil society can provide a policy advocacy interface and extend the outreach of IRENA's activities. One formative activity is planned:
 - Activity 1: Preparing the foundation for cooperation networks with industry, civil society and experts through initial consultative meetings. For growth in renewable energy to continue, a predictable, long-term policy environment is critical for attracting investments. Forums of key stakeholder sectors will serve as a two-way mechanism for receiving and providing input to the renewable readiness assessments, policy and technology related work that IRENA undertakes, and for catalysing technology cooperation among actors. Members across regions and sectors will be identified to carry the networking processes forward. A web-based networking platform connecting renewable energy experts worldwide is also being developed.
- 37. Assist and catalyse multilateral cooperation in renewable energy technology. Promoting North-South and South-South technology cooperation will strengthen and enhance existing scientific and technical capabilities, particularly in developing countries, to make appropriate technology choices and develop endogenous capacity to promote renewable energy technologies. A forum to enable a regular exchange of knowledge between Members' experts will be developed, including decentralised renewable energy solutions, renewable energy technology transfer and solutions for technology access. IRENA will build on and complement IEA implementing agreements in technology areas of higher relevance for developing countries. Two activities are planned:
 - Activity 1: Initiating discussions with key stakeholders for technology cooperation, as priorities emerge from the renewable energy readiness reports. Potential partnerships will be identified and two workshops to identify potential partnerships, based on priorities that emerge, will be held.
 - Activity 2: Developing modalities for setting up mechanisms to foster technology cooperation. Existing mechanisms for cooperation will be assessed to identify

elements for effective cooperation, providing a basis for discussion at the above workshops.

Outputs

- 38. During 2011, the following final outputs will be delivered:
 - a. Knowledge mapping report on strategic knowledge sources and gaps;
 - b. Reports on statistics database, renewable energy potentials and renewables indicators;
 - c. Gap analysis and strategy for further IRENA actions on knowledge development;
 - d. Agreement on convening intergovernmental consultations in four regions;
 - e. Engagement with partners in Africa and the Pacific Islands on renewables readiness assessment; design of process and methodologies;
 - f. Launch of consultations on cooperation networks for industry, civil society organisations and experts;
 - g. Modalities for technology cooperation;
 - h. Architecture of web platform for renewable energy experts' virtual networking.

	April to December 2011			
Category	Resources	Posts		
Core budget Post Non-post	1,945,100 1,354,900	14		
Subtotal	3,300,000			
Voluntary Contributions	2,000,000	-		
Total	5,300,000	14		

Table 9.	Resource requirements: Knowledge Management and Technology
	Cooperation (in USD)

39. The amount of \$3,300,000 would provide \$1,945,100 for 14 posts (1 D-1, 3 P-5, 2 P-4, 6 P-3, 2 GS/OL posts).

- 40. Non-post resources totalling \$1,354,900 would cover the following requirements in order to achieve the expected results and deliver the outputs elaborated above:
 - a. 67 work months of consultant specialised expertise not available in IRENA;
 - b. Seconded personnel;
 - c. 15 expert meetings;
 - d. Travel of staff to undertake targeted studies, and participate in relevant forums;
 - e. Training related to the concept paper and partnership agreements for a renewable energy potentials platform;
 - f. External printing of the design process related to engagement with partners in Africa and the Pacific islands on renewable readiness assessment;
 - g. Proprietary software related to the prototype renewable energy statistics database and data collection methodology; and
 - h. Technical publications and information related to the knowledge mapping report and the renewable readiness assessment.
- 41. The voluntary contributions resources of \$2,000,000, to be funded from the UAE bid, will contribute to the implementation of the outputs outlined in paragraphs above.

Sub-programme 2 Policy Advisory Services and Capacity Building

Core Resource requirements: \$2,203,100 Voluntary contributions: \$2,000,000

Table 10. Objectives, expected accomplishments, indicators of achievement and performance measures

Objective: To strengthen countries' abilities to develop and implement policy and financial frameworks, and human and institutional capacities for promoting a sustainable deployment of renewable energy technologies

Expected accomplishments in 2011	Indicators of achievement	
(a) Cooperative key stakeholder approaches to foster enabling policies	i. Key renewable energy policy support; stakeholders agree on joint actions	
for renewables initiated	ii. Enhanced knowledge on lessons learned and best practices regarding access to energy programmes and social and macro-economic benefits of renewables	
(b) Understanding of the financing possibilities for renewable energy and	i. Enhanced knowledge of optional mechanisms for financing renewables for access to energy	
the framework conditions to leverage renewable energy investments improved	ii Increased understanding of new approaches of financing renewables through climate funding	
(c) Knowledge for effective response to human resource capacity gaps in transitioning to renewables enhanced	i. Increased knowledge on approaches, best practices and lessons learned for renewable energy specific capacity building strategies and programmes	
	ii. Increased interconnectedness of the international community for education and training in renewable energy	
	iii. Increased opportunities for students and trainees to follow renewable energy study programmes, research projects, trainings	

External factors

The sub-programme is expected to achieve its objectives and anticipated accomplishments on the assumption that commitments by governments to advance the deployment of renewable energies at national and local levels, their willingness to provide access to relevant data and information and participate in assessment processes will continue. Moreover, the readiness of international organisations, civil society and the private sector, as well as the academic and scientific community, to share information and partner with IRENA is of equal importance.

- 42. A major driver for the uptake of renewable energy is the existence of an enabling policy framework and institutional capacity at national level. IRENA is mandated, *inter alia*, to analyse and monitor policies and financial mechanisms, provide relevant advice and assistance on policies and financing for renewable energy, promote the development of local capacities and offer capacity building, including training and education. IRENA's Policy Advisory Services and Capacity Building sub-programme will assist countries to foster an enabling policy and a financial and human resource environment for the deployment of renewable energy technologies.
- 43. The sub-programme will provide analysis of the latest trends and developments in renewable energy policy and financial mechanisms, and support its Members with tailored advice on setting up the adequate policy framework conditions, financial mechanisms and education and training strategies. IRENA will support Members to make greater use of effective policy tools and take action to mobilise provision of financial resources and capacity building to foster access to renewable energy.
- 44. Strengthen the ability of countries to create enabling policy frameworks for promoting the sustainable development of renewable energy policies and markets, with a special focus on developing countries. Well-designed incentives and support policies exert substantial influence on markets, investment and research and development of renewable energy. Analysis will be provided to Members on renewable energy policy trends and implementation, as well as assessments of the performance of policies, the macro-economic and social impacts of renewable energy, and access to energy programmes in developing countries. Three activities are planned:
 - Activity 1: Consultation with relevant policy support stakeholders (i.e. OECD/IEA, UNEP, UNDP, UNIDO, World Bank, REEEP, REN 21) to identify policy advice priorities and forge partnerships for tailored advice. A discussion paper mapping various stakeholders and their activities related to renewable energy policy advice and including a more in-depth analysis of selected stakeholders to identify cooperation opportunities for IRENA will be prepared and discussed in a stakeholders' roundtable meeting to agree on joint actions towards fostering enabling policies for renewables.
 - Activity 2: Consultation with the IEA on collaborative development of a renewable energy policy database. A Memorandum of Understanding (MoU) will be negotiated with the IEA to define modalities for cooperation on a joint IRENA/IEA renewable energy policy database for the purpose of extending the existing datasets of the IEA to deepen the focus on developing countries.

- Activity 3: Two analyses of social and macro-economic development variables: lessons learned and best practice in policies regarding access to energy; and renewable energies' impact on employment. These two studies will assist in developing better understanding of methods to enhance the effectiveness of policy advice offered to governments. (i) An analysis of "access to energy" initiatives to identify lessons learned on policies, financing, and business models for expanding access through upscaling the use of renewable energy will be undertaken, to be later discussed in a stakeholders workshop in 2012 with an aim to forge cooperation. (ii) Analysis of the impact on employment of renewable energy policies will provide critical insight into the poorly understood linkages between energy, economic planning and labour policies at national and regional levels.
- 45. Improve understanding of the financing possibilities for renewable energy and the framework conditions to leverage renewable energy investments. Access to financing, especially in developing countries, remains a critical barrier, exacerbated by lack of knowledge on the substantial opportunities renewables offer and the financial options available. The sub-programme will assess financial flows into renewable energy in developing countries and the specific nature and impact of these investments, as well as opportunities to enhance their efficiency, accessibility and magnitude. Three activities are planned:
 - Activity 1: An in-depth analysis of financial flows and financial mechanisms for renewable energy in developing countries will be conducted in collaboration with relevant stakeholders. The study will provide insight into the size, source and recent trends of investments, identify information gaps and needs, and highlight best practices for larger and small scale financing of renewable energy projects in developing countries. The results will be published and discussed at a meeting in the framework of the International Year for Sustainable Energy for All in 2012.
 - Activity 2: Cooperation with the Abu Dhabi Fund for Development (ADFD) through consultation on modalities for cooperation with IRENA. Opportunities for providing technical advice or other avenues for enhancing the relationship between the Fund and the policy and capacity building services of IRENA will be explored with an aim to concluding an agreement by the end of 2011.
 - Activity 3: Facilitation in upscaling the renewables component in the Green Climate Fund of the United Nations Framework Convention on Climate Change (UNFCCC), by participation in the formal consultations on these initiatives, and preparing a position paper on upscaling. Through these activities, IRENA will contribute to the discussions of the Transitional Committee of the UNFCCC on the Green Fund. The activity will ensure the highest involvement of the renewable energy community.

- 46. Enhance the ability in IRENA Member countries to formulate long-term capacity building responses integrated into national policies and processes and to facilitate access to education and training. The sub-programme will develop analytical processes assisting governments to identify existing capacity gaps (e.g. from findings of the RE readiness assessments), priority areas, and the information required to develop integrated capacity building strategies addressing individual and institutional capacities. At the same time, the sub-programme will seek to meet the growing demand from the renewable energy skills market, particularly in developing countries, facilitating access to tailored education programmes. Four activities are planned:
 - Activity 1: Review of best practices and lessons learned on effectiveness of capacity building approaches. Information on existing capacity building approaches, programmes and measures targeted at the renewable energy sector will be gathered, and a review undertaken of the effectiveness of selected approaches. The data gathering and review will focus on the regions involved in renewable readiness assessments, in order to provide input to understanding of capacity building assets in these countries. Improvements of existing approaches will be suggested and new and innovative approaches will be developed to fill identified gaps.
 - Activity 2: Design of a Renewable Energy Learning Portal. A common platform will be proposed for exchange among renewable energy and education experts to enhance education and training effectiveness for the sector. The portal will bring together the best databases on renewable energy education and training while exploring the prospects for a comprehensive, publicly accessible inventory. This will be done in consultation with key actors such as RETScreen, CEM, REEEP and UN organisations.
 - Activity 3: Design of IRENA's approach to supporting country capacity building strategies. Countries have already made considerable efforts in identification of capacity gaps and needed action. Building on these efforts, as well as on the findings of the readiness assessments and the review of best practices and lessons learned, IRENA's approach to capacity building and strategy development will be elaborated in consultation with its Members and relevant regional institutions.
 - Activity 4: Facilitation of increased resources for capacity building. Long-term training programmes based on countries' own efforts and institutions will be promoted. Education and training opportunities for talented students, particularly from developing countries, will be facilitated. This includes scholarships at the MASDAR Institute of Science and Technology and its related institutes, which will be linked to research initiatives and priorities of IRENA.

Outputs

47. During 2011, the following final outputs will be delivered:

- a. Discussion paper and roundtable prepared for key stakeholder cooperation on renewables policy support approaches;
- b. Memorandum of Understanding with the IEA on policies database collaboration;
- c. Study on energy access policies lessons learned;
- d. Study on employment impacts of renewables deployment;
- e. Study on financial flows in renewables in developing countries;
- f. Draft modalities for cooperation between IRENA and the ADFD;
- g. Position paper for the discussion at the UNFCCC on the Green Fund;
- h. Compendium of capacity building best practices and lessons learned;
- i. Consultations with strategic partners on Renewable Energy Learning Portal;
- j. Draft strategy paper on IRENA's capacity building approach;
- k. Agreement with the Masdar Institute for Science and Technology on support to graduate research on renewable energy.

	April to December 2011	
Category	Resources	Posts
Core budget		
Post	955,300	9
Non-post	1,247,800	
Subtotal	2,203,100	
Voluntary Contributions	2,000,000	-
Total	4,203,100	9

Table 11. Resource requirements: Policy Advisory Services and Capacity Building

48. The amount of \$2,203,100 would provide \$955,300 for nine posts (1 D-1, 3 P-5, 1 P-4, 2 P-3, and 2 GS/OL).

49. The amount of \$1,247,800 for non-post requirements would provide for:

- a. 45 work months of specialised expertise of consultants to prepare a discussion paper on consultations policy support; access to energy programmes; macroeconomics of renewables; financial flows for renewable energy in developing countries; discussion paper for ADFD; report on UNFCCC Green Climate Fund; best practices in capacity building, design of Renewable Energy Learning Portal and strategy in capacity building;
- b. Seconded personnel;
- c. Four expert meetings on policy, macro-economic aspects of renewable energy, assessment of financial flows and mechanisms, and cooperation with ADFD;
- d. Travel of staff to consult on IEA policy database, to contribute to discussions on UNFCCC, to conduct studies on analysis of contribution of renewables to social and macro-economic development and on assessment of financial flows and mechanisms; to review capacity building best practices; to design a learning platform;
- e. Other specialised services related to information technology for the Renewable Energy Learning Portal;
- f. Rental and maintenance of data processing equipment;
- g. Books and technical publications.
- 50. The Voluntary Contributions resources of \$2,000,000, to be funded from the UAE bid, will be used to implement the outputs outlined in paragraphs above.

Sub-programme 3 Innovation and Technology

Resource requirements from the German voluntary contributions: \$3,100,000

Table 12.Objectives, expected accomplishments, indicators of achievement and
performance measures

Objective: To provide governments the means for an accelerated renewable energy technology uptake tailored to their specific needs, considering national conditions of resource endowment, social and economic frameworks

Expected accomplishments in 2011	Indicators of achievement	
(a) Framework for technology policy support to governments for accelerated	i. Scenario and strategy analysis for one world region completed.	
renewable energy development and deployment designed.	ii. Innovation, road-mapping and technology assessment integrated toolbox developed and deployed.	
(b) Increased understanding of cost reduction potential and wider use of standards to accelerate renewable uptake.	i. Widely accepted and used study laying the basis for analysis of current cost of technology.	
	ii. Partners' renewable energy standards mechanisms identified.	
(c) Enhanced operational capacity of IRENA.	Bonn centre operational.	

External factors

The sub-programme is expected to achieve its objectives and anticipated accomplishments on the assumption that the voluntary funding is available and that the IRENA Innovation and Technology Centre (IITC) is fully operational by September 2011.

- 51. Governments can steer and accelerate technological change and innovation for renewable energy options through a mix of measures aimed at removal of barriers. The African Union, the Clean Energy Ministerial, the UN General Assembly and the UNFCCC technology mechanism, amongst others, have called for technology and innovation to meet the growing need for energy access for all that is affordable, secure and environmentally sustainable. Accelerated technological change and innovation are needed for a transition to sustainable energy systems.
- 52. The sub-programme will provide governments with the means for an accelerated renewable energy technology uptake tailored to their specific needs, considering national conditions of resource endowment, social and economic frameworks. In

accordance with the IRENA Statute, activities in this field include analysis of renewable energy technology policies; dissemination of information and increased awareness; technologies and equipment overview and assessment of success-failure factors; improved pertinent knowledge and technology transfer; and joint R&D and provision of information about the development and deployment of national and international technical standards in relation to renewable energy. A major mechanism for dissemination and exchange of technical knowledge will be through the industry and experts' networks established under the Knowledge Management and Technology Cooperation sub-programme.

- 53. Assist governments on request in energy planning for more efficient and effective renewable energy technology and innovation strategies. The Agency will assist governments in medium- and long-term energy planning. This will include renewable energy road-mapping activities. Scenario modelling and analysis will be used to analyse complex change in terms of capital stock turnover, technological change and changing energy demand. Based on the scenario analysis, robust policy strategies will be proposed that account for uncertainty and risk. Analysis of case studies for renewables and lessons learned from other sectors will assist governments to enhance the technology innovation process. Five activities are planned:
 - Activity 1: Scenarios for strategies will be collected and categorised, their key parameters identified and improved datasets proposed, as well as scenario implications for strategy and policy development. A partner dialogue process, including one workshop, will be launched on the representation of renewables in energy scenarios. Africa is selected as the first focus region in 2011. The analysis will include the continent, the five sub-regions and the national levels, and it will complement the renewables readiness analysis for Africa in Knowledge Management and Technology Cooperation sub-programme and be part of the same process.

A start will be made in collecting information for the Pacific islands for further elaboration in 2012. Also the representation of renewables in global energy scenarios will be enhanced, in cooperation with partners.

• Activity 2: Assessment of end-use technology options, including patent analysis. A technology database will be developed with a set of factsheets on best practice renewable energy technology solutions for different types of end-use. A workshop will be held on renewable power systems for islands. This will complement the renewables readiness analysis for Pacific islands in KMTC. The database will complement similar activities under the aegis of other fora (e.g. CEM, IEA) and cooperation will be explored, notably for effective dissemination through joint web portals. Together with the World Intellectual Property Organisation (WIPO), a partnership on worldwide patent analysis as a basis for accelerated technology deployment will be further explored.

- Activity 3: Support for the innovation process with a focus on design criteria for conducive policy frameworks that reduce cost and accelerate the innovation process. Focus will be on success-failure factors based on past experience with renewables, trying to extract general policy design guidelines covering the full technology innovation chain, in cooperation with partners.
- Activity 4: Technology road-mapping developed by sector and/or region, identifying prospects, technological barriers, financing, development and policy needs, building on the work of the IEA and MEF/CEM but with special emphasis on increased involvement of developing countries. First area of attention will be renewables for industrial applications. Both in-depth background analysis and dialogue with stakeholders will be pursued.
- Activity 5: Provision of technical expertise in discussions with key stakeholders for technology cooperation, and in the dialogue with the R&D community. Assist UNFCCC in the implementation of the climate technology mechanism for renewables, and promote assessment of environmental impacts in renewables planning.
- 54. Facilitate a better understanding of cost and the potential for cost reductions through technology development and market deployment to accelerate renewables uptake. Activities will provide governments with objective, up-to-date information regarding the current status of, and prospects for, renewable energy technologies in terms of cost, availability and supporting infrastructure needs. Efforts will be aimed at streamlining standards and test procedures for equipment as they play an important role in efficient market formation. Two activities are planned:
 - Activity 1: Overview of cost and its implications on renewable energy, covering cost on the level of equipment, projects and energy services, and accounting for regional differences in equipment cost, resource quality, the cost of capital and other key parameters. A framework will be developed for data collection. Data will be analysed following a standardised methodology. Both supply and end-use technologies will be covered. The information can help governments to set feed-in tariffs, assess the cost-effectiveness of options and calculate investment and financing needs.
 - Activity 2: Promotion of the wider use of standards, test procedures and good practices for renewable energy equipment, operational practices and energy management that are essential to create well-functioning markets and optimise the use of renewable energy. Partners will be identified at the international, regional and national level. IRENA will develop an active presence in the relevant forums, assist in the development and deployment of existing standards with relevance for renewables and identification of explicit and implied needs and gaps of Member countries.

55. *Operationalise the IRENA Innovation and Technology Centre (IITC).* Staff will be hired, procedures and networks established to make the Bonn centre operational.

Outputs

- 56. During 2011, the following final outputs will be delivered:
 - a. Drafting of a report and convening of a workshop on scenarios;
 - b. Technology database concept, including five technology fact sheets;
 - c. Workshop on island power systems;
 - d. Draft working paper on the use of patent information for accelerated technology transfer;
 - e. Working paper on success/failure criteria for renewable energy innovation policies;
 - f. Working paper and workshop on industry roadmaps. Draft policy roadmap;
 - g. Draft report and convening of a workshop on cost of renewable energy options;
 - h. Draft working paper on status and gap analysis for standards;
 - i. Operational IITC.

Table 13.	Resource requirements from the German voluntary contributions: Innovation
	and Technology

	April to December 2011	
Category	Resources	Posts
Core budget		
Post	-	-
Non-post	-	-
Subtotal	-	-
Voluntary Contributions		
(Germany)		
Post	965,300	10
Non-post	2,134,700	-
Subtotal	3,100,000	10
Total		10

57. The German contribution of \$3,100,000 would provide \$965,300 for ten posts (1 D-1, 3 P-5, 1 P-4, 3 P-3 and 2 GS) and \$2,134,700 for non-post requirements, including:

- a. Specialised expertise not available in IRENA for the activities related to scenarios and strategies, end-use options including patents, innovation processes technology road-mapping, cost status and outlook; standards;
- b. Expert meetings on scenarios and strategies for Africa; end-use options; island power systems; road-mapping renewable in industry (four regions); cost status and outlook; data review;
- c. Travel of staff in conjunction with the expert meetings and other activities;
- d. External printing and workshop documentation;
- e. Proprietary software for scenario modelling;
- f. Office operating costs;
- g. Rental and maintenance of data processing equipment;
- h. Technical publications and materials.

D. Administration and Management Support

Core Resource requirements: \$2,852,100 Voluntary Contributions: \$1,003,000

- 58. The newly established Division for Administration and Management Support is responsible for the provision of administrative and management services in support of IRENA. The Division has at its core the objective of developing, securing approval and managing the implementation of administration strategies, regulations, rules, policies and procedures, ensuring that the Agency has the necessary infrastructural, human and technical assets in place, and is well positioned to realise its strategic objectives in the short, medium and longer term as per its development and expansion plans.
- 59. The Division defines standards levels and ensures that the quality of support services provided by outside contractors is of the highest possible level. It further ensures that there is general satisfaction from all stakeholders with internally provided support services, takes action on complaints, identifies sources of dissatisfaction and takes corrective actions.
- 60. The Division leads the following services: Finance and Budget; Human Resources; Information and Communication Technology; and Procurement and General Services. Managerial and financial authority is exercised to the level delegated by the Director-General. Through its four technical services, the Division will aim to ensure that all new or revised management policies, procedures and internal controls meet or exceed the expectations of Members, as reflected in the Statute, the decisions of the governing bodies, the relevant regulations and rules, and reviews by audit and oversight bodies.
- 61. The capacity of managers to deliver mandated programmes will be strengthened through more focused planning, the adoption of results-based management methodologies and tools, and regular and systematic monitoring and evaluation practices. The Division will also closely monitor oversight body recommendations, identify material weaknesses and ensure that remediation plans are developed. The Division will be responsible for improving management practices throughout the Agency, promoting accountability and management evaluation, improving work processes and procedures, enabling continuous management improvement, implementing management policies and reform initiatives to empower the staff, and enhancing the ability of staff to carry out its work more effectively.
- 62. Furthermore, the Division will provide administrative and/or technical support to the governing, as well as audit and oversight bodies. The Division will provide coordinating and oversight function of the business process and needs analyses, and the preparations for the implementation of an enterprise resource planning system

(ERP) to consolidate the management of all financial, human and physical resources under a single integrated system for the entire Agency. This function will be exercised in a manner that minimises the burden on the Agency and its resources, and mitigates organisational and managerial risks.

63. The Division represents the Director-General, as requested, on administrative and management matters in relation to governing bodies and monitors emerging management issues throughout the Agency. Within its delegated authority, the Division is responsible for maintaining close liaison with host country authorities and Members on all substantive aspects of financial, budgetary, personnel and common support services matters. In this function and in close coordination with the host country, the Division will manage the development plans for the Agency's new Headquarters complex in Masdar.

Human Resources

- 64. The Office of Human Resources plays a strategic role in ensuring human resources capacity to the Agency's overall management to meet its goals and enable it to deliver its mandates. The Office of Human Resources provides the framework to enable the Agency to attract, develop and retain a wide spectrum of talent, taking into account the necessity of securing the highest standards of efficiency, competence and integrity, with due regard to the importance of recruiting staff primarily from Member States and the adequate representation of developing countries with emphasis on gender balance. It participates in strategic workforce planning that aligns with organizational needs.
- 65. In accordance with the Staff Regulations, the Office continues to develop human resources policies and systems that are in line with the UN common system. In addition, the Office of Human Resources provides expert advice to managers and staff on all aspects of human resources and staff administration; monitors performance; certifies and establishes travel entitlements and carries out the requisite day-to-day administration that enables staff to be properly compensated with appropriate salaries, benefits and entitlements. The Office of Human Resources coordinates with other Offices (i.e. Finance, Information Technology and Procurement) to ensure the implementation of related activities.
- 66. Beyond the scope of this fiscal year, the development of an Enterprise Resource Planning system to integrate all aspects of human resources and financial operations will be essential. This will ensure that Human Resources transitions from a transactional to a more strategic, dynamic office. The Office will also establish a cost-effective and administratively efficient social security scheme for the staff, including provisions for health protection. Policies and resources will also be needed to ensure that staff members are properly developed and that adequate learning and development activities are integrated into all programmes.

Table 14.Objectives, expected accomplishments and indicators of achievement

Objective: Effective human resources management		
Expected accomplishments Indicators of achievement		
Development and implementation of HR procedures in line with the UN common system	Transition of previous contracts in line with those in the UN common system.	
Availability of a wide array of qualified candidates, i.e. gender and geographically diverse	Maintenance of gender balance and geographically diverse workforce.	
Standard HR practices and procedures established and implemented in line with Common System policies	A unified HR administration and operations implemented across the offices in Abu Dhabi, Bonn and Vienna.	
Accurate and timely day-to-day human resources administration across all offices.	Staff entitlements are processed accurately and in a timely manner.	

Outputs

- 67. During 2011, the following final outputs will be delivered:
 - a. Revised Staff Regulations and Rules to govern all staff, including those on secondment;
 - b. Development of a Human Resources Manual or issuance of administrative directives as required to define conditions for entitlements established in the Staff Regulations and Rules and to introduce simplified procedures, related forms, templates and checklists (Standard operating procedures), including automated forms/templates;
 - c. Implementation of processes for pre-boarding, on-boarding and induction of new staff;
 - d. Implementation of a formal recruitment process, including standardised vacancy notices to announce employment opportunities;
 - e. Administration of contracts for different contractual arrangements, including fixed-term and temporary appointments, loans and consultancy contracts;
 - f. Administration of benefits, entitlements and separation procedures;
 - g. Introduction of a formal performance appraisal system and support to managers in effectively managing performance of staff;
 - h. Advice to line managers and staff on human resources issues;
 - i. Coordination of official travel and certification of related entitlements; introduction of standard processing for travel requests and claims through simplified procedures.

Finance

- 68. The Finance Office administers and ensures compliance with the Financial Regulations and Procedures and relevant legislative mandates. It applies the accounting policies and procedures of IRENA, in accordance with the Financial Regulations and Procedures and relevant standards. It ensures sound financial management of all resources made available to the Agency, as well as their effective and efficient use; accounts for and reports to the appropriate authorities on the use made of IRENA's financial resources; prepares the necessary groundwork for the implementation of the financial components of a planned Enterprise Resource Planning system, in particular by providing specifications for changes and conducting user acceptance tests and ensuring implementation of the International Public Sector Accounting Standards (IPSAS).
- 69. The Office will ensure that activities implemented from all sources of funding are directed at improving internal controls; enhancing risk management; streamlining processes (in particular in the area of receipt, disbursement and processing of assessed contributions); strengthening information technology services; improving financial management, reporting and accounts; and improving services to meet clients' needs.
- 70. The Office will establish internal control systems in line with the Financial Regulations and Procedures. The Finance Policy Manual will be finalised. An interim reporting procedure, until the ERP is in place, will be implemented for both internal and external users reporting, which will require standardising existing reports and developing new ones. The Office will assist other support functions, including fixed asset management.
- 71. The Finance Office processes the day-to-day accounting transactions, performs reconciliations and monthly closing entries. A review of the chart of accounts will be made. The Office is responsible for reviewing and processing all receipts, payments, obligations and inter-office vouchers; analysis and reconciliation of accounts, including all receivables, payables, inter-office and bank accounts; review and consolidation of all accounts from satellite offices; provision of advice on accounting and financial matters and related systems, as well as the development of new cost-effective accounting policies, practices and procedures, as appropriate.
- 72. The Office is responsible for the payment of salaries and related allowances and other benefits; payments to staff upon separation from the Organisation; processing of payments to vendors and other contractors; processing of travel claims.

Table 15.Objectives, expected accomplishments and indicators of achievement

Objective: Effective, efficient and transparent financial management			
Expected accomplishments	Indicators of achievement		
Continuing improvements in the quality and the accuracy of financial processing and the timely preparation of financial information for users	Absence of significant adverse audit observations relating to financial management and control.		
Developing an accurate, systematic and timely reporting process and providing users with clear and transparent reporting on a consistent basis	A positive audit opinion of the Board of Auditors on financial statements.		
Ensuring the prudent investment of funds and improving cash management actions.	Maintenance of a loss-free record in safeguarding financial resources.		

Outputs

- 73. During 2011, the following final outputs will be delivered:
 - a. Establishment of an IPSAS-compliant chart of accounts;
 - b. Accounting, payroll, payment and disbursement of funds and treasury functions;
 - c. Annual financial statements and other financial reports;
 - d. Analysis of business processes in connection with ERP plans;
 - e. Technical material (recurrent): financial statements; monthly reports on the status of contributions;
 - f. Provision of advice on accounting and financial matters and related systems to various offices; and
 - g. Development of policies and procedures to safeguard financial resources.

Information and Communications Technology

- 74. The Information and Communications Technology (ICT) office provides a broad range of solutions and services to IRENA offices by enhancing technology to achieve the work programme targets. In 2011, ICT will strengthen service delivery operations aimed at enabling staff members, Members and other stakeholders to connect and share knowledge continuously. ICT strives to improve work efficiency with the newest tools, technologies and applications to increase transparency and accountability in the Organisation.
- 75. Working closely with sub-programmes, technical solutions will be developed to collaboratively meet the information technology needs, including unrestricted internet connectivity, state-of-the-art infrastructure supported by wireless network, printing, voice and audio-video technologies to enable personnel and programme partners to connect and share knowledge.
- 76. One virtual office environment with fully integrated information and communication offices in Abu Dhabi, Bonn and Vienna will be established. The three offices will be connected via site-to-site high-speed connectivity, in a cost-effective, scalable and secured manner for optimal information and knowledge exchange between staff members.
- 77. ICT acts as a focal point for IRENA's basic and strategic information technology requirements, and takes an active role in building the IT design, specification, branding, installation, implementation and operationalisation. It implements infrastructure, applications and security health checks, as well as latest anti-virus tools, patches and upgrades. The office also provides regular data backups to ensure all users and operational data are secured.

Objective: To provide a broad range of solutions and state-of-the-art services that enable personnel to connect and share knowledge effectively and continuously		
Expected accomplishments	Indicators of achievement	
(a) Improved office productivity, internal communications and automation of business	i. Development of ICT operational policies and procedures.	
processes; ICT operational management system in place	ii. Provision of monthly ICT service reports.	
(b) ICT infrastructure for IITC established	i. Installation of a secure site-to-site data link providing transparent user data communication.	
	ii. Implementation of a remote support model for IITC staff members.	
(c) Enhanced and improved website features and hardware infrastructure	i. Additional layer of security and replacing redundant hardware architecture enhance security and high availability of website.	
	ii. New design and functionality implemented.	
(d) Improved office productivity, internal communication and automation of business processes	i. Intranet SharePoint Portal and departmental sites for document exchange and management.	
	ii. Automation of business processes for more transparent and paperless environment.	

Table 16. Objectives, expected accomplishments and indicators of achievement

Outputs

78. During 2011, the following final outputs will be delivered:

- a. Development and implementation of an intranet application (SharePoint 2010) to improve office productivity, internal communications and automation of business processes;
- b. Analysis and design of the business processes for Human Resources, Finance and Procurement;
- c. Preparation for ERP implementation;
- d. Updated ICT operational policies and procedures documentation;
- e. ICT Call Log maintained and reported;
- f. Change Management Process adapted; and
- g. Implementation of Patch Management Process.

Procurement and General Services

- 79. The main objectives of the Procurement and General Services Office include: ensuring continued efficient, effective and high-quality support in the areas of procurement, facilities management, archives, mail operations and records management. The Office will focus on ensuring efficiency and transparency in the area of procurement.
- 80. The Office is responsible, in coordination with the host country, for the management and operation of the existing physical facilities; the preservation and servicing of records with continuing value in support of the Organisation's operational, informational, legal and other needs. The Office is also responsible for the management of the mail operations.

Table 17. Objectives, expected accomplishments and indicators of achievement

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Objective: To ensure efficient, effective and high quality support in the areas of procurement and facilities management.			
Expected accomplishments	Indicators of achievement		
Providing a transparent, effective and efficient procurement of goods and services	Full compliance with the procurement requirements, and timely provision of services.		
Developing an accurate, systematic and timely reporting process and providing users with clear and transparent reporting on a consistent basis	A positive audit opinion of the Board of Auditors on procurement activities.		
Ensuring effective and efficient provision of general services	Timely provision of general services.		

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Outputs

- 81. During 2011, the following final outputs will be delivered:
 - a. New Procurement and General Services procedural manuals;
 - b. Maintenance of supplier database;

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- c. Technical and substantive archives and records management;
- d. Asset and inventory services: efficient and effective management of all nonexpendable property and equipment;
- e. Mail operations services: provision of means of transmitting official correspondence and material through the worldwide pouch and postal service and the messenger service within the Headquarters complex;
- f. Liaision with the host country on building custodial services; and
- g. Procurement services: posting of procurement plans and upcoming procurement opportunities; preparation and issuance of tenders.

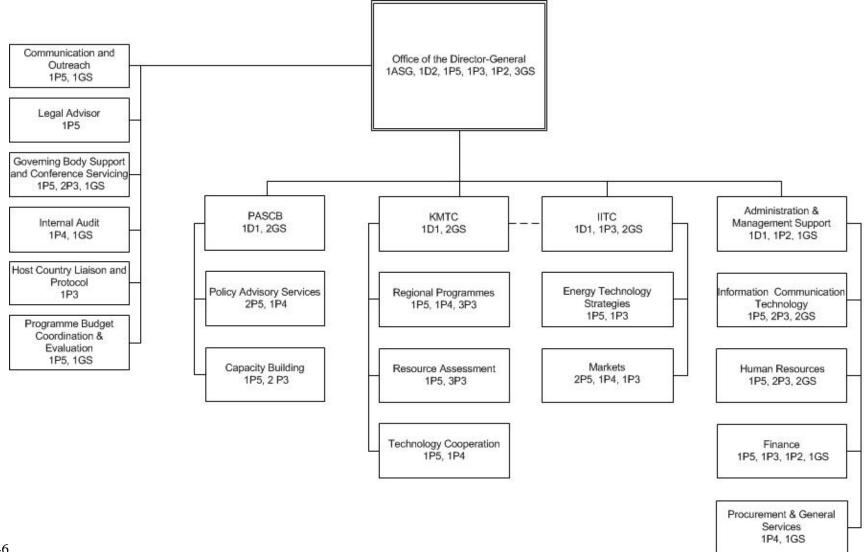
Category	Resources 2011	Posts 2011
Core budget		
Post Non-post	1,877,600 974,500	19
Subtotal	2,852,100	19
Voluntary Contributions	1,003,000	-
Total	3,855,100	19

Table 18. Resource requirements: Administration and Management Support

- 1. The overall level of resources for the Division for Administration and Management Support under the core budget amounts to \$2,852,100, providing \$1,877,600 for 19 posts (1 D-1, 3 P-5, 1 P-4, 5 P-3, 2 P-2, 1 GS/PL and 6 GS/OL) and \$974,500 for non-post requirements as follows:
 - a. General temporary assistance to replace staff on sick or maternity leave;
 - b. Specialised expertise not available in IRENA in the areas of human resources, finance and procurement;
 - c. Seconded personnel;
 - d. Travel of staff to attend training programmes, and to conduct assessments of information technology and financial systems requirements of the Bonn and Vienna offices;
 - e. Training of staff;
 - f. Contractual services related to information technology requirements, including proprietary software, email security, telecommunications services, equipment warranties and upgrade of hardware infrastructure; and
 - g. Office supplies and materials.

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Annex 1 IRENA Organisational structure and post distribution for 2011



ANNEX II

IRENA Scale of C	ontributions for 2011
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States	UN Factor (%)	Adjusted Contribution (%)	Contribution to IRENA 2011 (USD)
Afghanistan*	0.004	0.005	642
Albania	0.010	0.012	1,606
Algeria*	0.128	0.155	20,555
Angola*	0.010	0.010	1,326
Antigua and Barbuda	0.002	0.002	321
Argentina*	0.287	0.348	46,089
Armenia	0.005	0.006	803
Australia	1.933	2.341	310,418
Austria*	0.851	1.031	136,661
Azerbaijan*	0.015	0.018	2,409
Bahrain*	0.039	0.047	6,263
Bangladesh	0.010	0.010	1,326
Belarus	0.042	0.051	6,745
Benin*	0.003	0.004	482
Bosnia and Herzegovina	0.014	0.017	2,248
Brunei Darussalam*	0.028	0.034	4,496
Bulgaria	0.038	0.046	6,102
Burkina Faso*	0.003	0.004	482
Cambodia*	0.003	0.004	482
Cameroon*	0.011	0.013	1,766
Cape Verde	0.001	0.001	133
Central African Republic*	0.001	0.001	133
Chad*	0.002	0.002	321
Chile*	0.236	0.286	37,899
Colombia*	0.144	0.174	23,125
Comoros*	0.001	0.001	133
Congo*	0.003	0.004	482
Costa Rica*	0.034	0.041	5,460
Côte d'Ivoire*	0.010	0.012	1,606
Croatia*	0.097	0.117	15,577
Cyprus	0.046	0.056	7,387
Czech Republic*	0.349	0.423	56,045

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Democratic Republic of the Congo*	0.003	0.004	482
Denmark	0.736	0.891	118,193
Djibouti*	0.001	0.001	133
Dominican Republic	0.042	0.051	6,745
Ecuador	0.040	0.048	6,424
Egypt*	0.094	0.114	15,095
Eritrea	0.001	0.001	133
Estonia*	0.040	0.048	6,424
Ethiopia*	0.008	0.010	1,285
Fiji	0.004	0.005	642
Finland	0.566	0.685	90,893
France	6.123	7.415	983,284
Gabon*	0.014	0.017	2,248
Gambia	0.001	0.001	133
Georgia	0.006	0.007	964
Germany	8.018	9.710	1,287,599
Ghana*	0.006	0.007	964
Greece*	0.691	0.837	110,967
Grenada*	0.001	0.001	133
Guatemala*	0.028	0.034	4,496
Guinea*	0.002	0.002	321
Guinea-Bissau*	0.001	0.001	133
Honduras*	0.008	0.010	1,285
Iceland	0.042	0.051	6,745
India	0.534	0.647	85,754
Iran*	0.233	0.282	37,417
Iraq*	0.020	0.024	3,212
Ireland*	0.498	0.603	79,973
Israel	0.384	0.465	61,666
Italy*	4.999	6.054	802,782
Japan	12.530	15.175	2,012,175
Jordan*	0.014	0.017	2,248
Kazakhstan*	0.076	0.092	12,205
Кепуа	0.012	0.015	1,927
Kiribati*	0.001	0.001	133
Kuwait*	0.263	0.319	42,235
Kyrgyzstan*	0.001	0.001	133
Latvia	0.038	0.046	6,102

Lebanon*	0.033	0.040	5,299
Lesotho	0.001	0.001	133
Liberia*	0.001	0.001	133
Libyan Arab Jamahiriya*	0.129	0.156	20,716
Liechtenstein	0.009	0.011	1,445
Lithuania	0.065	0.079	10,438
Luxembourg	0.090	0.109	14,453
Madagascar*	0.003	0.004	482
Malaysia	0.253	0.306	40,629
Maldives	0.001	0.001	133
Mali	0.003	0.004	482
Malta*	0.017	0.021	2,730
Marshall Islands	0.001	0.001	133
Mauritania*	0.001	0.001	133
Mauritius	0.011	0.013	1,766
Mexico	2.356	2.853	378,347
Monaco	0.003	0.004	482
Mongolia	0.002	0.002	321
Montenegro	0.004	0.005	642
Morocco*	0.058	0.070	9,314
Mozambique	0.003	0.004	482
Nauru	0.001	0.001	133
Nepal*	0.006	0.007	964
Netherlands	1.855	2.247	297,892
Nicaragua	0.003	0.004	482
Niger	0.002	0.002	321
Nigeria	0.078	0.094	12,526
Norway	0.871	1.055	139,873
Oman	0.086	0.104	13,811
Pakistan*	0.082	0.099	13,168
Palau	0.001	0.001	133
Panama*	0.022	0.027	3,533
Papua New Guinea*	0.002	0.002	321
Peru*	0.090	0.109	14,453
Philippines*	0.090	0.109	14,453
Poland	0.828	1.003	132,967
Portugal*	0.511	0.619	82,061
Qatar	0.135	0.163	21,679
Republic of Korea	2.260	2.737	362,930

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Republic of Moldova*	0.002	0.002	321
Romania	0.177	0.214	28,424
Rwanda*	0.001	0.001	133
Saint Vincent and the Grenadines*	0.001	0.001	133
Samoa	0.001	0.001	133
Sao Tome and Principe*	0.001	0.001	133
Senegal	0.006	0.007	964
Serbia	0.037	0.045	5,942
Seychelles*	0.002	0.002	321
Sierra Leone	0.001	0.001	133
Slovakia	0.142	0.172	22,804
Slovenia	0.103	0.125	16,541
Somalia*	0.001	0.001	133
South Africa	0.385	0.466	61,827
Spain	3.177	3.848	510,190
Sri Lanka	0.019	0.023	3,051
Sudan*	0.010	0.010	1,326
Swaziland	0.003	0.004	482
Sweden	1.064	1.289	170,866
Switzerland	1.130	1.369	181,465
Syrian Arab Republic*	0.025	0.030	4,015
Tajikistan*	0.002	0.002	321
The former Yugoslav Republic of Macedonia	0.007	0.008	1,124
Timor-Leste*	0.001	0.001	133
Togo*	0.001	0.001	133
Tonga	0.001	0.001	133
Tunisia*	0.030	0.036	4,818
Turkey*	0.617	0.747	99,083
Uganda*	0.006	0.007	964
United Arab Emirates	0.391	0.474	62,790
United Kingdom of Great Britain and Northern Ireland*	6.604	7.998	1,060,527
United Republic of Tanzania*	0.008	0.010	1,326
United States of America	22.000	22.000	2,917,200
Uruguay*	0.027	0.033	4,336
Uzbekistan*	0.010	0.012	1,606
Vanuatu*	0.001	0.001	133

Yemen*	0.010	0.010	1,326
Zambia*	0.004	0.005	642
Zimbabwe*	0.003	0.004	482
IRENA Budget	86.417	100	13,260,000

This calculation is based on the United Nations General Assembly Resolution 64/248 on "Scale of assessments for the apportionment of expenses" of 24 December 2009⁹. It has been adjusted to the number of IRENA Members and Signatories who are UN Member States, and does not include the European Union.

States with an asterisk reflect Signatories that have not yet ratified the IRENA Statute.

Pursuant to the decision 2010/385/EU of the Council of the European Union of 24 June 2010, the European Union as a party to the IRENA Statute is also requested to contribute to the IRENA budget.

⁹In force for the period 2010-2012.