IRENA
International Renewable Energy Agency

26 May 2013

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

Preliminary Framework for the

Work Programme and Budget 2014-2015

Background

1. This document sets out the preliminary programmatic framework for 2014-2015, pursuant to the Assembly decision on the *IRENA Programmatic and Budgetary Cycle* of 14 January 2013 (A/3/DC/12) to facilitate early consultations with Members on Work Programme formulation. This decision requests the Director-General to "consult with Members to elicit their views on the IRENA work programming to be taken into consideration in the development of the biennium work programme and budget, within the overall Medium-term Strategic framework". In the course of preparation of the preliminary framework, the Director-General invited the Members to provide their views on the upcoming Work Programme for 2014-2015, and several Members responded with written contributions.

2. The preliminary framework draws on the Agency's statutory and legislative provisions, as well as reflects the response to the Director-General's request for input on the Work Programme 2014-2015 and on-going discussions with Members and other stakeholders. It also benefits from the Agency's increasing experience of developing and implementing programmatic work, including the 2013 Work Programme.

Introduction

3. Economic trends and concern about climate change are sharpening the focus on the potential for an energy transition and a change in the energy mix for both economic and environmental

stability. Rising incomes and population growth in developing countries are shifting attention toward emerging markets and the resulting increase in energy demand. The energy poverty of over 1.3 billion people is catalysing action to provide access to modern energy services that would improve lives and stimulate economic growth. The political and policy traction created by these issues, coupled with the rapid development of renewable energy technologies and their falling costs, are shifting the energy balance and expanding the menu of energy choices for countries.

4. It is with this background that the Members provided strategic direction and guidance to IRENA through its Medium-term Strategy 2013-17 (MTS). The MTS defines the strategic vision that underpins IRENA's programmatic activities: to be the principal platform for international cooperation; to be a centre of excellence on renewable energy; to be a repository of policy, technology, resource and financial knowledge; and to support countries in their transition to a renewable energy future.

5. To realise this vision, IRENA has restructured the Agency's programmatic divisions to better enable strategic selection, the alignment of activities and efficient implementation. Through its Knowledge, Policy and Finance Centre (KPFC) and the IRENA Innovation and Technology Centre (IITC), IRENA undertakes a range of analytical and advisory activities aimed at providing accurate information, sound advice and a broader knowledge base to assist countries in making informed renewable energy policy decisions. The Country Support and Partnerships (CSP) division supports countries to translate these decisions into action-oriented strategies and plans. CSP provides a platform for countries to cooperate, share experiences and best practices, while enhancing their capacity to plan, manage and regulate strategies and projects.

Proposed Programmatic Framework for 2014-2015

6. The proposed framework for 2014-2015 builds on the Agency's existing programmatic structure, but aims to enhance the Agency's work by further consolidating programmatic activities, refining thematic focus, expanding engagement with stakeholders, and increasing links with complimentary global initiatives. Further, it seeks to find new avenues to promote the use of renewables in a time of growing energy demand and in the context of sustainable development and climate change. As economic conditions force policy change, IRENA will focus on building the case for renewable energy on economic, social and environmental grounds, as called for by Ministers at the Ministerial Round Table during IRENA's third Assembly. The proposed programmatic framework introduces three underlining themes for IRENA activities in the next biennium: integration, transformation, and growth.

Integration

7. Increasingly, countries are exploring new modalities of international cooperation to find sustainable energy solutions to meet their growing energy needs. In this context, a number of IRENA's activities are aimed at facilitating cooperation and catalysing common action to accelerate the deployment of renewables. In the 2014-2015 programmatic cycle, this trend will continue with the focus on important requisites: country-defined needs, national and regional institutions and operations, policy and regulatory frameworks, and technology solutions.

8. Building on its experience to date, IRENA will work with power pools in Africa to maximise the renewable energy potential at regional and trans-regional levels. Its new initiative – the Africa Clean Energy Corridor – will seek to develop an interconnected energy system starting with the Eastern and Southern African power pools, to help realise the potential of abundant renewable energy sources to meet growing energy needs and increase access to modern sustainable energy services. In the Latin America and Caribbean region, IRENA will continue to work on geothermal energy and expand to other renewable technologies. The Agency will help strengthen capacities through transfer of knowledge and technologies, among countries and between regions. These activities, led by CSP, will be supported by KPFC's work on social, economic and environmental impact, and the technology-focused work of IITC.

9. In response to the strategic objective to create a repository of policy, technology, resource and financial knowledge, IRENA will consolidate information by creating a virtual Knowledge Gateway. The Knowledge Gateway will integrate already existing platforms such as the Global Atlas and IRELP, while also consolidating data and information available across the programmatic divisions. It will also seek to enable easy access to information from partner entities such as IEA, REN21, SIDS-DOCK, the CEM, SE4ALL, etc.

10. In keeping with its role as the principal platform for international cooperation on renewable energy, IRENA will seek to collaborate with stakeholders in new ways, across sectors of society and beyond traditional boundaries. Experience to date has shown that new ways of collaboration are needed to overcome bureaucratic and resource-intensive layers. It is for that reason that IRENA is pursuing a concept of decentralised leadership, which allows for stakeholders to convene and collaborate around thematic issues of common interest. This approach is applied to the Agency's work with the private sector and civil society, and will be extended to new constituencies including RD&D institutions, academia, and parliamentarians. This approach is also being applied to already-established initiatives such

as the Renewable Energy Policy Advice Network (REPAN), managed in collaboration with the Clean Energy Solutions Centre.

11. IRENA will continue its work on facilitating access to financing though the IRENA/ADFD facility, and through other existing and new financing opportunities, such as the Green Climate Fund and the UAE Pacific Fund.

Transformation

12. The past decade has witnessed developments that are transforming the way energy resources are developed, produced, distributed and used. The ever-increasing energy demand of emerging markets and recent discoveries of oil and gas are changing countries' energy strategies and creating new geopolitical dynamics. At the same time, falling renewable energy technology costs are making renewables increasingly competitive in a growing number of markets and in a variety of settings. In addition, renewable energy is increasingly being considered as a viable energy choice because of its positive impact on economic growth, job creation, energy security, and carbon emissions. These developments are having a profound impact on the energy sector ownership structure, resulting in a need for new business models, including for the electric power industry.

13. IRENA will help identify and highlight new opportunities stemming from these transformational trends. Its expanded focus on the socio-economic benefits of renewables and cost trends will assist countries to make informed decisions in their energy planning. Led by KPFC, IRENA will undertake in-depth analysis on the role of renewables in carbon-based economies focusing on the countries of the Gulf Cooperation Council, and on the impact of energy ownership structures on production and consumption. It will seek to realise the environmental, fiscal and installation benefits of hybrid solutions by identifying the regulatory and technological potential for utilising renewable energy technologies in traditional energy systems.

14. The public and private sector both play a central role in shaping a supportive investment environment for renewable energy. This involves developing a strategic case for renewable energy investments, to demonstrate that renewable technology deployment will pay off relative to traditional energy sources. In the next two years, IRENA will focus on addressing obstacles through energy policy and financial innovation including work on regulatory frameworks, packages of financing mechanisms, risk guarantees, as well as the price of energy. IRENA's renewable cost database for power generation will be updated and expanded to include other technologies and more detailed data on projects on islands and in

Asia. The cost database will be integrated into the Global Atlas to pilot a cost model to estimate a levelised cost of energy (LCOE) for a location.

15. Through REMAP 2030, IRENA will continue to map possible paths to doubling the share of renewable energy in the global energy mix, and to identify opportunities for the use of renewables in end-use sectors. This IITC-led effort will also seek to integrate the socio-economic impact of accelerating renewable energy deployment, and to stimulate action at the country and regional levels in cooperation with a wide range of stakeholders. IRENA will accelerate its work on technology solutions, in part by providing tools for their application, with a particular focus on grids and storage. To increase understanding around opportunities and strategies for innovation, IRENA will further develop its work on standards and patents, including a greater emphasis on practical application.

16. Public acceptance and environmental considerations related to energy sources are now critical considerations for policy makers. To ensure that governments, industry, and the public have access to unbiased, up-to-date, and fact-based information, IRENA will continue to work on debunking the myths about renewable energy and building the case for renewables. In an effort to minimise the potential environmental impact of renewable energy technologies, IRENA will study issues affecting the recycling of renewable energy technology equipment. Activities will also focus on the role of renewable energy in the context of sustainable development, including on-going work on the water-energy-land nexus analysis.

Enabling growth

17. Access to affordable modern energy services is a cornerstone of sustained economic growth, and renewable energy technologies are enabling a positive change for long-term prosperity. IRENA works with countries to help assess their renewable energy potential, to stimulate investments and help meet their existing, and growing, energy demand. Renewables Readiness Assessments will continue to be a flagship activity for the Agency, with an increasing focus on Asia. Within the Global Renewable Energy Islands Network (GREIN), IRENA will establish new interest clusters to facilitate the exchange of experiences and best practices, analyse technology solutions for islands, create new partnerships, and stimulate investment. IRENA Divisions will address cross cutting issues identified by countries and regions, including renewables in cities, rural energy and specific technology solutions, such as mini-grids and small hydro.

18. To strengthen Members' ability to attract investment, project development guidelines will be complemented with modules on technologies and finance. Targeted advice services will be

offered to assist in the implementation of renewable energy projects and to build capacity along the renewable energy value chain. Under the leadership of CSP, and upon the request of Members, IRENA will provide tailored advisory service on a range of issues. Based on the feedback received, and experience gained through RRAs and other country-specific activities, it is envisaged that advisory modules will be developed for capacity needs assessment, measurement campaigns, and post-RRA deployment planning, among others.

19. To help realise the broader benefits of renewable energy, IRENA will study the impact of deploying renewable energy on employment and provide recommendations on maximising local value creation. Following the success of the IRENA Off-grid Renewable Energy Conference, this event will be institutionalised on a biennial basis, with the second event scheduled for 2014. Further to this, rural energy work will be broadened to include mini-grid business models, and the review of financial models and activities in off-grid renewable energy projects.

Global and Regional Initiatives and Partnerships

20. The United Nations Secretary-General's initiative, "Sustainable Energy for All" (SE4ALL), rallied countries, international organisations, the private sector and civil society around the aspirational goals of ensuring access to modern energy for all, increasing the rate of energy efficiency, and doubling the share of renewable energy in the global energy mix by 2030. IRENA has been designated as the Renewable Energy Hub within the SE4ALL initiative. IRENA will define its work in this respect on the basis of three underlining principles:

    - Facilitating complementarity of SE4ALL activities with broader global efforts on renewable energy, including with IRENA's programmatic activities;
    - Responsiveness to the needs of its Member constituency, in line with its mandate;
    - Close cooperation with the SE4ALL Global Facilitation Team in Vienna and New York, as well as the SE4ALL Hubs for energy access and energy efficiency.

21. In the course of the 2014-2015 biennium, important global and regional events will take place. Preparations for some of them, such as the upcoming MENAREC6, are already underway. IRENA is also considering the most optimal contribution to the upcoming global SIDS conference in Samoa in 2014, as well as to the post-2015 debate on Sustainable Development Goals.

22. To become the authoritative voice for renewable energy, IRENA will continue to strengthen its communication and outreach activities. In the course of 2013, IRENA will revamp its website, refine its newsletter and bulletin, and further advance social media outreach.

Partnerships with countries and other stakeholders will be institutionalised to further develop IRENA's communication strategy and broaden its reach. In recognition of the need to significantly enhance the communication and outreach activities, a more detailed note on the subject will be presented to the Council at its fifth meeting.

Proposed Framework – Divisional Activities

Knowledge, Policy and Finance Centre

The Knowledge, Policy and Finance Centre (KPFC) is IRENA's central knowledge repository and a centre of excellence for renewables policy and finance issues. KPFC's information collection and analysis enables IRENA to inform and advise its Members and to disseminate information to the public. It is also a central repository of IRENA's internal knowledge to inform and support the work of all divisions, as well as to provide critical knowledge products to IRENA's Members.

Component 1: Global Knowledge on Renewable Energy

- IRENA institutional publication
- Knowledge gateway
  - ✓ Renewable energy statistics (data collection and methodologies)
  - ✓ Global Atlas (all RE sources)
  - ✓ IRELP
  - ✓ IEA/IRENA policy database
  - ✓ Best-practices database
- Stakeholder engagement (Business Forum, Parliamentarians, Civil Society, Academia)

Component 2: An Enabling Environment for Renewable Energy: Policy and Finance

- Policy and market assessment
  - ✓ Energy pricing (including MENAREC conference 2014)
  - ✓ Carbon-based economies' transformation to renewable energy
  - ✓ Guidebook on policies in cities (including green procurement, urban planning and RE/EE, etc.)
  - ✓ Energy sector ownership structure (impact on production and consumption)
  - ✓ Hybrid solutions: RE and gas (markets and regulations)
  - ✓ Nexus

- RE finance
  - ✓ Derisking renewable energy finance (loan guarantee schemes)
  - ✓ Financial models and activities in off-grid RE projects
  - ✓ Platform for dialogue: systematic engagement with public and private financing institutions and the private sector

Component 3: Socio-economic and Environmental Impacts of Renewable Energy

- Socio-economic value of renewable energy
  - ✓ Employment
  - ✓ Policy recommendations on the local value creation of RE deployment
  - ✓ Rural energy (mini-grid business model, biennial IOREC)
- Environmental impact of RE
  - ✓ Recycling RE equipment
  - ✓ Debunking the myths

IRENA Innovation and Technology Centre

IRENA's Innovation and Technology Centre (IITC) provides cutting-edge information on renewable energy technology and innovation, and seek new pathways for transition to a sustainable energy future. It is an objective and authoritative source of advice on renewables costs and cost trends, technology options, mid- and long-term objectives and roadmaps for achieving them. IITC, as a centre of excellence for renewable energy technology and innovation, stays abreast of the latest developments and translates them into practical, policy-friendly tools for IRENA's Members.

Component 1: Technology Integration Planning

- REMAP 2030
  - ✓ REMAP analysis
  - ✓ Technology roadmaps and renewables deployment (country roadmaps upon request)
  - ✓ Technology solutions for cities
  - ✓ Technology briefs (10 briefs annually)

- Grid and storage
  - ✓ Mini-grid and smart grid (technology options)
  - ✓ Transmission and distribution (technology overview)
  - ✓ Grid stability assessments (upon request)

- ✓ Storage solutions (country, regional/sub-regional focus)

- Energy system analyses
  - ✓ Post-RRA module on energy planning evaluation and gap analysis
  - ✓ Support the use of modelling tools and methodologies for planning purposes (upon request)

Component 2: Costs, Technologies and Deployment

- Costing and performance of RE technologies
  - ✓ Costing studies (power sector, stationary applications, transport, cost of RE for All)
  - ✓ Costing Alliance (database and piloting of combined costing database and the Global Atlas cost curves)
- Project development
  - ✓ Project Navigator development
  - ✓ Piloting of Navigator modules (Guidelines, Technologies, Finance)

Component 3: Promote Efficient and Effective Renewable Energy Innovation Strategies

- Facilitation of markets
  - ✓ Operationalisation of standards (regional/sub-regional focus, and country support upon request)
  - ✓ Testing and certification for selected technologies – best practices and recommendations
  - ✓ Standards and IPR platform
- RD&D and Innovation strategies
  - ✓ RD&D mapping and gap analysis, and institutional cooperation
  - ✓ Innovation policy frameworks
  - ✓ Technology adaptation
  - ✓ Studies: advanced biofuel generation, storage technologies, and gas hybrids.

Country Support and Partnerships

The Country Support and Partnerships (CSP) division supports countries in the development and implementation of national and regional renewable energy strategies. Upon request, CSP assists countries with their Renewables Readiness Assessments, advises on follow-up actions and supports key capacity-building efforts. It provides a platform for cooperation between countries, regions, organisations and institutions, drawing upon the work of KPFC and IITC. CSP maintains a systematic overview of country and regional needs, experiences and trends, which

helps facilitate cross-pollination of best practices between countries and regions and assists in shaping IRENA's programmatic priorities.

Component 1: Country Support

- Renewable Readiness Assessment (up to eight countries a year)
- National strategies
    - ✓ Post-RRA support (measurement campaigns, nexus modelling tool, local content development, etc.)
    - ✓ Advisory service (upon request)
    - ✓ Renewable energy in applications

Component 2: Partnerships, Regional and Technical Cooperation

- Regional collaboration
    - ✓ Grid integration
    - ✓ Enabling frameworks: geothermal and small hydro
    - ✓ Renewables in cities: facilitating application of best practices
- Partnerships and technical cooperation
    - ✓ GREIN
    - ✓ Mini-grids
    - ✓ RE Policy Advisory Network - REPAN (RRA expert network, Ask-the-expert, etc.)

Component 3: Capacity Building

- Regional capacity building initiatives
- Capacity building needs assessments (geothermal, mini-grids, renewables in cities, other KPFC and IITC work-driven needs)
- Modular capacity building activities
    - ✓ Thematic training (RE in cities, geothermal, mini-grids, SME, RE data collection)
    - ✓ Peer-to-peer country cooperation and transfer of knowledge and skills
    - ✓ Partnerships with international institutions and private sector

ANNEX

Divisional activities – regional focus

Knowledge, Policy and Finance Centre			
Component	**Activity**	**Sub-activity**	**Region**
Component 1: Global Knowledge on Renewable Energy	IRENA institutional publication		Global, selected regional focus
	Knowledge gateway	Renewable energy statistics	Global
		Global Atlas	Global
		IRELP	Global
		IEA/IRENA policy database	Global
		Best-practices database	Global
	Stakeholder engagement		Global
Component 2: An Enabling Environment for Renewable Energy:	Policy and market assessment	Energy pricing review (including MENAREC conference 2014)	MENA
		Carbon-based economies' transformation to renewable energy	GCC
		Guidebook on policies in cities	Global
		Energy sector ownership structure	Global
		Hybrid solutions: RE and gas	Global
		Nexus	Africa, Asia, LAC, MENA
	RE finance	Derisking financing	Global
		Financial models and activities in off-grid RE projects	Global
		Platform for dialogue: public and private financing institutions and the private sector	Global
Component 3: Socio-economic and Environmental Impacts of Renewable Energy	Socio-economic value of renewable energy	Employment	Global
		Policy recommendations on the value creation of RE deployment	Global
		Rural energy	Africa, Asia

	Environmental impact of RE	Recycling RE equipment	Global
		Debunking the myths	Global
		RE and climate system (can we add something)	
IRENA Innovation and Technology Centre			
Component	**Activity**	**Sub-activity**	**Region**
Component 1: Technology Integration Planning	REMAP 2030	REMAP analysis	Global
		Technology roadmaps and renewables deployment	Global, country and regional upon request
		Technology briefs	Global
	Grid and storage	Mini-grid and smart grid	Global and region-specific: islands, Africa, Asia, GCC, Europe
		Transmission and distribution	Global
		Grid stability assessments	Islands, upon request
		Storage solutions	Global
	Energy system analyses	Post-RRA module on energy planning evaluation and gap analysis	Africa, Asia, LAC, countries upon request
		Support the use of modelling tools and methodologies for planning purposes	Asia
Component 2: Costs, Technologies, and RE deployment	Costing and performance of RE technologies	Costing studies	Global
		Costing Alliance	Global
	Project development	Project Navigator development	Global
		Piloting of Navigator modules	Upon request
Component 3: Promote Efficient and Effective Renewable Energy Innovation Strategies	Facilitation of markets	Operationalisation of standards	Africa, Asia, LAC, countries upon request
		Testing and certification for selected technologies	Global
		Standards and IPR platform	Global
		Technology solutions for cities	Global
	RD&D and Innovation strategies	RD&D mapping and gap analysis, and institutional cooperation	LAC, Asia

		Innovation policy frameworks	Africa, Asia, LAC
		Technology adaptation	Global
		Studies: advanced biofuel generation; storage technologies; and gas/biogas hybrids.	Global
Country Support and Partnerships			
Component	**Activity**	**Sub-activity**	**Region**
Component 1: Country Support	Renewable Readiness Assessment (up to eight countries a year)		Upon request
	National strategies	Post-RRA modules	Upon request
		Advisory service	Upon request
Component 2: Partnerships, Regional and Technical Cooperation	Regional collaboration	Grid integration	Africa, LAC, Asia, MENA
		Enabling frameworks: geothermal and small hydro	Africa, Asia, LAC
		Renewables in cities: facilitating application of best practices	Africa, Asia, LAC
	Partnerships and technical cooperation	GREIN	Islands
		Mini-grids	Africa, Asia
		RE Policy Advisory Network - REPAN	Global
Component 3: Capacity Building	Regional capacity building initiatives		Pacific SIDS, ECOWAS
	Capacity building needs assessments		Africa, Asia, LAC, MENA
	Modular capacity building activities	RE in cities, geothermal, mini-grids, SME, RE data collection	Global
		Peer-to-peer country cooperation and transfer of knowledge and skills	
		Partnerships with international institutions and private sector	