IRENA's Workshop on

"Innovation for Enabling an Accelerated Deployment of Renewable Energy Technologies"

27 July 2013, Bonn

SUMMARY

Table of Contents

1. Introduction

With a mandate from countries around the world, IRENA supports governments in their adoption of enabling policies for Renewable Energy Technology (RET) investments. IRENA's commitment to provide practical tools and policy advice to accelerate renewable energy deployment goes hand-in-hand with the mission of the Technology Executive Committee's (TEC) of the United Nations Framework Convention on Climate Change (UNFCCC) in recommending actions for the development and transfer of climate change mitigation technologies. IRENA's endeavours to facilitate knowledge sharing also provides significant synergies with the TEC's objective of promoting collaboration and seeking cooperation with relevant stakeholders and institutions.

In this context, IRENA conducted a workshop on "Innovation for Enabling an Accelerated Deployment of Renewable Energy Technologies", on 27 July 2013 in Bonn, Germany. The meeting aimed at contributing to the TEC's discussions by presenting the key findings of IRENA's recent work in the field of technology innovation. This work highlights the success factors for innovation and pursues the successful transfer and deployment of RET. The meeting consisted of four sessions:

- An introduction to IRENA and its activities to accelerate renewable energy technology deployment;
- Presentations about key findings from IRENA's recent publications on innovation policy frameworks and the activities underway in the field of standardisation, intellectual property rights, technology transfer and cooperation in research, development and demonstration of RET;
- A plenary discussion on how the work presented can support the development of national policies to promote renewable energy deployment worldwide;
- Closing session and the next steps to accelerate RET deployment.

Participants included members of the TEC, representatives of the UNFCCC secretariat and intergovernmental and non-governmental observer organisations. Valuable feedback and suggestions were received from participants concerning potential areas of collaboration between IRENA and the TEC, as well as other innovation instruments that may promote the sustainable deployment of RET at a global scale.

2. IRENA activities presented

IRENA's activities presented during the workshop included the following.

2.1. Renewable energy innovation policy frameworks

Based on IRENA's Innovation and Technology Centre (IITC) work in 2012 on innovation policy, in collaboration with National Renewable Energy Laboratory (NREL), IRENA is developing a set of practical guidelines for Member Countries to define appropriate RET innovation policies. These guidelines are also supported by case studies that illustrate best practices for the development of national policies at a country level to improve their innovation strategies.

2.2. *International standardisation in the field of renewable energy and the role of intellectual property rights in innovation for renewable energy technologies*

This activity intends to improve the understanding on how to utilise standards, quality assurance schemes and intellectual property rights to support steadily growing markets for RET. IRENA provides recommendations for policy makers and project developers to make the best use of standardisation and quality infrastructure and patents information to promote the global deployment of renewable energy.

2.3. *Cooperation strategies to support research, development and demonstration of renewable energy technologies within the innovation policy frameworks in the Latin America and Caribbean (LAC) region*

This project addresses IRENA's efforts in reinforcing current cooperation mechanisms in LAC region. The project seeks to identify initiatives, drivers and opportunities of cooperation in LAC, and supports IRENA's role as a promoter of research, development and demonstration in RET. It analyses existing gaps in cooperation to provide recommendations to overcome barriers to multi-stakeholders innovation systems. In order to carry out this research and analysis, a methodology has been designed and applied to some research, development and demonstration initiatives in the region.

2.4. *Enhance bioenergy technology deployment: Africa and LAC*

IRENA is evaluating the techno-economic valorisation pathways for biomass residues for energy generation and mechanisms for enhanced renewable energy technology deployment in Africa and the LAC region. This activity provides policy makers with guidance on how the valorisation of biomass can promote technology transfer, income stream diversity through efficient resource use, and attract private sector investments while achieving tangible environmental benefits through the reduction of greenhouse gas emissions.

3. Main discussion points

Key points from the above-mentioned discussions are as follows:

3.1. *High value of IRENA's work to the TEC.*

- IRENA was commended for being able to capture in its Annual Work Programmes the topics of main interest and need in the field of RET.
- IRENA's activities were pointed out as an invaluable source of knowledge in the domain of RET, as well as a source of inspiration to unveil possible solutions to complex policy discussion concerning clean technology deployment. All of which are relevant to the TEC discussions and a number of other organisations.
- The Chair of the TEC also stressed that IRENA has been following a very promising, and already successful, pathway to achieve its mission to support the sustainable deployment of RET worldwide.
- IRENA was called to continue its work on providing reliable data and statistics concerning aspects such as, the cost of technology, much needed policies to reach the SE4All target and novel technologies emerging with promising prospects in the market.
- Participants also encourage IRENA to strengthen its strategy to communicate and disseminate its excellent work among the RET community.

3.2. Enhanced technology deployment

- Members of the TEC supported IRENA's approach of analysing strategies for the deployment of RET that considers the transfer, as well as the adaption of these technologies, with a special focus on emerging countries. The term "technology transfer" that entails a straight and direct transfer of technology does not necessarily includes the adaption of the technologies. Therefore, IRENA's proposal to analyse issues from an "enhanced technology deployment" perspective instead of a mere "technology transfer" one is appreciated.

3.3. Quality, standardisation and patents

- IRENA's work on quality and standardisation was highlighted as very relevant to the present status of markets for RET. The focus of IRENA's activities that were mentioned as being very useful are: harmonising existing standards; improving the existing gap regarding the accessibility to standards; and establishing and reinforcing the quality infrastructure of RET.
- IRENA was also mentioned to be one of the few intergovernmental organisations currently addressing patent concerns and gaps.

3.4. Technology roadmaps

- The attendees expressed high interest on IRENA's technology roadmaps. As a result, further information was given regarding IRENA's roadmap activities, such as technology and islands roadmaps and REMAP. In relation to REMAP, the importance of focusing on the energy consumption in the manufacturing, buildings and transportation sectors was mentioned. In addition, the increasing relevance of the deployment of bioenergy in these sectors was also discussed.

3.5. IRENA partnerships

- The plenary discussed the importance of IRENA in continuing to engage with the academia and research institutions, and all other organisations also working on RET.