Socio-Economic Benefits of Renewable Energy

A Joint Workshop of IRENA, GIZ and RCREEE
At the World Future Energy Summit 2016

Date: 20 January 2016
Time: 14:00 – 18:00
Location: Capital Suite 15
Abu Dhabi National Exhibition Center
Abu Dhabi, United Arab Emirates

Abstract

The business case for renewable energy is further strengthened by the socio-economic benefits they offer. These benefits are increasingly relevant for countries exploring ways to stimulate growth while reducing the adverse impacts of climate change, improving energy security and widening access to energy. The knowledge base, however, on this aspect remains relatively limited and dispersed.

Over the years, IRENA has contributed to bridging the knowledge gap by consistently building on its analysis of socio-economic benefits of large scale renewable energy deployment. In addition to the review of jobs in the renewable energy sector that is published each year, IRENA has conducted a quantitative assessment that estimates the broader macro-economic impacts of renewable energy on variables such as GDP, total employment in the economy, trade and welfare in the report *Renewable Energy Benefits: Measuring the Economics* that will be launched at the sixth IRENA General Assembly. In addition, recognising the potential areas of domestic value creation that can be achieved through renewable energy deployment, IRENA studied the different activities, sub activities and components that are needed for the deployment of selected solar and wind technologies in the study *Renewable Energy Benefits: Leveraging Local Industries*. This analysis can enable the formulation of policy recommendations on how to maximize the benefits of the deployment of these technologies.

In the context of energy access, the deployment of decentralized renewable energy can have a significant impact on communities that depend on agriculture, directly or indirectly, for their livelihoods. In the pre harvesting stage, pumping using renewable energy can displace existing fossil-fuel based systems and expand irrigation in a manner that is environmentally sustainable and maximizes resource efficiency. Renewables can also be used in post harvesting activities for heating/cooling and motive power applications for food processing and preservation, maximizing the productivity and profitability of activities including crop drying, milling, pressing, cooking and refrigeration. Building on its earlier work on *Renewable Energy in the Water, Energy and Food Nexus* and *Renewable Energy Jobs & Access*, IRENA is continuing its efforts to promote an integrated approach to decentralized renewable energy deployment through case studies on the impacts of off-grid technologies on individuals and small enterprises in the agriculture sector.

Increasingly, on the ground projects by different institutions specifically look to promote socio-economic benefits. The German Society for International Cooperation (GIZ), for example, is implementing the

regional project RE-ACTIVATE ("Promoting employment through renewable energy and energy efficiency in the Middle East and North Africa") since 2014, on behalf of the German Ministry for Economic Cooperation and Development (BMZ). The project has been supporting the partner countries in the MENA region, particularly Morocco, Tunisia and Egypt, in making targeted use of the socio-economic effects of sustainable energies. It focuses on labor-intensive applications, in particular decentralised renewable energy generation (photovoltaics, solar thermal and wind), and energy efficiency in buildings, industry and agriculture. The project supports the partners in identifying the employment effects of different applications and in further developing their policy approaches in this respect. It facilitates the development of suitable framework conditions and adapted support instruments and helps to build skills at the local level. Successful examples are documented and fed into national and regional dialogues. The project cooperates intensively with the Regional Centre of Renewable Energy and Energy Efficiency (RCREEE) in Cairo to encourage and promote cross-border network building, know-how exchange, stakeholder cooperation and capacity development in these various respects.

In this context, a key role accrues to SE4JOBS ("Sustainable Energy for Jobs"), a collaborative measure and work platform that is supported by a number of GIZ projects and coordinated by RE-ACTIVATE. It identifies and assesses good practices and success models in connection with optimising the socio-economic effects of sustainable energies in developing countries and emerging economies. Results and recommendations are made available to a wider audience through a SE4JOBS toolbox, SE4JOBS case studies and SE4JOBS training measures which are currently in the process of finalisation.

In an effort to bridge the existing knowledge gap on the socio-economic benefits of renewable energy, IRENA is partnering with GIZ and RCREEE to present and discuss the results of the various assessments that have been conducted in this respect, revisit the approaches and trajectories which concrete global front-running countries have followed, and explore the policies and conditions needed to maximise the multiple renewable energy benefits for local populations.

The objectives of this workshop are to:

- Provide knowledge on the results of studies conducted to assess the impacts of renewable energy deployment on GDP and jobs;
- Share experiences, disseminate best practices and stimulate dialogues on effective policies that can maximise the socio-economic benefits of renewable energy;
- Produce insights and recommendations that help decision makers and practitioners to harness renewable energy more effectively for local socio-economic development.

Draft Agenda

13:45 - 14:00	**Welcome Coffee**	
14:00 - 14:30	**Welcome and Introductory Remarks** Rabia Ferroukhi, IRENA and Steffen Erdle, GIZ	
Session 1 **14:30 – 15:30**	**Benefits of Renewable Energy: Measuring the Economics** Moderated by Rabia Ferroukhi, IRENA *Setting the scene: Measuring renewable energy benefits, Alvaro Lopez-Peña, IRENA* *Renewable energy jobs, Arslan Khalid, IRENA*	
	Open Discussion	- How do the results compare with other studies? - What is the value added of the study carried out by IRENA? - What are the economic variables that affect the model most? And how were these addressed? - What are the implications for policy-makers?
Session 2 **15:30 – 16:30**	**Benefits of Renewable Energy: Options for Maximizing Local Value and Employment** Moderated by Ziad Jaber, RCREEE *Setting the scene: Promoting local employment and value creation - tools and policies:* - *International good practices for employment through sustainable energy - Steffen Erdle, GIZ* - *Socio-economic impact of renewable energy in Lebanon – Joseph Al Assad, LCEC*	
	Panel Discussion	Insights from the field and feedback from practitioners: the public sector - Mohamed El Sobki, New and Renewable Energy Agency (NREA), Egypt - Joseph Al Assad, Lebanese Center for Energy Conservation (LCEC) Lebanon - Ayanda Belinda Nakedi, Eskom Renewables, South Africa Insights from the field and feedback from practitioners: the private sector - Raed Bkayrat, First Solar - Bruce Douglas, Global Solar Council - Emad Ghaly, Siemens
	Q&A Session	
16:30 - 17:00	**Coffee Break**	
Session 3 **17:00 – 18:00**	**Renewable Energy Benefits: Impact on Livelihoods** Moderated by Steffen Erdle, GIZ *Setting the scene: Improving livelihoods through decentralized renewable energy, Dagmar Zwebe, SNV*	
	Panel Discussion	Dagmar Zwebe, SNV Silvia Escudero, EUEI PDF Divyam Nagpal, IRENA
	Q&A Session	
18:00	**Concluding Remarks**	