

## **Workshop Summary: Navigating Renewable Energy Projects in the GCC**

**Location:** Dubai, U.A.E.

**Date:** 09/11/2015

### **Objectives:**

- Highlighting the value of the Project Navigator for the U.A.E. and other GCC countries
- Identify region-specific aspects of project development which could be incorporated to the Navigator for it to meet the regional needs.

### **About the Workshop:**

The workshop was a joint effort by IRENA and the Dubai Water and Electricity Authority (DEWA). It introduced the IRENA Project Navigator to government officials, local utilities and project developers, providing an opportunity to discuss how the Navigator could be used to enable the further deployment of renewable energy projects in the United Arab Emirates (U.A.E.).

### **Main Outcomes:**

- Region-specific aspects and concerns about project development were identified
- DEWA will develop further solar project and they expressed their interest in using the IRENA Project Navigator. The IRENA Project Navigator could also be used to support a roof-top solar programme in the UAE.
- The Regulation & Supervision Bureau in Abu Dhabi (RSB), the Federal Electricity & Water Authority (FEWA), Sharjah Electricity & Water Authority (SEWA) and Bee'a expressed their interest in the Navigator and to receive individual trainings on how to use it.
- The opportunity to involve the utilities and other relevant stakeholders from the region in the development of the technical guidelines for rooftop PV project was well received. This is an effort to know more about their comments and feedback which will help IRENA understand more about the region.

## **Opening Ceremonies**

Mr. Armando Dominiononi (Senior Manager - Regulation, DEWA) explained DEWA's vision of sustainable development and highlighted the importance of solar energy in the future development of the U.A.E.

Roland Roesch (Senior Programme Officer – RE Markets and Technology Dialogue, IRENA) explained that the workshop was meant to be a platform to present the Project Navigator and to source feedback on how useful these tools could be for project development in the region and how content and knowledge can be deepened in cooperation with DEWA.

## Session 1: IRENA Project Navigator

### **The Project Navigator Objectives and Demonstration – Roland Roesch, Mustafa Bahatem (IRENA)**

Roland Roesch gave a presentation introducing the Project Navigator. During the presentation the current challenges in RE project development were explained, emphasizing the need for a tool like the Project Navigator. The main objectives, features and advantages of using the Navigator were also explained.

Afterwards, Mustafa Bahatem gave a demonstration of the online platform, explaining the different sections that compose the Navigator, explaining their contents and the way they can be used.

### **Lessons learnt from the Sh. Mohamed Rashid Solar Park**

Mr. Umraz Ahmed Noor Ahmed explained the Dubai Integrated Energy Strategy 2030 which contemplates 15% of solar in the energy mix and total solar installed capacity of 3 GW. He also explained the different phases of the solar park: Phase 1 (13 MW), Phase 2 (200 MW) and Phase 3 (800 MW). The PPA for Phase 3 is expected to be signed in Q3 2016 and to be commissioned in early 2017.

- Dubai solar LCOE: USD 5.62/kWh
- 200 MW DEWA thin film solar IPP – largest in the Middle East, competitively tendered in a single phase, developed on a build, own and operate basis. Next procurement is 800MW in order to get 1GW by 2020

The following success factors for the project were highlighted:

- DEWA kept technology neutrality.
- Developer fully responsible for financing.
- Transparent process
- Dubai and DEWA environment, DEWA as trusted off taker

## Session 2: Developing PV Projects

### **Technical Guidelines for PV Systems**

Roland Roesch and Mustafa Bahatem presented the Technical guidelines for Utility-scale PV projects. During this presentation, the most relevant aspects of developing large PV projects were explained, including trade-offs between different plant configurations and PV modules. Additionally a brief introduction to the upcoming technical guidelines for solar home systems and plug and play PV systems was given. During this presentation, the option to include relevant stakeholders from the region in the shaping and development of these guidelines was brought up. This option benefits all parties since it provides IRENA with relevant feedback and it provides the region with a document which is well-adapted to their own conditions.

Some of the issues that were raised during the questions and answers session were:

- On the Sh. Mohamed Rashid Solar Park project:
  - What inverter were used in MBR solar park? MBR solar park uses central inverters because of the price of the market and because it's preferable for large power plants.
  - Mounting system? The mounting system used is the fixed systems with thin film PV because of the free large area.
- The need for a one-page indicative assessment of how much a typical roof-top system could generate so that interested customers surface.
- An assessment of whether a connected grid system is more favorable than a system with storage- electricity should always flow as opposed to being stored and anytime storage is needed – costs are increased.
- Yahya alZafin Vice President in DEWA asked about Decommissioning of the thin film PV
- Differentiate between the contracts in the development phase because each contract have different method and might not be applicable in the every phase.
- A Local installer commented that it would be better if there were a table from DEWA to show the customers for example if they install xx KW system they will generate xxx and that will reduce their bill by xxx AED. So the idea to have 4-5 systems and how much they generate

### Session 3: Interactive Session

Session three provided the participants with a walkthrough of the online platform which they could follow on their own computers. During this session the participants had hands-on experience the Navigator which helped them get familiarised with the interface and clarify some doubts.