





#### **Multilateral Working Group on Solar and Wind Energy Technologies**

#### Side Event prior to the 3rd Clean Energy Ministerial

## 24 April 2012, Imperial College London

#### **SUMMARY**

On 24 April, on the margins of the Clean Energy Ministerial (CEM) meeting in London, a workshop hosted by UK Department of Energy and Climate Change and Imperial College was held in cooperation with the CEM Multilateral Working Group on Solar and Wind Technologies. The workshop gathered some 60 experts and highlighted the following:

- (i) The launch of the IRENA Renewable Energy Learning Partnership (<a href="www.irelp.org">www.irelp.org</a>). The virtual platform was created to meet the growing worldwide demand for skilled renewable energy expertise. This demand is particularly prevalent in developing countries where renewable energy has an important role to play in development plans and poverty alleviation. Its first phase and core services include a global education and training database, a library of training materials, a database of webinars, and an e-learning platform for students for online lectures and tutorials.
- (ii) The Capacity Development Needs Diagnostic for Renewable Energy (CaDRE), developed in co-operation with a number of partners. CaDRE is intended to assist policy makers, organisations and capacity development/renewable energy practitioners in shaping an environment conducive to the development of renewable energy. It is designed as a country-driven, comprehensive approach to analysing the capacity already in place, predicting future capacity needs, identifying capacity gaps and providing recommendations for creating capacity development strategies. CaDRE will be available on IRENA's website shortly. (see the presentation from Joscha Rosenbusch, GIZ).
- (iii) The Global Atlas as a collaborative, international effort that is enabling the involvement of a large number of public and private contributors. Several presentations were provided in this session:
  - The Global Atlas was recently invited to contribute to the United Nations Sustainable Energy for All initiative. This initiative is led by the UN Secretary-General Ban Ki-moon, in order to mobilize action from all sectors of society in support of three interlinked objectives to be achieved by 2030: providing universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix (see the presentation by Mr Knut Aanstadt, Secretariat of the Sustainable Energy for All).
  - IRENA presented the concept of the Global Solar and Wind atlas. The internet-based platform is designed to raise awareness on technology opportunities, limit the financial risk for countries willing to investigate their technical potentials further, and for companies willing to invest in a new market. To this end, it provides high quality resource maps from the leading institutes worldwide, and simplified models to evaluate the technical potentials. The dataset is enriched by more detailed national atlases validated against measurement campaigns. The ambition for this







platform is to become a repository for high quality renewable energy resource data and a catalyst to trigger planning, policy development and attract investors in emerging and new renewable energy markets. (see the presentation from Nicolas Fichaux, IRENA)

- The technical collaboration on the Global Atlas was presented by DLR and NREL. The platform is currently under development, and is a joined effort between DLR (GER), NREL (USA) and Mines ParisTech (FR). The code is open source, which would enable additional contributors to participate in the developments of the Global Atlas in the future. The database of solar and wind maps is not centralized, but distributed on the servers of the participating institutes. This flexible and open architecture enables to include the datasets from countries having developed national atlases, and open possibilities for technical cooperation.(see presentation from Carsten Hoyer Klick, DLR and Doug Arent, NREL)
- The Global Atlas will contain detailed datasets shared by contributing countries. For countries that do not yet have those detailed assessments in place, the Atlas will provide access to databases of global coverage. Those datasets, provided by mesoscale assessments are used for preliminary assessment of possible technical resource, and the identification of future areas of interest for further prospection. (see the presentation from Andrew Tindal, GL Garrad Hassan).
- The University of Reading presented a method for estimating the wind resource in urban areas. Those complex, turbulent environments, require refined physical modeling for assessing the resource, and a detailed description of the urban environment. (see presentation from Daniel Drew, University of Reading).



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# Global Solar and Wind Atlas: Expanding the Partnership Building Capacities Hosted by ImperialCollegeLondon

**Date**: April 24<sup>th</sup>, 2012 **Time**: 13:00 – 18:00

Venue: Gabor Suite, 6<sup>th</sup> Floor, Electrical Engineering (building 16 on the attached

map), Imperial College London, Exhibition Road, London, SW7 2AZ

#### **Draft Agenda**

#### 13.00 -14.00 - Light welcoming lunch

## 14.00 -14.30 - Welcome and introduction: The value of international cooperation

- 1. Welcoming by UK DECC and ImperialCollege, workshop hosts
- 2. Welcome and Introduction by Denmark, Germany and Spain as lead countries of the Working Group
- 3. Sustainable Energy for All Global challenges, global synergies (SE4All Secretariat)

## **PART I: The Global Atlas**

#### 14.30 - 15.15 - The Global Atlas - An open collaborative platform

- 1. Open cooperative architecture (IRENA, DLR, NREL)
- 2. Report from the Indian Stakeholder Workshop of Delhi: first example of advanced cooperation (India)
- 3. Discussion and questions

#### 15.15 - 15.30 - Break

#### 15.30-16.30 - The Global Atlas - An Alliance of competencies

- 1. Presentations different UK institutes (tbd) on ressource assessments: Vision, data sets, expectations
- 2. Discussing synergies and next steps with other member countries
- 3. Summary by the Chairs

Break - 16.30 - 16.45

## **PART II: Building Capacities**

## 16.45 – 18.00 – CapacityBuilding Projects of the Working Group

- 1. Introduction by the Chairs
- 2. Launch and Presentation of the IRENA Renewable Energy Learning Partnership interactive discussions
- 3. Launch and Presentation of the Capacity Development Needs Diagnostics for RE Handbook and Toolbox interactive discussions
- 4. Short update in Train the Trainers pilot project and CABIN.

## 18.00 - Closure by the Chairs/ Reception