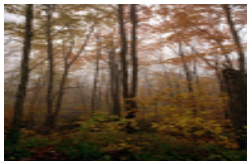
This presentation was held within the project ADVANCE, which has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under the grant agreement no 308329.

IRENA's work on energy scenarios




Joint NREL-ADVANCE Workshop on Renewable Energy Sources
20 February, 2013

About IRENA

IRENA
International Renewable Energy Agency

International organization supported by the governments of the member countries

Members: 160 countries (107 ratified)

Mandate: Sustainable deployment of the six RE resources (Biomass, Geothermal, Hydro, Ocean, Solar, Wind)

Programme of Work:

1. Knowledge, Policy and Finance [**Data & statistics; RE support policies; socio-econoimc impacts**]
2. Innovation and Technoogy [**Technology integration planning; technology costs and performance; project development; innovation policy**]
3. Country Support and Partnerships [**RE Readiness assessment, Capacity building**]

Energy Systems Models and IRENA

IRENA
International Renewable Energy Agency

IRENA applies Energy System models to a country/regional level energy planning

- Model configuration for country/region's planning needs
- IRENA's own analysis
- Capacity building in planning

IRENA provides interface between member countries and scientific community

- Provides access to IRENA's data/insights on renewable technology developments and resource potential assessment
- Incorporating the latest methodological development for better assessment of roles of renewables in power systems

Technology integration planning

IRENA
International Renewable Energy Agency

Global Atlas, Resource fact sheets, Technology briefs, Sectoral Roadmaps, Regional technology cost data

Energy system analysis
Least system cost investment planning
Grid stability study (power sector)

Renewable Readiness Assessment, Project navigator, Abu Dhabi Fund for Development

RE planning challenges

Generation adequacy

- Flexibility of backup capacity
- Capacity credit of RE
- Storage options
- Flexible demand and off-grid solutions
- Local climatic effects on RE generation

Transmission and distribution

- Adequate T&D infrastructure
- Incorporation of spatial factor
- Short-term network stability issue

REMAP for SEE4ALL

REMAP (Renewable Energy Roadmap)

- Aspirational goal of doubling the global RE share by 2030
- Assessment of regional and national implications (technology mix, investment needs, cost, macro-economic impacts)
- In cooperation with member country experts
- Assessment of system configuration with policies in place or likely to be in place, followed by technology options analysis to raise the RE share further
- Global scenario analysis can inform REMAP
- Release at 4th IRENA Assembly January 2014

IRENA
International Renewable Energy Agency

Thank you for your attention

Asami Miketa
amiketal@irena.org
www.irena.org