Regional Workshop on Renewable Energy in Central Asia

Abu Dhabi, 27 April 2017

Enabling Frameworks: Renewables Readiness Assessment

Presentation by Gurbuz Gonul
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Renewables Readiness Assessment

- Backbone of IRENA’s country level engagement
- Comprehensive assessment of the situation on the ground for RE deployment; identification of obstacles hindering accelerated deployment; recommending short / medium-term actions to overcome them
- Country-initiated, country-led process
- Inclusive and multi-stakeholder process promoting consensus
- Process establishing a basis for future collaboration
- IRENA as facilitator
Who is engaged in the RRA?

RRA Core Team
- Ministry in charge of RE
- Development partners
- IRENA
- Consultant
- Regional entities

National Expert Group
- Ministries and specialized gov. bodies (industry, agriculture, rural development, etc.)
- Private sector and utilities
- Civil society and associations
- Financing institutions
- Academia

Validation Stakeholder Group
- Other key ministries – health, water, education, women, social affairs, etc.
- Bilateral and multilateral agencies (WB, UNDP, etc.)
- Suppliers and manufacturers, Chamber of commerce, etc.

Experts inducted to identify up to 5 service-resource pairs
Experts finalise service-resource pair templates and formulate Action Plan
Outcomes resulting from consultative process to be validated by national stakeholders
30 RRAs globally

- **Caribbean**
  - Grenada
  - Antigua & Barbuda

- **Latin America**
  - Peru
  - Nicaragua
  - Panama

- **Sub-Saharan Africa**
  - Senegal
  - Gambia
  - Mozambique
  - Djibouti
  - Tanzania
  - Mali

- **MENA**
  - Oman
  - Mauritania
  - Tunisia
  - Egypt

- **Asia**
  - Mongolia
  - Philippines
  - Pakistan
  - Thailand
  - Afghanistan

- **Pacific**
  - Kiribati
  - Fiji
  - Marshall
  - Vanuatu

- • Completed
- • Under implementation
- • Planned
RRA Recommendations: Case of Africa

- Policy and Strategy: 25%
- Planning: 17%
- Assessments: 13%
- Legal and Regulatory: 17%
- Capacity Building: 11%
- Financing and Investment: 11%
- Deployment and Operation: 6%
Impact of RRAs: Case of Africa

- DJIBOUTI
- MOZAMBIQUE
- SWAZILAND
- ZAMBIA
- TANZANIA
- ZIMBABWE
Impact of RRAs: Case of Africa

DJIBOUTI

- RRA used for guidance for geothermal development
- Exemption from import duty for RE equipment enforced
- RE integrated into Electricity Master Plan
Impact of RRAs: Case of Africa

SWAZILAND

- Grid Code and RE IPP policy adopted (four PPAs signed)
- RE integrated into national energy policy and legislation
- Integrated resource planning under development
Impact of RRAs: Case of Africa

- RE resources mapping for the whole country done
- RE feed-in-tariffs adopted
- Rural Electrification Strategy revised with focus on RE by private sector
Impact of RRAs: Case of Africa

ZAMBIA

- RE resources mapped and feed-in-tariffs adopted
- Integrated resource planning under development
Post-RRA Activities: Case of Africa

• **Planning**: least-cost System Planning Test (SPLAT) models to support planning for long-term power generation expansion plans in West Africa.

• **Small-hydro trainings** for Zambia, Mozambique, Swaziland and the Gambia

• **Training on Resource Assessment and Development** of RE projects in Djibouti

• **Capacity Needs Assessment** at regional level in ECOWAS to promote RE-based mini-grids.

• **Statistics**: Training on renewable energy data collection and the compilation of energy statistics for 9 countries in Southern Africa

• **Finance & Investments**: technical workshop focused on RE investment strategies for countries of Southern and Eastern Africa
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Enabling Frameworks

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Why the RRA?

A global framework to deploy RE at national level

- Finance
- Infrastructure & Local Capacities
- Data and Information in Energy and RE
- Local Skills
- Awareness
- R&D Innovation Education
- Technologies
- Potential & Resources
- Strategy and targets
- Legal and policy framework
Post-RRA Activities

Swaziland (Capacity Building Programme):

- Energy planning capacity building programme to strengthen energy planning capacity within the local institutions (Ministry)

- Based on IRENA’s power sector investment planning tool (System Planning Test / SPLAT-S model) and Wind and Solar Zoning results (MapRE zoning)

- Leading to an Energy Master Plan

MapRE Zoning + SPLAT - S + Training Programme → ENERGY MASTER PLAN
Tanzania (RRA Analysis):

- Most cost-effective RE zones (wind, solar PV and CSP) incorporated into planning process to develop a least-cost optimization model for the power generation.

- Enabling analysts to assess investment paths to achieve different policy goals.

MapRE Zoning | Best zones selected (Generation potential and LCOE) | Least cost electricity generation mix