

**Meeting of SREP Pilot Countries  
May 28-30, 2013 – Bandos Island, Maldives**

**Progress Updates from Countries with Endorsed Investment Plans**

**Country: Kenya**

*Please provide brief descriptions under each of the areas below for a fast-moving project and slow-moving project, in terms of preparation and implementation*

*Fast-moving project: Development of 400 MW of Geothermal Energy at Menengai*

Recent developments	<ul style="list-style-type: none"> <li>• Funding became effective in July, 2012</li> <li>• Funds have been released by AFD, AfDB &amp; WB</li> <li>• 8 additional wells (23MW steam equivalent) drilled bringing cumulative total to 16 wells with a steam equivalent of 50MW</li> <li>• The additional 3 Rigs funded by AfDB awaiting delivery</li> <li>• Feasibility Study on going, to be completed in August 2013</li> <li>• Procurement of consultancy services of a Transaction Advisor and Project Management &amp; Supervision ongoing</li> <li>• Capacity building ongoing- Total No. of officers trained 512             <ul style="list-style-type: none"> <li>– 30 World Bank (11 Female 19 Male)</li> <li>– 82 AfDB/SREP (39 Female 43 Male)</li> <li>– 400 USAID (150 Female 250 Male)</li> </ul> </li> <li>• Additional training in the pipeline:             <ul style="list-style-type: none"> <li>– AFD Health Safety &amp; Environment: 40</li> <li>– NDF : 20</li> <li>– JICA : 20</li> </ul> </li> </ul>
Goals for the next 12 months	<ul style="list-style-type: none"> <li>• Funding for 2 more rigs expected through US EXIM Bank</li> <li>• Drill 24 additional wells at Menengai</li> <li>• Complete Menengai feasibility study by August 2013</li> <li>• Initiate and complete appraisal for the additional 15 M USD for steam gathering funding disbursed through World Bank</li> <li>• Install and commission a 6.2MW Modular/Well-Head Power Plant to supply power to rigs currently powered by Diesel Generators</li> </ul>
Factors contributing to project progress	<ul style="list-style-type: none"> <li>• Support and facilitation from MDBs</li> <li>• Feed-in-Tariffs policy in place was used in negotiating PPA with the IPP</li> <li>• The USD 40M from SREP funds which was used as follows:             <ul style="list-style-type: none"> <li>– Capacity building USD 3.5M;</li> <li>– Drilling materials USD 13.5M;</li> <li>– Consultancies USD 8M;</li> <li>– Steam gathering system USD 15M</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• GoK funding since 2009, totaling USD 375M</li> <li>• Availability of local technical capacity for Geothermal resource assessment</li> </ul>
Barriers to project progress / reasons for delay	<ul style="list-style-type: none"> <li>• There are no delays experienced in the project. Progress is within the project plan</li> </ul>
<b><i>Projects on Course: Mini-Grids and Solar Water Heaters</i></b>	
Recent developments	<ul style="list-style-type: none"> <li>• Project Documents for both SWH and Mini-Grids completed in March, 2013</li> <li>• Some donors (GIZ and AFD) have expressed interest in retrofitting of mini-grids</li> <li>• Since the Oct/Nov 2012 pilot countries meeting, 3 mini-grids have been retro-fitted bringing the total to 7</li> <li>• The installed capacity of the 7 retro-fitted mini-grids is 6,828kW which includes 550kW wind 510kW solar PV</li> <li>• The no. of proposed mini-grids has increased from 27 to 59 (Project Document)</li> <li>• There is potential to go beyond the 30% RE target in each mini-grid</li> <li>• Licensing SWH installers has been initiated by ERC</li> <li>• Discussions have started between ERC and private sector representative (KEREA) on capacity building for SWH</li> <li>• Several institutions have expressed interest in supporting / undertaking capacity building (UNIDO, JKUAT, University of Nairobi, UN Habitat)</li> </ul>
Goals for the next 12 months	<ul style="list-style-type: none"> <li>• Develop capacity of REA staff to supervise installation of the proposed 59 mini grids</li> <li>• ERC plans to undertake a study to determine the effect of including SWH systems on overall building cost</li> <li>• ERC to negotiate partnerships with development partners for developing national capacity in SWH</li> </ul>
Factors contributing to project progress	<ul style="list-style-type: none"> <li>• Ongoing programme for retro-fitting existing diesel mini-grids to hybrid systems</li> <li>• Commitment by the Government to provide universal electricity access</li> <li>• The Energy (SWH) Regulations (2012) are stimulating uptake of SWH systems</li> <li>• The private sector has a positive response to the regulations as a business opportunity</li> </ul>
Barriers to project progress	<p>The Mini grids and SWH projects are on course</p> <ul style="list-style-type: none"> <li>• Evaluation of on-going pilot projects was necessary to provide information for completion of the mini-grids project document</li> <li>• Need for additional data to facilitate development of a business</li> </ul>

	plan for SWH project • Potential Barrier- Inadequate training facilities and trainers for SWH installations
--	--

*Please provide any additional information you wish to share on impacts or lessons learned from the preparation or implementation of your SREP Investment Plan.*

- There is close collaboration with Multilateral Development Banks (MDBs) and Civil Society
- The national working group is dedicated to the process
- The readiness of the implementing agencies to undertake the projects has contributed to timely implementation
- Timely endorsement of the IP and the Menengai Geothermal Project Document by the SREP Sub-Committee

*Monitoring energy access:*

What indicators and monitoring systems are being used at the national or sector level to monitor energy access?	<p><b>Indicators:</b> Number of Rural Electrification Programme Customers; National Electricity Connectivity; Project documents; Number of Rural Electrification schemes implemented; No. of Government institutions supplied.</p> <p><b>Monitoring Systems:</b> Kenya Integrated Household Budget survey (Updated every five years), Economic Survey (updated annually), Sector surveys as the need arises, Kenya Power Annual reports, REA and ERC Annual reports</p>
Will these existing monitoring systems capture the impacts of SREP investments in energy access, and, if yes, how?	<p><b>Yes.</b> These reports provide information on the levels of electrification in the country, number of customers (domestic, industrial and commercial) connected in each region, increase in the number of customers connected through rural electrification; Number of off-grid stations and connected customers; Number of biogas digester installed.</p>

*What is your government's experience working with social enterprises for delivery of energy access in rural areas?*

- The use of subsidies in stimulating uptake as applied to the domestic biogas programme (KENDBIP) is good. Withdrawal of subsidies, however, needs to be supported by a properly designed exit strategy.
- Use of existing institutions to implement projects is good, for example Kenya National Federation of Agricultural Producers (KENFAP) has been instrumental in driving the KENDBIP.
- Development of Small Hydro Power has mobilised financing from communities for implementing some projects and this promotes the sense of ownership.

- Partners should meet their obligations as per contract to avoid set-backs in project implementation.

*What activities undertaken in your country have been successful at scaling up renewable energy access in rural areas?*

- Zero-rating of renewable energy (RE) equipment has improved access to solar PV, briquetting equipment, bioethanol for cooking
- Introduction of renewable energy in existing diesel mini-grids
- The Feed-in-Tariffs policy for RE, solar PV regulations, energy management regulations and Solar water heating regulations are positively contributing to uptake of RE.
- Mapping and assessment of RE resources has contributed to increased investment by private sector
- The Kenya National Domestic Biogas Programme (KENDBIP) which is supported by the Netherlands Government has been very successful (over 6000 domestic plants constructed out of the targeted 8000 by 2014)

*What activities undertaken in your country have not been successful at scaling up renewable energy access in rural areas?*

Biofuels development has not been very successful. Very little research along the value chains of different biodiesel feed-stocks has been done.

*What project ideas for the SREP Competitive Set Aside have government, private sector stakeholders, or MDBs discussed in your country?*

- Implementation of additional hybrid mini-grids with a higher percentage of RE contribution
- Financing of Solar Water Heaters