

SREP Bulletin

Summary of the fifth meeting of pilot countries participating in the Scaling up Renewable Energy Program (SREP)

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THE FIFTH MEETING OF PILOT COUNTRIES PARTICIPATING IN THE SCALING UP RENEWABLE ENERGY PROGRAM IN LOW INCOME COUNTRIES (SREP)

The fifth meeting of pilot countries participating in the Scaling up Renewable Energy Program (SREP) was held in Bandos Island, Maldives, from 28-30 May. Over 50 participants attended the meeting from pilot countries, countries on the SREP pilot reserve list, multilateral development banks (MDBs) and the Climate Investment Funds (CIF) Administrative Unit.

On Tuesday, after an official welcome by the Government of Maldives, participants: heard updates from pilot and reserve countries on new developments of investments plans, and exchanged lessons on SREP planning, project preparation and implementation; discussed the SREP "pipeline" monitoring and project delivery; and heard about the proposed competitive allocation of funds to promote innovative approaches to engage the private sector. CIF Administrative Unit presented on the criteria and procedures for the selection of the SREP Sub-Committee members.

On Wednesday, country representatives worked on finetuning indicators that assess enabling environments for investing in renewable technologies, following presentations by the Inter-American Development Bank (IDB) and the World Bank on the potential indicators. In the afternoon, participants completed diagnostic worksheets on their country's enabling environment for renewable energy investments. After a first round of in-country discussions, countries then shared these experiences among each other in a roundtable discussion. CIF Administrative Unit presented on the SREP Results Framework regarding monitoring and reporting, after which the World Bank presented an overview of ways to define and measure access to renewable energy. During a roundtable session, participants discussed ways of assessing the access impacts of generation and transmission projects, working collaboratively through a case study based on a fictional country.

On Thursday morning, participants attended a joint energy and technical working group learning event on SREP, and Kenya, Nepal and Maldives highlighted specific challenges and key lessons in implementing rural energy projects. Participants discussed their countries' best practices, challenges, and developing country-specific enabling environments. The African Development Bank (AfDB) moderated discussions of successful practices, the unique challenges of rural poverty, and rural functional markets. World Wildlife Fund (WWF) moderated a panel discussion on the role of social enterprise and the provision of energy services in rural areas. Panelists



Delegates discussing the role of social enterprise and the provision of energy services in rural areas.

from Kenya and India shared their experiences in establishing renewable energy systems in remote areas. Participants discussed social enterprise work in the country context to address challenges in the rural sector, and how these can improve enabling conditions and develop markets. In the afternoon, participants visited a solar photovoltaic (PV) installations at the Muhyiddin School on Villi-Male' Island, located on the northern side of Male' Atoll and observed environmental work done by Save the Beach non-governmental organization.

A BRIEF HISTORY OF THE CLIMATE INVESTMENT FUNDS

The CIF is a set of financing instruments that provide developing countries with a jump-start toward achieving climate-smart development. Through two distinct funds, the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF), the CIF support developing countries' efforts to mitigate and manage the challenges of climate change by providing grants, concessional loans and risk mitigation instruments, and through leveraging significant financing from the private sector,

IN THIS ISSUE

A Brief History of the Climate Investment Funds
Report of the Meeting
Joint Energy+ Technical Working Group/SREP Learning Event
Upcoming Meetings
Glossary

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the MDBs and other sources. With CIF support, 49 developing countries are piloting low-emissions and climate-resilient development, transformations in clean technology, sustainable forest management, and increased energy access through renewable energy.

The CIF, formally approved by the World Bank's Board of Directors on July 1, 2008, is a collaborative effort among the MDBs and countries to bridge the financing and knowledge gap between now and the next international climate change agreement. The CIF were designed through consultations with various stakeholders and are governed by donor and recipient countries, with active observers from the UN, the Global Environment Facility, civil society, indigenous peoples' organizations and the private sector.

The CTF and the SCF each have a specific scope and objective, and their own governance structure. Thus far, donor countries have pledged approximately US\$7.6 billion to the CIF, administered through country-led programs and investments, by the AfDB, Asian Development Bank (ADB), European Bank for Reconstruction and Development, Inter-American Development Bank (IDB), International Finance Corporation (IFC) and the World Bank. The CTF provides developing and middle-income countries with incentives to scale up the demonstration, deployment and transfer of technologies with a high potential for long-term greenhouse gas emission reductions.

The SCF supports developing country efforts to achieve climate-resilient, low-carbon development. It operates through three targeted programs with dedicated funding to pilot new approaches to climate action that should initiate transformation with potential for scaling up climate resilience. The three programs under the SCF are the Forest Investment Program (FIP), the Pilot Program for Climate Resilience (PPCR) and SREP. Pledges for the three SCF programs total US\$2.44 billion.

The FIP supports developing country efforts to reduce emissions from deforestation and forest degradation, promote sustainable forest management and enhance forest carbon stocks. The SREP aims to: scale up the deployment of renewable energy solutions and expand renewable markets in the world's poorest countries; and pilot and demonstrate the economic, social, and environmental viability of low-carbon development pathways in the energy sectors of low-income countries.

The PPCR helps developing countries mainstream climate resilience into development planning and offers additional funding to support public and private sector investments. It provides incentives for scaled-up action and initiates a

shift from "business as usual" to broad-based strategies for achieving climate resilience at both the national and regional levels. Thus far, there are nine pilot countries and two pilot regions, and US\$1.3 billion has been pledged.

CIF PILOT COUNTRY MEETINGS

The CIF Pilot Country Meetings provide the opportunity for those working on CIF-financed operations in countries around the world to meet regularly and discuss progress and experiences in an open and collaborative manner. Representatives of CIF pilot country governments are joined by their counterparts from the MDBs, donor countries and other stakeholders to share knowledge, learn from experiences in CIF implementation, and foster trust and accountability.

CTF countries meet annually, SCF pilot countries meet semi-annually, and all CIF countries meet as needed to discuss emerging CIF-wide issues. A total of 20 Pilot Country Meetings have been organized between October 2009 and May 2013. Through discussing common issues, pilot country representatives have identified areas of common understanding, and have communicated their views to the CIF governing bodies on how to improve the CIF.

Pilot Country Meetings also provide a space for cross-fertilization among CIF programs. For example, in early 2011, SREP countries that were in the initial stages of CIF programming had the opportunity to learn from PPCR experiences in preparing their Strategic Programs for Climate Resilience (SPCRs) for endorsement. PPCR experiences highlighted the need for: multi-stakeholder engagement and ongoing inter-ministerial collaboration and coordination; a clear understanding of the state of knowledge, awareness and policies to address climate change; and political will to bridge capacity gaps.

The PPCR, the CIF program that is farthest along in implementation, convened its first meeting of pilot countries in October 2009 and has met seven times since. CTF pilot countries first met in March 2010 and have met twice since; and SREP and FIP pilot countries first met in November 2010 and have each met four times since then.

JUNE 2011 PILOT COUNTRY MEETINGS: These meetings convened in Cape Town, South Africa, prior to the 2011 CIF Partnership Forum. Six SPCRs had already been endorsed by the PPCR Sub-Committee when this meeting convened. Thus, the meeting's objective was to bring countries together to discuss common issues related to preparing and implementing the SPCRs, including the results framework, and gender and stakeholder involvement, as well as to look at lessons learned on the basis of the PPCR learning brief.



Participants attending the fifth SREP Pilot Country meeting.



The objective of the SREP Pilot Country Meetings was to provide technical input to countries to support the preparation of investment plans. Experts from MDBs and UN agencies reported on options for renewable energy policies, subsidies and finance. Participants also discussed challenges and opportunities associated with the SREP results framework, climate-risk assessment for energy investments, and gender mainstreaming.

The meeting of FIP pilot countries provided input to countries to support the preparation of their investment plans and targeted discussions on stakeholder involvement, cooperation with partners and donors, synergy with national processes and results framework.

The meeting of CTF countries offered an opportunity for country representatives to discuss experiences with CTF implementation, focusing on renewable energy and energy efficiency. Participants also discussed the results framework with a view to moving forward with implementing systems for monitoring and evaluating results.

MARCH/APRIL 2012 PILOT COUNTRY MEETINGS: PPCR pilot countries met in March in Livingstone, Zambia. The meeting objectives were to provide a space for countries to discuss and prepare for the challenges and opportunities of maintaining a programmatic approach in implementing PPCR Strategic Programs; and to exchange views on the design and implementation of systems to monitor results and manage knowledge. A segment on climate information systems and hydro-meteorological services was also organized in recognition of the fact that a large proportion of PPCR pilot countries plan to make investments in this area.

SREP pilot countries met in March in Nairobi, Kenya. Countries discussed experiences, lessons learned and best practices regarding technologies, financing instruments and private sector engagement, as well as exchanged views on designing and implementing systems to monitor results. In addition, one full day was focused on structured, case study-based learning using Kenya's experience in developing their SREP Investment Plan.

In April, FIP pilot countries convened in Brasilia, Brazil. One objective of the meeting was to share innovative approaches to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+) investment. A further objective was to work with the private sector, indigenous peoples and local communities, and to exchange views on the design and implementation of systems to monitor results from REDD+ investments.

OCTOBER 2012 PILOT COUNTRY MEETINGS: The sixth meeting of pilot countries and regions participating in the PPCR convened in October in Istanbul, Turkey. During this meeting, pilot countries provided updates on their progress with the programming and implementation process for the SPCRs. Participants discussed and provided feedback on the PPCR learning product, and PPCR monitoring and evaluation showcases.

The fourth meeting of pilot countries participating in the SREP convened in October in Istanbul, Turkey. Pilot and reserve countries provided updates on their progress with the SREP programming and implementation process. Participants also learned about various emerging financing instruments and shared their preliminary experiences.

The fourth meeting of pilot countries participating in the FIP convened in October in Istanbul, Turkey. Pilot countries provided updates on their progress with the FIP programming and implementation process. Participants also discussed and provided feedback on the FIP learning product, and FIP

monitoring and evaluation showcases. Consultations also took place on the revised FIP results framework between pilot and contributor countries.

During a meeting of CTF, convened during the same period in Istanbul, Turkey, pilot countries shared experiences, successes and challenges, and lessons learned from the CTF implementation process, and discussed and provided feedback and recommendations on CTF monitoring and evaluation showcases. Consultations also took place on the revised CTF results framework between CTF recipient and contributor countries. In a master class on wind energy and biodiversity issues, CTF support at different stages of wind energy development was highlighted, including introducing wind farms in South Africa, and working with Egypt, where large-scale wind energy has already been developed, but is still facing many challenges.

MAY 2013 PPCR PILOT COUNTRY MEETING:

The seventh PPCR meeting for pilot countries and participating regions convened in May in Washington, DC. The meeting provided countries and regional organizations with opportunities to share challenges and experiences in implementing their programmes to enhance climate resilient development. During practical discussions, participants were able to converse on issues related to the PPCR revised results framework, including work plans, core indicators, and national monitoring and reporting systems.

Participants examined different models of country and regional coordination mechanisms, including managing interagency coordination, engagement with stakeholders, measuring and reporting results, and mainstreaming climate resilience.

Core indicator guidance sheets and score cards for monitoring and reporting received attention, with CIF staff providing information on the content and context of the work plans, and soliciting feedback in order to improve the core indicator guidance sheet and score card. Participants also focused on activities pursued by businesses and enterprises, with support from MDBs in middle-income countries outside of the PPCR, and engaging the private sector through a competitive set aside under the PPCR.

REPORT OF THE MEETING

OPENING AND INTRODUCTION

On Tuesday morning, Ahmed Shafeeu, Minister of Fisheries and Agriculture, Maldives, opened the meeting, expressing confidence in the meeting's role to increase the profile of the Maldives' energy sector through the opportunities provided



Ahmed Shafeeu, Minister of Fisheries and Agriculture

in sharing lessons and experiences. He said that although the islands' energy needs are miniscule at a global scale, the country is directly impacted by climate change's adverse effects, and stressed the need for removing the burden created by fossil fuel subsidies. He attributed the Maldives' carbon dioxide (CO2) emissions to the high demand for transport and fishing vessels and expressed the government's

desire to minimize diesel consumption and CO2 emissions. Stressing the need for economic development that does not compromise the natural environment, he said US\$139 million has been leveraged by the Maldives' SREP investment plan

for the design and implementation of renewable energy technology (RET), which would raise the share of renewable energy in the final mix from 2% to 16%. He encouraged participants to use the meeting as a platform for meaningful exchanges of their countries' experiences to scale up renewable energy.



Unit Program Manager

Patricia Bliss-Guest,

CIF Administrative Unit, commended the leadership shown by the Maldives in raising awareness about the consequences of climate change and in addressing its mitigation and adaptation challenges, reminding that the Maldives was the first country to announce its intentions of becoming carbon neutral, and to do so by 2020. She applauded the role of SREP in helping the country achieve this goal through supporting investments, strengthening policies, and building capacity to support the required energy shift. Bliss-Guest outlined: the endorsement of six investment plans since the first SREP pilot country meeting, to which Tanzania and Liberia had been added due to the mobilization of additional funding; and approval of four SREP projects by the Sub-Committee. She urged participants to speak candidly about their successes and challenges, to tap the expertise of colleagues from other countries, the multilateral development banks (MDBs) and the CIF Administrative Unit, and to assist CIF in finding ways to overcome barriers to the timely delivery of projects.

UPDATES FROM THE SREP PILOT AND RESERVE COUNTRIES

Shaanti Kapila, CIF Administrative Unit, introduced the session, noting questions to be addressed included recent developments, project goals for the upcoming 12 months, and factors contributing to or delaying project success.

Surya Kumar Sapkota, Alternative Energy Promotion Centre, Nepal, said barriers to success in his country's projects include fulfilling MDB requirements and aligning these with

national priorities and requirements.

Ahmed Ali, Ministry of Environment and Energy, Maldives, outlined recent developments in the Accelerating Sustainable Private Investments in Renewable Energy Programme, which commissioned a 280kW roof-mounted, solar photovoltaic grid-connected system.



Shaanti Kapila, Global Support Program Coordinator, CIF

Alassane Agalassou, Ministry of Environment and Sanitation, Mali, on his country's projects, highlighted private sector coordination for increased advocacy. He noted that programme timelines are being finalized and said factors for success include the stabilization and amelioration of the political and security situation in Mali.

Faith Odongo Wandera, Ministry of Energy, Kenya, on a geothermal energy project at Menengai, said support and facilitation from MDBs and domestic technical capacity have contributed positively to the project.

Leonardo Valladares Matute, Ministry of Finance, Honduras, on a project to strengthen renewable energy policy and the regulatory environment, said although a grant agreement has been signed between the government and MDBs, procedures have taken longer than anticipated.

Gosaye Mengistie Abayneh, Ministry of Water and Energy, Ethiopia, outlined three national projects, saying they were initiated prior to the SREP, but that SREP involvement will enhance the project outcomes. He underscored government and MDB commitment in contributing to their project success.

Christopher Simelum, Ministry of Climate Change, Meteorology, Geo-hazards, National Disaster, Energy and Minerals, and Environment, Vanuatu, said 73% of the population has no access to modern electricity due to the large number of islands and distance to urban centres, and stressed the need to overcome the barriers of: finding additional finance; short timeframes; and lack of capacity to implement the National Energy Road Map.

Edward Ishengoma, Ministry of Energy and Minerals, Tanzania, expanded on Tanzania's SREP Investment Plan that prioritizes development of geothermal energy technology and a mini-grid system, and described Tanzania's challenges of low awareness of renewable energy advantages, lack of institutional capacity, converting donor promises into concrete commitments, and developing biomass as an additional renewable energy priority.

John Korinihona, Ministry of Mines, Energy and Rural Electrification, Solomon Islands, outlined the current work on the investment plans of the islands. He lamented the difficulties of identifying indicators and establishing baselines in the absence of previous data on geothermal and hydro energy, and urged strengthening data gathering and data storage, and enabling private investment through institutional structures, legislation and policies.

Mardia Warner, Rural and Renewable Energy Agency, Liberia, presented Liberia's Investment Plan, lamenting the difficulty of reaching stakeholders, while struggling with limited technical capacity at national level, as well as a lack of private investment, and legal and regulatory frameworks. She expressed hope that the SREP program will build on the lessons learned in pilot projects implemented after the civil war, thus creating a systematic and phased approach in which a programme for mini-grids can be developed.

Tumenjargal Makhbal, Ministry of Energy, Mongolia, reported on the 19.3% of Mongolia's nomadic households that utilizes 1.43 MW of solar and wind energy systems. He urged scaling up the renewable energy mix to provide heating of hot water and homes, and electricity to rural health facilities and schools, and stressed the government's aim of reducing energy loss and stabilizing the energy system.



Tamara Babayan, Renewable Resources and Energy Efficiency Fund, Armenia, on some of the challenges and lessons, emphasized the importance of good energy statistics for long-term planning and monitoring, and identified the negative impact of gas price increases as an opportunity to introduce renewable energy technologies.

ASK THE EXPERT: EXCHANGING LESSONS ON SREP PLANNING, PROJECT PREPARATION, AND IMPLEMENTATION

During the "Ask the Expert" session, participants from new SREP pilot and reserve countries were invited to seek guidance and learn from countries with already endorsed investment plans. Suggested questions to be addressed included, *inter alia*: the steps and timeline followed in the investment planning process; identifying and prioritizing areas for SREP investment; deciding how to allocate limited resources; leveraging additional financing; and private sector involvement.

During the ensuing discussion, participants debated whether the demand for renewable energy projects is driven based on existing government programmes, or by private sector and local communities. Some questioned local communities' willingness to pay, with one participant noting the effect subsidies, remittances and growing rural affluence may have.

Others queried the involvement of the ministry of finance as the lead coordinating institution, saying that coordination is essential and needs to involve other ministries and stakeholders. Some urged that governments retain ownership of the SREP process and not be driven by the wishes of others. They also discussed: that preparation is essential, but it takes time; the possibility of private sector financing; initiating and prioritizing SREP projects; and developing country-owned investment plans.

SREP PIPELINE MONITORING AND PROJECT DELIVERY

Zhihong Zhang, CIF Administrative Unit, presented on SREP "pipeline" monitoring and project delivery, noting that contributions and pledges thus far total US\$480 million. He recalled that pledges are made up of grants and capital contributions, noting a SREP Sub-Committee decision stating that countries with a low risk of debt distress can have no more than 70% of indicative funding drawn from grant contributions, whereas countries with moderate or high risks can have all indicative funding drawn from grant contributions, except for private projects, which can be drawn from capital contributions.

Zhang provided an overview of project delivery targets established by the SREP Sub-Committee, saying the target delivery timeframe from investment plan endorsement to



Claudio Alatorre, IDB, (standing) in the "Ask the Expert" session

sub-committee approval of all projects contained within the investment plan is 24 months, following which the investment plan will turn "red." When this occurs, a country update on implementation must be provided. He further noted that the interval from funding approval to MDB approval of an individual project should not exceed nine months, to prevent the project light from turning "red."

Zhang noted that the SREP Sub-Committee has proposed pipeline management enhancements by addressing: means to

speed up preparation and implementation of projects in the pipeline; over-programming; and providing flexibility. He noted that the SREP may wish to adopt measures similar to those of the CTF, which has an over-programming allowance of 30% of contributions.



During the discussion, Nepal noted that additional requests

from the ADB may further delay its project implementation. Maldives asked what could be done to expedite the implementation process of its project to be implemented by the IFC, with Laura Gaensly, IFC, noting that the Government of the Maldives can be engaged to investigate possibilities. On over-programming, Claudio Alatorre, IDB, said that in the CTF the over-programming allowance was established to allow greater monetary flows for faster-moving projects and that this could be a model for the SREP going forward.

During the roundtable discussions which followed, participants commented on the delays in, and implications of, the development and implementation of their programs. Kenya explained the delay in their geothermal project delivery was due to a lack of data for their steam-gathering. Honduras mentioned the complexity of having two funding institutions involved, and the importance of having innovative financing mechanisms that are tailored to the country's needs. He regretted not having appropriate benchmarks against which to measure their Grid-Connected Renewable Energy Development Support Project progress accurately, due to not having comparable projects in Honduras.

In a second roundtable discussion on the usefulness of the "traffic light" system for tracking project development, and the reasons for successes or delays, the Maldives proposed closer collaboration with MDBs to minimize the impact of deadlines. Ethiopia noted that although damage to a component needed to begin construction of their geothermal unit has caused delays, the government's commitment or close collaboration with MDBs have not been affected. Several representatives stressed the need for flexibility and understanding of unique country limitations.

ENGAGING THE PRIVATE SECTOR THROUGH A COMPETITIVE SET ASIDE UNDER THE SREP

Zhang presented the background to setting aside resources on a competitive basis, which aims to include private sector clients working though the MDBs' "private sector arms," as well as funding channeled through governments to the private sector, stressing that only the initial six pilot countries are eligible to access the set aside. He announced an increase

in the set aside from US\$50 million to US\$90 million and presented the criteria for selection: alignment with country investment plans; raised level of innovation; demonstration of private sector support and engagement; projects should start within the next 12 months; and progress achieved in other projects would be advantageous. He provided an overview of the procedures for accessing the set aside and encouraged participants to access the web page for further information (https://www.climateinvestmentfunds.org/cif/set-aside/srep-set-aside). Alatorre noted that the increase in funding has slightly changed the proportion of funding per country and number of projects allowed per country.

CRITERIA AND PROCEDURES FOR SELECTION OF SREP SUB-COMMITTEE SEATS

Patricia Bliss-Guest provided an overview of the criteria and procedures for selecting SREP Sub-Committee seats, noting that the Sub-Committee is made up of 12 seats, with six members from contributing countries and six from recipient countries. She said that as a new Sub-Committee could not be established at the CIF 2012 Partnership Forum, held in November 2012, consultations were undertaken to determine criteria and procedures for selecting new members.

Criteria agreed upon, she said, includes: regional representation; recipient country members should represent those with endorsed investment plans, non-pilot countries, and those with investment plans being prepared; rotation of members should be inclusive and fair, but also retain institutional memory; and a written expression of interest must be provided. Based on these, she said the current recipient countries serving on the Sub-Committee include: Ethiopia; Kenya; Maldives; Mongolia; Senegal; and the Solomon Islands.

In the ensuing discussion, some participants queried the decision process for selecting members, with one saying that information should be provided with the candidates' suitability. Another urged that regional representation should include Latin America, given an implicit aspiration for the SREP to be a long-term, sustainable programme.

On a question of including a recipient country member that is not involved in the programme, Bliss-Guest noted the importance of establishing a Sub-Committee that is as equitable as possible. In closing, Bliss-Guest said the topic will be revisited at the upcoming 2014 Partnership Forum and encouraged participants to have further discussions on criteria and processes for selection prior to this.

ASSESSING ENABLING ENVIRONMENTS FOR CLEAN ENERGY

On Wednesday morning, pilot and reserve country representatives met to consider how to improve their country's enabling environments for renewable energy investments. Claudio Alatorre presented on viable options for improvement. He emphasized the need to recognize and value the benefits of RETs, and to accommodate some peculiarities associated with RETs, including their capital-intensive nature, and the time and geographical patterns of resource availability. On crosscutting policies, he highlighted renewable energy targets and the reduction of fossil fuel taxes. Regarding electricity markets, Alatorre explained that policy makers can create procurement rules such as feed-in tariffs, self-supply regulations, or complementary policies such as streamlined permitting. He recognized that, on new market paradigms, markets are not "technology-blind," and suggested accommodating variable generation moving away from the baseline - peak model, which matches conventional technologies, and towards policies that incentivize flexibility through demand response, energy storage, regional interconnection or flexible generation.

Participants then engaged in a thematic roundtable discussion regarding ways of assessing enabling environments in their own countries. The themes included energy access, energy efficiency, grid-connected renewables, and cross-cutting issues. The indicators discussed and selected by the participants will form the basis of the reporting framework used by the MDBs, to report to the SREP Sub-Committee on enabling environments.

Gevorg Sargsyan, World Bank, said the objectives of the activity were to: create a framework for assessing the enabling environment for investments in clean energy access; contribute to domestic policies; comparison and benchmarking; and monitor the process over time. He highlighted the relevance to SREP, and urged participants to design a framework that covers renewable energy as well as energy efficiency and access, while being objective, comparable, actionable, and context neutral. Participants were tasked with selecting, within groups, the indicators and sub-indicators most and least relevant from a list of proposed indicators.

Reporting back, participants noted five priority indicators, including: the retail price of electricity; the affordability of connection costs; determining fossil fuel subsidies in US\$ per unit of energy; and determining technical and commercial



Gevorg Sargsyan, World Bank and Ahmed Saleem, Maldives



losses within a system. They also said the indicators on the retail price of district heating and carbon taxes were not applicable to SREP countries and should be thus disregarded.

On grid-connected renewable energy, participants selected as most important, *inter alia*: legislation of renewable energy subsidies; determining whether laws and regulations specify the payees for each aspect of transmission interconnection for renewable energy; the diversity of electricity generation sources; and time and number of procedures for negotiating off-take agreements for a renewable energy project. Others also stressed the importance of the time spent on, and number of procedures to obtain environmental permits for renewable energy projects. Participants suggested that the indicator on whether the transmission pricing for renewable energy is based on transmission expansion be disregarded, as this differs vastly between models and countries.

Participants reporting back to plenary noted important indicators for energy efficiency, including: the price of energy to end-user as consumption increases; and determining whether there is an obligated energy efficiency institution coordinating and monitoring energy efficiency, and whether this institution is the legitimate controller of such data. Participants also suggested combining indicators on determining whether there is an allowance of savings retention for energy efficiency capital expenditures in public entities and whether there is an allowance of multi-year energy efficiency contracts as this creates an incentive through the ability to sign agreements and retain the savings within that entity. They cited non-relevant indicators including the absence of rolling blackouts, and the consideration of demand as an elastic variable in energy sector plans.

On energy access, participants suggested the most important indicators are whether there are laws in place to allow minigrids to function, and determining: the number of procedures to permit a mini-grid; whether there is "light-handed" tariff regulation; and if there should be a defined source of funding for renewable energy mini-grid systems. They concluded the least important indicators to be the absence of subsidies for kerosene, subsidies for connecting users to mini-grids, and whether there is least-cost or least-grant bidding for concession areas.

SREP COUNTRY ACTIONS TO ENHANCE ENABLING ENVIRONMENTS

On Wednesday afternoon, country representatives gathered together to assess their respective country's enabling environment for renewable energy investments, including

laws and regulations, policies, institutions, and markets and incentives. Participants were tasked with a "country diagnostic exercise," and discussed the areas in which SREP resources enable them to enhance weak enabling environments, as well as benefit from strong enabling environments. After a first round of "in-country" discussions, countries then shared these experiences among each other in a roundtable discussion. The selected RETs included geothermal, wind, solar, hydro, waste-to-energy and off-grid or mini-grid technologies.

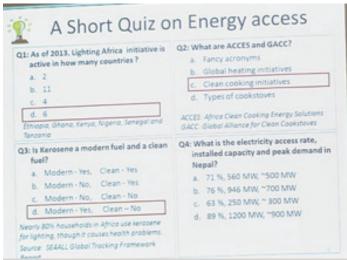
SREP MONITORING AND REPORTING

Inka Schomer, CIF Administrative Unit, presented on the SREP Results Framework, which is based on five principal indicators: it is a living document which should serve as basis for developing monitoring and evaluation (M&E) systems for SREP investment plans; MDBs will need to report progress in field testing to the CIF Administrative Unit on an annual basis; the framework should operate within existing national M&E systems; the proposed indicators should be applied flexibly and take into account pilot country circumstances; and data collection and reporting standards will use compatible methodologies. Schomer identified the challenges of using the framework, including significant pressure to demonstrate results on an annual basis, resource and human capacity constraints, and emphasizing accountancy rather than learning. She reflected on the report-back process, and noting the decision to use national M&E to track SREP outcomes, she recommended some M&E resources, including the CIF M&E web page and twitter account, and direct interaction with M&E specialists.

DEFINING AND MEASURING ACCESS TO ENERGY

Mikul Bhatia, Energy Anchor Unit, World Bank, presented an overview of defining and measuring access to energy. He stressed that energy access is a multi-faceted challenge, noting that connections alone do not necessarily equate to energy access. He outlined the difficulties inherent to measuring energy access, including: the multiple dimensions of energy use; multiple uses and applications of energy; and multiple energy sources. He said clarification is needed when defining access as it can refer either to accessing energy sources, accessing energy services, or actual consumption of energy. Aspects for consideration, he said, include standards of access, quality, availability and affordability of supply.

On measuring household electricity access, he noted attributes of electricity supply to consider include peak available capacity, duration of supply, evening supply,





Mikul Bhatia, The Energy Anchor Unit, World Bank

affordability, legality of connection, and quality and reliability of supply. He said sustainability of supply is not considered as it can be difficult to measure. He outlined a proposed framework for measuring access using a five-tier system, on both the service side and the supply side. He underscored that the service-side system is based on regular use of appliances, which range from lighting and phone charging at the most basic level, to using high-power appliances. On the supply side, he noted the tiers are based on the attributes of electricity supply. Bhatia suggested that energy access targets should be context specific, and used the example of Africa potentially targeting basic usage as opposed to Asia who may wish to aspire to usage of low-power appliances as their basic target.

Bhatia further explained the core survey questionnaire and the indices of access to electricity supply and services, stressing the multiple benefits that are derived from such tools. One participant questioned the applicability of the instruments in different contexts, while another participant asked whether the unit of analysis can also be considered at individual level. On the attributes of household cooking solutions, he emphasized efficiency, safety, convenience, pollution and adequacy. He suggested ways of measuring these attributes, describing the adjustment of tiers to incorporate clean cooking appliance attributes. One participant suggested improvements to assessing multiple appliance use, and another asked about the possibility of using the core questionnaires in his country.

During a roundtable session, participants discussed ways of assessing the access impacts of generation and transmission projects working through a case study based on a fictional country. Bhatia suggested using one framework, as well as the complementary approaches of quick estimation at project commencement, and actual measurement after implementation. He emphasized the key factors in using quick estimations, *inter alia*: the amount of additional energy available; distribution area; and transmission and distribution losses. On going forward, he stressed the need for enhanced energy surveys, including tracking the progress under the UN Secretary-General's Sustainable Energy for All initiative, and developing a broader role for energy survey data. He proposed setting up a support team at the World Bank Energy Anchor Unit to facilitate household energy surveys.

JOINT ENERGY+ TECHNICAL WORKING GROUP/SREP LEARNING EVENT

THE UNIQUE CHALLENGES OF SCALING UP

RENEWABLE ENERGY TO RURAL AND REMOTE COMMUNITIES

On Thursday morning, the meeting reconvened for a joint Energy+ Technical Working Group and SREP earning event. Participants heard presentations from country representatives on their specific challenges and lessons learned in implementing rural energy projects.



Henry Gichungi, Kenya Power and Lighting Company, presented on experiences in Kenya's remote areas with solar and wind mini-grids, emphasizing the transformation brought about by modern energy supply to rural households. He described: the challenges of high capital costs; the operational challenges of expensive energy storage facilities, poor infrastructure, and inadequate ability and willingness of communities to pay; inadequate training on system operation and maintenance; low penetration; destabilization by wind turbines; intermittent nature of renewable energy which prevents substitution by thermal generation.

Mustafa Ajwad, Maldives Energy Authority, spoke of the unique energy challenges to a country where each island is remote and has to be self-sufficient, since submerged electricity cables do not currently exist. He noted the challenges of space



constraints, logistical challenges regarding transportation, growing demand, lack of technical expertise and public awareness. He stressed that opportunities exist to offset these challenges, saying the way forward includes inter-island connection through submarine cables, nationwide implementation of RETs through minigrids, and aggregation of projects.

Surya Kumar Sapkota provided an overview of the challenges of scaling-

up renewable energy in rural Nepal. He noted key areas to successfully scale-up renewable energy include: selecting the appropriate technology; having wide stakeholder involvement; including the private sector; using a participatory demand-driven approach; and ensuring that efforts are in line with national frameworks and policies. He outlined challenges and obstacles such as affordability and availability, access to financing and risk-sharing, a lack of awareness among target groups, high dependence on traditional biomass, the high costs of clean modern energy, and a lack of relevant capacity in rural areas. He suggested enabling environments can be strengthened through policy support, technology transfer and local capacity building. He also urged prioritizing energy supply to social infrastructure, such as clinics and schools.

During the discussion, participants noted the use of minigrids and solar energy for energy provision in Mali, stressing that any expansion of infrastructure must be undertaken with sustainability in mind. They addressed government support for micro hydropower installations, primarily with financial assistance. One participant noted that although grid infrastructure in Kenya is government-owned, new legislation is being drafted that will permit private grid expansion. Another noted the need for risk-sharing in expanding rural energy, saying that the Government of Nepal aims to bear 50% of the risk, where risk-sharing mechanisms are established.

SOCIAL ENTERPRISE AND THE PROVISION OF ENERGY SERVICES IN RURAL AREAS

Daniel Riley, WWF, and representing the Energy+ Technical Working Group, presented an update from consultations with the private sector and civil society and describing these consultations, both at large scale and in



remote areas, he announced a publication based on the distillation of the lessons they have learned. He stressed the role of social partnerships in RET development, and involving civil society in developing rural energy systems.

Riley then moderated a panel discussion, reminding participants that the focus should be on the objectives of social enterprises, the ways in which they sustain their operations, and how to operate in areas where energy markets are lacking and where pure for-profit enterprises are initially unsuccessful.

Joseph Nganga, Renewable Energy Ventures, Kenya, told of the large section of rural Kenyan households that will not become part of the general energy grid within the next two decades, and his company's experiences in developing and distributing solar lanterns through enabling young entrepreneurs in remote villages.



Thomas Pullenkav, SELCO Foundation, India, spoke of the two decades of SELCO's involvement in developing alternative lighting options for remote rural households in India. He described the challenges of creating an "ecosystem" for renewable energy applications including unaffordability of RETs, lack of technical expertise and maintenance possibilities, and lack of credit facilities that can support rural entrepreneurs.

James Wakaba, Global Village Energy Partnership International, described his organization's involvement in



Thomas Pullenkav, SELCO Foundation

several African countries to meet their renewable energy needs, inter alia: supporting small-scale hydropower development in rural Tanzania; assisting in the development of pico hydropower maintenance and distribution enterprises in Rwanda; helping with value-chain development of cook stove applications in Uganda; and assisting with the development of cooling systems for dairies in rural Senegal.

Nganga noted that social

enterprises are able to provide tailored systems to address the low level of energy usage in rural households. He also stressed that such interim measures provided by social enterprises will assist in preparing communities to spend money on energy when they are eventually connected to the grid. Wakaba underscored social enterprises' role in decreasing barriers to entry through building markets and creating community awareness. He also highlighted their role in making the business case for new technology development. Pullenkay

urged that social enterprises be supported by government, especially during the initial phases, but underscored that this should be in a policy making and regulatory capacity. Wakaba urged for capacity support and awareness raising from governments.

During the ensuing discussion, some participants queried the efficacy of subsidies in supporting social enterprises. They also queried the sustainability of such interventions, given plans for energy infrastructure expansion in most countries, with one participant reiterating that the goods and services offered by social enterprises are interim solutions to serve needs until grid or mini-grid power arrives. They also noted that as these interventions are a social good, they should be supported by public money.

REFLECTIONS AND WRAP-UP

In closing, Patricia Bliss-Guest encouraged participants to stay in touch with each other and communicate frequently regarding their projects. Reminding them that their progress will potentially mobilize more funds to enable projects in other countries, she invited countries to attend the Partnership Forum scheduled to take place in Jamaica in 2014. Kapila closed the meeting at 12:28 pm.

FIELD VISIT TO VILLI-MALE' ORGANIZED BY THE GOVERNMENT OF MALDIVES

In the afternoon, participants were taken to Villi-Male', an island located on the northern side of Male' Atoll, to visit one of six solar PV installations at the Muhyiddin School. Ibrahim Nashid, Renewable Energy Maldives (REM), presented on the "Six Island Solar PV" project, a joint power-purchasing agreement between the State Electric Company and REM, with funding and technology transfer provided by German solar-power firm Wirsol. He said the school's installation was the first large solar-powered installation, as well as being the first private-public partnership, which meant they had to design, finance, install, maintain and manage everything through the one company. On challenges, he outlined the stability of roofs as problematic for solar panel installation, prohibitively expensive installation costs for the average household, and limited internet capacity for system management.

Participants also learned about some of the environmental challenges facing residents of the country's low-lying islands, including waste management, access to safe drinking water and coastal erosion. Thanzeela Naeem, Save the Beach, Villi-Male', presented on the non-government organization's work, which started in 2008 as a youth movement in Villi-Male' to conserve the beaches of the island, and currently operates on a voluntary basis without any funding. She emphasized the need to: establish waste management systems, particularly for hazardous chemical waste management; raising awareness on household waste management and litter; and stemming the brine outflow from water treatment plants onto the coral reefs. On access to drinking water, she lamented rising contamination of groundwater on many of the islands, the lack of waste water treatment facilities, and the large amount of bottled water used by the population, which contributes to the waste problem.





Participants were taken to Villi-Male', an island located on the northern side of Male' Atoll, to visit one of six solar photovoltaic (PV) installations at the Muhyiddin School

Ali Shareef, Ministry of Environment and Energy, Maldives, described the large constructing costs of a breakwater, and installation and operational costs of desalination systems.

UPCOMING MEETINGS

44th GEF Council Meeting: The Global Environment Facility (GEF) Council meets twice per year to approve new projects with global environmental benefits in the GEF's focal areas, and provide guidance to the GEF Secretariat and agencies. dates: 17-20 June 2013 venue: World Bank Headquarters location: Washington DC, US contact: GEF Secretariat phone: +1-202-473-0508 fax: +1-202-522-3240 e-mail: secretariat@thegef.org www: http://www.thegef.org/gef/council meetings

20th Meeting of the Adaptation Fund Board: The Adaptation Fund Board supervises and manages the Adaptation Fund under the authority and guidance of the countries that are parties to the Kyoto Protocol. dates: June 2013 (TBD) location: Bonn, Germany (TBD) contact: Jeannette Jin Yu Lee phone: +1-202-473-7499 fax:+1-202-522-2720 email: jlee21@thegef. org www: http://www.adaptation-fund.org/page/calendar

Fifth Africa Carbon Forum: The Africa Carbon Forum is a trade fair and knowledge-sharing platform for carbon investments in Africa, and will consider ways to promote access to low-carbon development in Africa. dates: 3-5 July 2013 location: Abidjan, Côte d'Ivoire contact: Emilie Wieben email: acf@risoe.dtu.dk www: http://africacarbonforum.com/2013/english/

19th Session of the Conference of the Parties to the UNFCCC: COP 19, CMP 9, ADP and the SBs will convene in Warsaw, Poland. dates: 11-22 November 2013 location: Warsaw, Poland contact: UNFCCC Secretariat phone: +49-228-815-1000 fax: +49-228-815-1999 email: secretariat@unfccc.int www: http://www.unfccc.int

CIF 2014 Partnership Forum and Associated Meetings: This meeting will take place in Jamaica in 2014. dates: TBD, 2014 location: Jamaica contact: CIF Administrative Unit phone: +1 202 458 1801 email: cifevents@worldbank.org www: https://www.climateinvestmentfunds.org/cif/home

GLOSSARY

ADB	Asian Development Bank
AfDB	African Development Bank
CIF	Climate Investment Funds
CTF	Clean Technology Fund
FIP	Forest Investment Program
IDB	Inter-American Development Bank
IFC	International Finance Corporation
MDBs	multilateral development banks
PPCR	Pilot Program for Climate Resilience
REDD+	reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks
RET	renewable energy technology
SCF	Strategic Climate Fund
SPCR	Strategic Program for Climate Resilience
SREP	Scaling Up Renewable Energy Program in Low Income Countries

