

**Aide-Memoire for
Scaling Renewable Energy Program in Low Income Countries (SREP)
Joint MDBs Scoping Mission to Nepal
February 03-08, 2011**

1. Introduction

1. A Joint World-Bank, ADB and IFC team¹ (the Mission) visited Nepal from February 03-08, 2011 to conduct the Scoping Mission for the project on Scaling up Renewable Energy Programs in Low Income Countries (SREP), on the invitation of the Government of Nepal (GoN) by a letter dated December 22, 2010.² Nepal has been selected as one of the pilot countries with up to \$40 million contributions under SREP, which is a targeted program of the Strategic Climate Fund (SCF), one of the two funds under the Climate Investment Funds (CIF). SREP supports developing countries in their efforts to expand energy access and stimulate economic growth through the scaled-up deployment of renewable energy solutions; and it provides a trigger for transformation of the renewables market in each target country through a programmatic approach that involves government support for market creation, private sector implementation, and productive energy use. SREP is implemented by Multilateral Development Banks (MDBs), in close collaboration with other development partners including the UN and bilateral agencies.

2. The key objectives of the Mission were: (i) to identify key development partners and other stakeholders who should be consulted in the course of preparation of the Investment Plan and potential co-financiers of SREP; (ii) undertake a stocktaking of existing activities and documentation available on a range of analytical, strategic and programming activities related to renewable energy; (iii) agree on a timetable and financial and human resources required to prepare the Investment Plan; and (iv) Agree on the terms of reference for the Joint Programming Mission to initiate preparation of the Investment Plan.

2. Mission Activities and Outputs

3. The Mission held meetings with the government institutions such as the ministries of Environment (MoE), Finance (MoF) and Energy (MoEn), Department of Electricity Development (DOED), Alternative Energy Promotion Centre (AEPC) and Nepal Electricity Authority (NEA). Also the Mission met with the industry associations, commercial banks and development partners (DPs). A detailed list of stakeholders met by the joint mission team is provided in Annex-3.

4. During the meetings, the Mission explained the objectives of the scoping mission and the processes involved in the country led SREP process. The Mission also explained the key features of SREP, including: (i) barrier reduction, (ii) leveraging investments by 1:4, (iii) increasing renewable energy capacity and access to energy, (iv) transformational impact, and

¹ The team comprised of: **World Bank** – Pravin Karki (Senior Hydropower Specialist), Tomoyuki Yamashita (Senior Energy Specialist), Anjali Garg (Energy Specialist), Mudit Narain (Energy Analyst), Mikul Bhatia (Senior Energy Specialist and Co-mission leader). **Asian Development Bank** – Priyantha Wijayatunga (Senior Energy Specialist and Co-mission leader), Jiwan Acharya (Climate Change Specialist), Len George (Energy Specialist), Martin Jensen (Investment Specialist), Shahid Parwez (Programs/Projects Implementation Officer). **International Finance Corporation** – Pavol Vajda (Operations Officer), Sabin Raj Shrestha (Senior Financial Sector Specialist). The mission was also joined by Phil Lewis (Policy Analyst), **DfID** and James Haselip (Researcher), **UNEP**.

² Invitation letter from GoN and response letter from ADB are provided in Annex-1 and 2 respectively.

(v) scaling-up through private sector participation. SREP support can be made available for all renewable energy technologies including solar, wind, bio-energy, and hydropower with capacities not exceeding 10MW per facility.

5. The mission identified counterpart agencies, agreed on the time schedule for further processing and prepared the Terms of Reference for the Joint Programming Mission. The details of these outputs are provided further in the document.

3. Summary of Scoping Mission Findings:

3.1 Sector Background

6. In Nepal, 46% of the population does not have access to electricity. Electricity provided only 1.8% of the total energy consumption in Nepal in 2005 compared to nearly 87% for fuel wood and biomass. Nepal's current power generation installed capacity of 690 MW (largely run of the river hydropower projects) is insufficient to meet growing demand and this has resulted in a decision in February 2011 to undertake up to 14 hours of load-shedding in a day. While Nepal has a technically feasible hydropower potential of 44,000 MW, this has not been significantly developed so far. Hydropower projects have been categorized as – micro and mini projects (up to 1 MW), small and medium sized hydropower projects (1-25) MW and large projects (over 25 MW). Secretary, Ministry of Energy is authorized to issue the license and Department of Electricity Development (DOED) is the license processing agency for hydropower projects over 1 MW as per the Electricity Act, 1993.

7. On the less than 1 MW front, the Government of Nepal has initiated several off-grid programs through the Alternative Energy Promotion Center (AEPC) which is the nodal agency for this category of renewable / alternative energy projects in Nepal. As of July 2009, over 30 MW of pico, mini and micro hydro initiatives have been installed across 59 districts, while over 600 integrated water mills have been installed across 46 districts of Nepal. Over 200,000 biogas household plants have been installed in 72 districts of Nepal in addition to larger community and institutional plants. Over 192,000 household solar PV systems with a aggregate capacity of 5.36 MW have been installed in 74 districts.

3.2 Designated Counterparts for SREP

8. **Steering Committee:** The Ministry of Environment has constituted a Steering Committee tasked with expediting, coordinating and supporting the works of SREP engagement. The Steering Committee is chaired by Secretary, Ministry of Environment. It has representation from Ministries of Finance and Energy, National Planning Commission (NPC), Alternative Energy Promotion Center (AEPC), Nepal Rastra Bank, Federation of Nepalese Chamber of Commerce and Industries (FNCCI), Nepal Micro-hydro Development Association, Solar Electrical Manufacturers' Association and Nepal Biogas Promoters Association. A copy of the note on formation of the steering committee is provided in Annex-6. The mission team requested Government of Nepal to consider including Nepal Hydropower Association (NHA) and Nepal Bankers Association (NBA) for appropriate representation of small hydropower developers and banking institutions on the Steering Committee.

9. **Designated Lead Agency:** GoN has appointed the Ministry of Finance and Ministry of Environment as the focal points for SREP engagement. As the agency responsible for the development of the renewable energy sector in Nepal, AEPC has been nominated by the

Ministry of Environment as the lead agency to deal with SREP related activities under the guidance of the Steering Committee. GoN indicated that other relevant government departments/agencies would be leveraged during implementation of the SREP project as necessary. In this regard, the mission team is cognizant that for small hydropower sector, the Ministry of Energy and its agencies would be important stakeholders.

3.3 Areas of Engagement

10. The areas of engagement under SREP in Nepal can be broadly divided into two groups; (i) Micro and Mini-Energy Initiatives – which would be largely grant supported with limited scope for leveraging funds from commercial sources (includes inter-alia micro and mini hydropower, solar (roof-top in urban and individual/mini-grid in rural areas), biogas/biomass and waste-to-energy projects), and (ii) Small Hydropower Projects – which can be implemented by private sector and are likely to be able to significantly leverage other funding sources (small hydropower in the range of 1-10 MW and urban solar). While supporting investment within these two broad categories, the project will also include capacity building and advisory assistance in these areas.

A. Micro and Mini-Energy Initiatives³

11. Considering the overall objective of SREP, focus on energy access and economic and social development needs to be a key feature of the final investment plan. In this regard micro and mini energy initiatives could form an important part of the SREP investment plan for Nepal. The consultations indicated many barriers to the development of this subsector which can be overcome through proper design of this component of SREP and providing appropriate technical assistance to the relevant institutions involved.

12. Stakeholder consultations have emphasized on four focused areas for SREP in Nepal: (i) Micro and mini and small hydropower, (ii) Solar (household and mini-grid both urban and rural), (iii) Community Biogas (and waste management), (iv) improved water mills integrated with electricity generation, and (v) biomass based and waste-to-energy based generation. There were also suggestions on solar-systems in urban and rural areas, including for electrification of government buildings and community infrastructure. Also in the absence of a proper wind energy assessment for Nepal it was suggested to develop a countrywide wind map and undertake pilot projects.

B. Small Hydropower (SHP) Development

13. There is growing interest and demand from both private sector and the Government to develop small hydropower (1-10 MW for purposes of SREP). These projects could be managed by local developers, funded by local banks and supported by the Nepal Government, although capacity of all the above local stakeholders would need significant strengthening. SHP projects would allow Nepal to ramp-up generation capacity in the short to medium run, ahead of large hydropower projects which typically take longer time to develop and would also require substantial external funding. Local grid based SHP generation and distribution can also be used for scaling up access to electricity in rural areas. Apart from offering significant opportunities for scaling-up renewable energy capacity development, SHP projects would also allow significant leveraging of funds from other sources.

³ In context of hydropower, micro-hydro is defined as less than 100kW, while mini-hydro is defined between 100kW to 1 MW.

14. So far, only a few small hydropower projects have come to fruition, almost all of them developed by the private sector and feeding power into the grid. A possible approach for leveraging small hydropower for enhancing electricity access in the rural areas would be to develop community-led SHPs through the District Development Committees (DDCs) with local grid for distribution of power in the local area. Such projects initiated at the instance of the DDC may be developed with assistance of private sector developers. Such projects may also be connected to the national grid to enable sale of excess generation and drawl of power from the grid in case of generation shortfalls. SREP funds could be used for mitigating barriers preventing such an approach, including reduced commercial viability on account of distribution in the local area or setting up a dedicated fund for promotion of small hydropower. The details of how this and other approaches may be structured would be examined by the consultant who would help in preparation of the Investment Plan.

15. The mission team held consultations with government agencies, private sector, and commercial banks to understand the barriers to small hydropower development and approaches for leveraging SREP funds to address these barriers. Lack of funding, suitable tariff, favorable government policy and burdensome taxes were reported as the key impediments. Refer to sections 4.5 to 4.7 for further details on stakeholder views on these barriers and their mitigation.

C. Capacity Building and Advisory Services:

16. The capacity development and advisory services are likely to be in two forms; capacity development specific to the two broad areas identified for SREP engagement and general capacity development activities within AEPC and other relevant institutions and groups to ensure long term sustainability of the renewable energy sector. These include capacity development in the appropriate government institutions, private sector, financial institutions and the communities.

3.4 Consultations held with Sector Stakeholders

A. Consultations with Government Agencies:

17. **Ministry of Finance (MoF):** MoF stressed the need to show the outcomes of SREP on the ground. MoF emphasized on individual and specific roles that AEPC, NEA and DoED in their respective areas of mandate must play jointly to deliver results under SREP. MoF indicated that the Steering Committee established can facilitate coordination with various concerned ministries to achieve this. MoF requested the Mission to take into account the lessons learnt in the implementation of the Power Development Fund (PDF) when proposing similar interventions under SREP to promote small hydropower projects.

18. **Ministry of Environment (MoE) and Alternate Energy Promotion Center (AEPC):** Ministry of Environment/AEPC is keen to explore possibilities of scaling up its current program of mainly micro-energy focused interventions as well as expanding into new areas such as small hydropower and urban household solar solutions. However, on the hydropower, its current mandate is limited to development of micro-hydro of capacity less than 1 MW.

19. By providing local support structures for mini-grid electrification and quality control services for micro-hydro equipment, AEPC is keen on using its long experience and the established best practice with micro-hydro to invest more on the R&D side. AEPC's primary concern is that by moving to larger size hydropower, the social and environmental benefits

diminish. On involvement of the private sector, AEPC's present experience is mainly with the manufacturers. AEPC considers community involvement in the form of equity (in cash or kind) in micro and mini hydropower systems as private sector participation.

20. **National Planning Commission:** In addition to confirming the GoN perspective articulated by other ministries, the National Planning Commission clarified that even though AEPC has been designated as the counterpart agency for preparation of the SREP project, other agencies may be engaged in implementation of the project depending on the requirements of the Investment Plan.

21. **Ministry of Energy (MoEn) and Department of Electricity Development (DoED):** MoEn and DoED emphasized the need for closer cooperation between agencies in meeting the requirements of developing mini/small hydropower projects. This is particularly important because of licensing and transmission interconnection requirements when developing projects in the range 1-10MW.

22. **Nepal Electricity Authority (NEA):** As a vertically integrated institution responsible for generation, transmission and distribution, NEA's role cannot be underestimated in promoting small hydropower in the range of 1-10 MW even though its recent focus is mainly on large hydropower projects. NEA has identified specific corridors where transmission lines are becoming bottlenecks for private developers with licenses. They feel that SREP could help fund some of these transmission lines. The Mission explained to NEA that such transmission lines can be justified for SREP support only if they are directly linked to specific Renewable Energy projects.

3.5 Consultations with private sector

23. Commercial banks, projects developers, industry associations and other private sector entities expressed interest to participate in the SREP program. They are confident that there is a significant pipeline of commercially viable projects in small hydro sector in the range from 1 to 10 MW. They have indicated that while the government should play a role in overall sector coordination, the implementation of projects should be carried out by private sector entities on commercial basis. The program should build on the lessons from similar previous programs and projects with a final goal to simplify and streamline the procedures.

3.6 Consultations with commercial banks:

24. The mission team consulted several commercial banks – all of whom expressed readiness to participate in financing of commercially viable small hydropower projects in general. However, commercial funding of RE projects faces several challenges: (i) short-term liquidity crisis resulting in increased interest rates; (ii) lack of long-term funding, (iii) underdeveloped financial markets resulting in maturity mismatch; (iv) relative small size of local banks resulting in a syndication financing even for few MW projects; (v) foreign exchange risk for funding in foreign currencies. According to the banks the SREP program should address lack of local funding at affordable rates, lack of equity, and high risk of the projects.

25. Among other barriers, the Banks reported on relatively small economy and banking institutions in Nepal, poor credibility of some developers, political instability, financial constraints and general lack of confidence in developers. Besides the difficulty of accessing capital, private banks reported on the lack of confidence in project preparation and implementation of small hydropower projects. This is where they feel the SREP can help.

3.7 Consultations with Development Partners

26. Development partners (DPs) emphasized the need to move forward on the basis of Sector Wide Approach (SWAp) for the energy sector development in Nepal. DPs pointed out the main barriers in the small-scale renewable energy development which includes, among others, financial, technical and regulatory barriers. DPs and the mission agreed on the need to find models under SREP to leverage funds for the development of the sector and the important role private sector plays in this regard.

4. Further Processing Activities to be undertaken

27. Following completion of the Scoping Mission, there are several key steps needed to prepare for the Joint Programming Mission.⁴ These are grouped into three stages: (i) before the Joint Programming Mission, (ii) during the Joint Programming Mission, and (iii) after the Joint Programming Mission, through the presentation of the Investment Plan to the SCF's SREP Sub-Committee.

28. ***Before the SREP Joint Programming Mission:*** Before the SREP Joint Programming Mission, the TOR for the Joint Mission and administrative arrangements for the program preparation grant must be completed and the technical assistance initiated, with adequate work carried out to enable the Joint Mission to proceed effectively. As outlined in the SREP Programming Modalities and Operational Guidelines, an Investment Plan Preparation Grant of up to \$1.5 million within the envelope of the SREP funding allocated to Nepal for its SREP program may be made available to Nepal for additional work as required to develop or complete the investment plan and capacity building and advisory services, including stakeholder consultations and planning sessions. In order to support GoN on the initial phase of the process and based on the findings of the scoping mission, upon the request of the Government, an advance of \$375,000 of the Investment Plan Preparation Grant will be arranged. In this regard, GoN and the Mission agreed that Asian Development Bank (ADB) will assume the lead administrative role in accessing and executing SREP grant funding advance for the preparation of the Investment Plan as per the request of the Government of Nepal.

29. A TOR for the Joint Programming Mission needs to be prepared and agreed by all parties, both in Nepal and among the SREP partners. This will include designation of the multilateral bank (MDB) teams to participate in the Mission, and the TOR must be posted on the CIF website adequately in advance of the Joint Mission. This is to allow all interested stakeholders the opportunity to be informed of SREP programming plans and to participate in consultations and other aspects of the Joint Mission, as appropriate. The GON will need to designate a process for the conduct of the Mission, including institutional contacts, most likely through a formal decision. A formal request to the MDBs to conduct the Joint Mission will also need to be prepared and transmitted. Advance planning for stakeholder consultations will need to be carried out, including the preparation of materials, lists of participants, designation of the timing and venues.

30. The main outputs of the pre-mission period will be (i) preparation and approval of the TOR for the Joint Mission, including provisions for MDB costs, (ii) a GON request to MDBs for conducting the Joint Mission, (iii) inception of work financed through the preparation grant, (iv)

⁴ A copy of Mission presentation on SREP, including the process steps hereafter is provided in Annex-4

detailed planning and scheduling of formal consultations, and (v) the completion of sufficient preparation of background materials through the grant and other means to enable effective conduct of the Joint Mission.

31. ***During the Joint Programming Mission:*** Once the necessary activities preceding the Joint Mission have been completed, the Joint Programming Mission will be scheduled and carried out. All relevant bilateral and other donors would be invited to join the joint mission. During the mission, GoN and MDB priorities, links between SREP and other initiatives (including parallel/complimentary investments by the MDBs and other co-financiers), and the strategic role of the proposed SREP investments will be identified and agreed among the Government and all other partners. This exercise will be carried out in a participatory and consultative manner, so that all key stakeholders will have an opportunity to share their views on how best the SREP resources can be used to support Government plans for scaling up renewable energy programs in the country.

32. The main outputs of the Joint Programming Mission will be a (i) completion of a consultation process engaging key stakeholders in the design of SREP support to Nepal; (ii) an early draft of the SREP Investment Plan document for further consultations; and (iii) a report documenting next steps for SREP in Nepal.

33. ***After the Joint Programming Mission:*** Following the Joint Mission, the draft Investment Plan will be reviewed by the GoN and the MDBs, and then refined and finalized. This could potentially require further stakeholder consultations and additional missions by MDBs should new issues arise or any issues remaining from the Joint Mission still need to be resolved. When a draft final version of the SREP document is ready, this will be published by the Government on the web for public consultations. In parallel, the involved MDBs would prepare their own necessary documentation based on the draft investment plan and undertake internal quality reviews. The MDBs would provide comments to GoN on the draft Implementation Plan. An independent expert may also be engaged in the review process. Taking account of any inputs, a final SREP Investment Plan will be prepared and transmitted to the CIF Administrative Unit for submission to SREP sub-committee.

34. The MDBs will consult with the CIF and SREP focal points in GoN to organize and schedule follow-up actions to the Joint Missions. Substantive and comprehensive discussions in this regard are expected to be conducted during the Joint Mission itself. The tentative schedule is given in Annex-5.

5. Conclusions and Next Steps

35. The broad areas of engagement under SREP will be (i) micro and mini energy initiatives in hydropower, solar, biogas/biomass, improved watermills and other suitable technologies and (ii) small hydropower in 1-10 MW range.

36. GoN will request an advance of US\$ 375,000 from SREP for investment plan preparatory activities. Asian Development Bank will access these funds and process/execute the relevant technical assistance in this regard. The TORs of the consultants to be fielded under the TA will be developed by the Mission as a whole.

37. The following time line for further processing has been agreed:

Tentative Schedule for SREP Investment Plan Preparation

Tentative Schedule	Activity	Principal Outputs
3 – 8 Feb 2011	Scoping Mission (Already held)	<ul style="list-style-type: none"> • Aide Memoire on Scoping Mission • Advance preparation grant application • TOR for the Joint Programming Mission • The schedule for the Investment Plan preparation
Mid Feb – Mid Mar	<ul style="list-style-type: none"> • Processing of advance Investment Plan preparation grant and engagement of experts • Inform CIF about Joint Programming Mission 	<ul style="list-style-type: none"> • Application for advance grant • Processing of TA and engagement of consultants • GON Request for Joint Programming Mission • TOR for Joint Programming Mission
End Mar – Mid Apr	Mobilization of IP preparation team	Preparation grant consultants fielded
End Apr – Mid May	Joint Programming Mission	First draft of IP
Mid May – End May	Apply for remaining preparatory grant (if required)	TA for capacity building
Mid Aug – End Aug	Second Joint Programming Mission	Finalize draft IP for Government approval
End Aug – Early Sep	Disclosure for public consultations in Govt website (2 weeks)	Comments and feedback from stakeholders and revised IP
End Aug – Early Sep	MDB Quality Review	Comments and feedback from MDBs and revised IP
Early Sep – End Sep	External/Independent Review	Comments and feedback from external reviewer and revised IP
End Sep – Early Oct	Government internal approval	Government endorsed IP
Early Oct	Submission of IP to CIF AU	
Nov 2011	Approval by SREP Sub-Committee (expected)	

ANNEXES

Annex 1 – Invitation Letter from Government for Scoping Mission

Annex 2 – Letter to Government for Scoping Mission from MDBs

Annex 3 – List of Stakeholders Met

Annex 4 – Presentation on SREP

Annex 5 – Mission Agenda/Schedule

Annex 6 – Note on Formation of Steering Committee

Annex 7 – List of Documents Collected

Annex 8 – Terms of Reference for Joint Scoping Mission

Annex 9 – Donor Activities in Energy Sector in Nepal



Government of Nepal
MINISTRY OF FINANCE

(Foreign Aid Coordination Division)

SINGHADURBAR
KATHMANDU, NEPAL

F/AEPC/SREP/100/057/68

December 22, 2010

Ms. Patricia Bliss-Guest
Programme Manager
Administrative Unit, Climate Invest Funds
The World Bank
Washington D.C., USA

Subject: Scoping Mission for SREP

Dear Ms. Patricia Bliss-Guest,

Nepal is pleased to have been selected as one of the pilot countries for Scaling up Renewable Energy Programme in Low Income Countries (SREP) under the Climate Investment Funds (CIF). We are also pleased to know that Nepal is selected as one of the medium-level countries to be funded for SREP from the SREP Sub-Committee Meeting held on 8 November 2010. The Government of Nepal considers it as an important initiative to help support its efforts to promote and scale-up renewable energy in the country and is willing to prepare an investment plan for SREP to the earliest possible.

As per the recently approved SREP Programming Modalities and Operational Guidelines, I would appreciate it very much if you could kindly process to send the Scoping Mission to assist us in identifying and undertaking the required preparatory work for this funding to the earliest possible.

We look forward to hearing from you in this matter at your earliest convenience to expedite the SREP activities in Nepal.

Your necessary action in this regard will be highly appreciated.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Bhuban Karki'.

Bhuban Karki
Under Secretary

Cc:

Ministry of Environment,
Singhadurbar



Asian Development Bank

Annex 2

Nepal Resident Mission

12 January 2011

Mr. Rameshore Khanal
Secretary
Ministry of Finance
Singha Durbar

Dear Mr. Khanal:

**Subject: Scaling-Up Renewable Energy Program for Low Income Countries (SREP):
Joint Scoping Mission– 3 – 8 February 2011**

In a response to the invitation letter dated 22 December 2010 requesting for a scoping mission and discussion with Government of Nepal representatives, Asian Development Bank and the World Bank Group are planning to conduct a Scoping Mission to Nepal from 3 – 8 February 2011 to initiate preparation of the Investment Plan which will form the basis for Scaling Up Renewable Energy in Low Income Countries (SREP) funding as well as related renewable energy projects in Nepal.

The main objectives of the Scoping Mission are to:

- (i) identify key development partners and other stakeholders who should be consulted in the course of preparation of the Investment Plan. This exercise should also lead to identification of potential co-financiers of the SREP;
- (ii) undertake a stocktaking of existing activities and documentation available on a range of analytical, strategic and programming activities related to renewable energy, which are considered important aspects of preparing the Investment Plan;
- (iii) agree on a timetable as well as financial and human resources required to prepare the Investment Plan; and
- (iv) agree on the outline of the Investment Plan.

If you have any questions or need further clarification regarding the Scoping Mission or next steps required to operationalize SREP activities please do not hesitate to contact us.

Yours sincerely,

Barry J. Hitchcock
Country Director
On behalf of ADB and the World Bank Group

cc: Dr. Ganesh Raj Joshi, Secretary, Ministry of Environment, Government of Nepal
Susan Goldmark, Country Director, The World Bank, Nepal
Rajeev Gopal, Country Representative, International Finance Corporation, Nepal
Patricia Bliss-Guest, Program Manager, Climate Investment Funds Administrative Unit,
The World Bank

LIST OF STAKEHOLDERS MET**GOVERNMENT****National Planning Commission**

Dr. Dinesh C Devkota Member

Ministry of Finance

Mr. Rameshwore Khanal Secretary
Mr. Lal Shanker Ghimire Joint Secretary
Mr. Bhuban Karki Under Secretary

Ministry of Environment

Dr. Ganesh Raj Joshi Secretary
Mr. Batu Krishna Uprety Joint Secretary, Chief - Climate Change
Mr. Purushottam Ghimire Joint Secretary, Chief - Environment Division
Mr. Sanjiv Pandey Section Officer

Ministry of Energy

Mr. Sheetal Babu Regmi Secretary

Alternate Energy Promotion Centre

Dr. Narayan Chaulagain Executive Director
Mr. Saroj Rai Executive Director, Biogas Support Program
Mr. Rudra Prasad Khanal Senior Administrative Officer
Mr. Surya K. Sapkota Senior Planning Officer
Mr. Thakur Raj Devkota Senior Rural Energy Development Advisor
Mr. Mangal D. Maharjan Senior Engineer
Mr. Neils Juhl Thomsen Chief Advisor, ESAP
Mr. Kiran Man Singh National Programme Manager
Mr. Karuna Sharma Component Manager, ESAP
Mr. Anand Raj Maskey Component Manager
Mr. Devendra Adhikari Manager
Mr. Raju Laudari, Manager, Climate and Carbon Unit

Nepal Electricity Authority

Dr. Jivendra Jha Managing Director
Mr. R. C. Mandal Director, System Planning Development
Mr. Tirtha Shakya Project Coordinator / Transmission and System Operations
Mr. Ram Chandra Pandey General Manager, Grid Development
Mr. Gopal Babu Bhattarai Project Manager, Butwal-Kohalpur Transmission Line Project
Mr. Heemant Joshi Project Manager, Singati-Lamosangu 132Kv Transmission Line Project

Department of Electricity Development

Mr. Sunil Bahadur Malla Director General

PRIVATE SECTOR

Confederation of Nepalese Industries

Mr. Narendra K Basnyat	Senior Vice President
Mr. Pratap Bahadur Singh	Director, CNI
NK Basnyat,	Senior VP CNI and Chairman, Bank of Kathmandu
Mr. G. P. Neupane	Executive Director, Arun Valley Hydropower Development Company
Mr. AK Begani	Nekon KB Plasto Engineering Industries Pvt. Ltd.
Mr. Sulav Agrawal	Executive Director Shanker Group,
Mr. Amul Shrestha	Chairman and Managing Director Transweld Nepal
Mr. SC Sanghai	Chairman, Triveni Energy Pvt. Ltd.

Federation of Nepalese Chambers of Commerce & Industry

Mr. Kush Kumar Joshi	President
Dr. Hemant Dabadi	Director-General
Dr. Uttam Kunwar	Environment & Energy Efficiency Expert

Independent Power Producers' Association Nepal

Mr. Pradeep Gangol	Executive Manager
Dr. Sandeep Shah	Ex – President

Clean Energy development Bank

Ms. Barsha Shrestha	General Manager
Dr. Janak Lal Karmacharya	Head – Energy Department
Mr. Kishore Dhungana	Head – Credit
Mr. Dinesh Dulal	Senior Relationship Officer
Mr. Sujan Paudel	Senior Relationship Officer

Kumari Bank Limited

Mr. Radesh Pant	Chief Executive Officer
Mr. Sanjay Poudyal	Head – Corporate Strategy and Development
Mr. Bikas Khanal	Head – Credit Risk Management
Ms. Smriti Joshi	Relationship Manager

Nepal Investment Bank Limited

Mr. Shivanth Pande	Head – Research and Development
Mr. Rajan Kumar Amatya	Deputy General Manager
Mr. Samyog Pradhan	Relationship Manager
Ms. Shreejana Pandey Rana	Relationship Manager

Nepal Bangladesh Bank Limited

Mr. Govind Babu Tiwari	Chief Executive Officer
Mr. Surendra Bhusan Shrestha	Deputy General Manager
Mr. Gopal Sharma	Senior Manager
Mr. Raghu Krishna Shrestha	Senior Manager

NIC Bank

Mr. Sashin Joshi
Mr. Niraj Shrestha
Mr. Bimal Daga
Mr. Saroj Shrestha

Chief Executive Officer
General Manager – Business Banking
Asst. General Manager, Risk Management
Senior Manager, Business Banking

Winrock International

Mr. Bibek Chapagain
Mr. Suman Dhakal

Director, REPSO Nepal
Research Officer

Development Partners

Mr. Simon Lucas

Climate Change and Inclusive Growth Adviser,
DFID

Mr. Neils Juhl Thomsen

Chief Advisor, ESAP

Mr. Chudamani Joshi

Program Coordinator, Embassy of Finland

Mr. Rolf Posorski

Team Leader, GIZ

Mr. Kenichi Iizuka

Representative, JICA

Mr. Narendra Gurung

Senior Programs Officer, JICA

Mr. Shanker Pandey

Local Expert, KfW

Mr. Upendra Man Shakya

Program Manager, Energy, KfW

Mr. Vikas Rawal

Manager, KOICA

Mr. Sewa Singh

Program Officer, KOICA

Mr. Inge Harald Vognild

First Secretary, Royal Norwegian Embassy

Mr. Thomas Krader

Renewable Energy Sector Leader, SNV

Mr. Anuj Dhoj Joshi

Program Leader RE, SNV

Mr. Vijaya Singh

AED, UNDP

Mr. Brian Harding

Climate Change Specialist, UNDP

Ms. Anupa Lamichhane

Program Analyst, UNDP

Mr. Shanker Khagi

Development Program Specialist, USAID

ANNEX 4

CLIMATE INVESTMENT FUNDS

NEPAL:
**Scaling Up Renewable Energy Programs in Low
 Income Countries (SREP)**

Joint ADB, IFC and World Bank Scoping Mission

3 - 8 February 2011

Structure
CIF

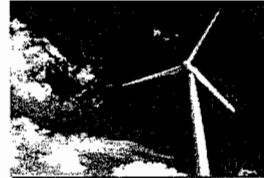
Clean Technology Fund (CTF)	Strategic Climate Fund (SCF)			
<p>Finance scaled-up demonstration, deployment and transfer of <i>low emissions technologies</i> to initiate transformation to low emission development</p> <p style="text-align: center;">CTF Investment Plans</p> <ul style="list-style-type: none"> • Support country and regional development strategies • Optimize blending with MDB financing and other sources, including bilateral programs • Range of financial products to stimulate private sector engagement <p>13 CTF Investment Plans (\$4.5 billion): Colombia, Egypt, Indonesia, Kazakhstan, Mexico, Morocco, Philippines, South Africa, Thailand, Turkey, Ukraine, Vietnam; regional MENA Concentrated Solar Power (Algeria, Egypt, Jordan, Morocco, Tunisia)</p> <p style="text-align: center;">\$4.5 billion</p>	<p>Targeted programs with dedicated funding to pilot new approaches to initiate transformation with potential for scaling up</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <p>Pilot Program for Climate Resilience (PPCR) Mainstream resilience in development planning</p> <p>9 PPCR country, 2 regional pilots (\$1 b): Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia, Caribbean, S. Pacific</p> </td> <td style="width: 33%; vertical-align: top;"> <p>Forest Investment Program (FIP) Reduce emissions from deforestation and forest degradation</p> <p>8 FIP pilots (\$587m): Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Laos, Mexico, Peru</p> </td> <td style="width: 33%; vertical-align: top;"> <p>Scaling Up Renewable Energy In Low Income Countries (SREP) Create new economic opportunities and increase energy access through renewable energy</p> <p>6 SREP pilots (\$320m): Ethiopia, Honduras, Kenya, Maldives, Mali, Nepal</p> </td> </tr> </table> <p style="text-align: center;">\$1.9 billion</p>	<p>Pilot Program for Climate Resilience (PPCR) Mainstream resilience in development planning</p> <p>9 PPCR country, 2 regional pilots (\$1 b): Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia, Caribbean, S. Pacific</p>	<p>Forest Investment Program (FIP) Reduce emissions from deforestation and forest degradation</p> <p>8 FIP pilots (\$587m): Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Laos, Mexico, Peru</p>	<p>Scaling Up Renewable Energy In Low Income Countries (SREP) Create new economic opportunities and increase energy access through renewable energy</p> <p>6 SREP pilots (\$320m): Ethiopia, Honduras, Kenya, Maldives, Mali, Nepal</p>
<p>Pilot Program for Climate Resilience (PPCR) Mainstream resilience in development planning</p> <p>9 PPCR country, 2 regional pilots (\$1 b): Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia, Caribbean, S. Pacific</p>	<p>Forest Investment Program (FIP) Reduce emissions from deforestation and forest degradation</p> <p>8 FIP pilots (\$587m): Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Laos, Mexico, Peru</p>	<p>Scaling Up Renewable Energy In Low Income Countries (SREP) Create new economic opportunities and increase energy access through renewable energy</p> <p>6 SREP pilots (\$320m): Ethiopia, Honduras, Kenya, Maldives, Mali, Nepal</p>		

Scaling Up Renewable Energy (SREP)

CIF

Purpose —

To pilot and demonstrate the economic, social and environmental viability of low carbon development pathways in the energy sector by creating new economic opportunities and increasing energy access through the use of renewable energy.



Scale —

\$320 million in pledges for significant programs of capacity building and investments in renewable energy

Governance —

Sub-Committee:

6 donors countries: Japan, Netherlands, Norway, Switzerland/Denmark, United Kingdom, United States

6 recipient countries: Armenia, Bangladesh, Nicaragua, Solomon Islands, Tanzania, Yemen

+ observers (4 civil society, 2 Indigenous Peoples, 2 private sector), GEF, UNDP, UNEP, UNFCCC

Measuring Success

- Remove barriers to renewable energy
- Lead to replication of renewable energy investments
- Increase installed renewable energy capacity in a country's energy supply

SREP funding

CIF

STRATEGIC CLIMATE FUND SREP

as of December 31, 2010

Exchange rates as of December 31, 2010

(in millions)

Contributor	Contribution Type	Currency	Pledges	
			Amount a/	USD eq.
Australia	Grant	AUD	10	10
Denmark	Grant	DKK	61	11
Japan	Grant	USD	40	40
Korea	Grant	KRW	3,690	3
Netherlands	Grant	USD	76	76
Norway	Grant	NOK	150	26
Spain	Grant	EUR	3	4
Switzerland	Grant	USD	20	20
United Kingdom b/	Capital	GBP	50	78
United States c/	Grant	USD	50	50
			318	

a/ Total value amounts to USD eq. 318 million.

b/ Represents provisional allocation.

c/ The total pledge made by the US to the CIFs remains \$2 billion; the allocation across the programs is indicative and based on an extrapolation of current U.S.

Purpose and Objective

To pilot and demonstrate the economic, social and environmental viability of low carbon development pathways in the energy sector by creating new economic opportunities and increasing energy access through the use of renewable energy

- Initiate process leading towards **transformational change**
- Overcome economic and non-economic barriers to scale up **private sector**
- Facilitate **knowledge sharing** and exchange
- Highlight economic, social and environmental **co-benefits** of RE programs
- Demonstrate RE feasible pathway to **economic growth and development**

5

SREP Pilot Countries

Initial six countries and allocations

- Maldives: \$ 30 million
- Honduras: \$ 30 million
- Mali: \$ 40 million
- **Nepal: \$ 40 million**
- Ethiopia: \$ 50 million
- Kenya: \$ 50 million

- Additional \$ 60 million available in reserve
- Quality of proposed activities within the IP and speed of preparation / implementation will be a factor in the allocation of the reserve fund.
 - 1:4 leveraging ratio is expected

6

Types of Activities

CIF

Investment Plans may include investments and other activities under two broad categories for SREP support:

Capacity building and advisory services –

- Development of energy policies and legislation
- Assessment of technical resource potential
- Strengthening governance and institutional capacity
- Creation of incentive scheme to improve financial viability of RETs

Investments –

- Targeted investments leading to the deployment of different renewable energy technologies and their operational management.

7

Eligible Investments:

- Renewable energy technologies: solar, wind, bio-energy, geothermal, small hydro
- Types of RE deployment applications: electricity generation, thermal applications, mechanical operations
- Mode of technology: National/regional grid connected, off-grid, stand alone or distributed generation
- Interconnection improvements directly related to RE scale up programs

Financing Modalities

CIF

SREP offers a mix of financing which should leverage other public and private sector resources and may be blended with financing available from the MDBs, bilateral agencies, and other development partners.

SREP supports a variety of finance products including:

- Grants
- Concessional loans
- Guarantees and equity
- Performance-based mechanisms such as Output based aid (OBA), Advance Market Commitments, and other innovative mechanisms

8

Programming of SREP Programs

CIF

Phase 1: Pre-Investment phase

- MDB scoping mission at invitation of Government
- Advance preparation grant (if requested) to be approved by MDB Committee
- MDB joint mission(s)
- Investment plan preparation grant (if requested) to be approved by MDB Committee
- Develop investment plan
- Endorsement of investment plan by Sub-Committee

Country led Joint Mission and Preparation Grants

CIF

Purpose: to help pilot country prepare SREP Investment Plans

Scoping Mission

- To assist in planning and preparing Joint Mission, including developing TOR.

Request for Advance Preparation Grant

- Government may request an advance preparation grant of up to \$375,000 for early preparatory work. Request submitted to CIF AU for MDB Committee approval

Initial preparation for Country-led joint Missions

- Joint mission TOR to include composition, budget, contacts, schedule, division of labor
- MDB Committee approves TOR/budget to be allocated from joint programming budget
- CIF Administrative Unit notifies SREP Sub-Committee and posts information on web 4 weeks prior to mission

Undertaking Joint Mission

- Government leads, MDBs, other development partners (bi and multilateral), indigenous peoples, civil society, private sector participate
- Focus on diagnosis, stakeholder consultation, results orientation
- Report of missions prepared before mission end; mission report on web

Investment Plan Endorsement

CIF

- IP reviewed and approved by government
- IP submitted by government to SREP SC through CIF AU
- SREP SC reviews IP taking into account access to energy and development goals, and SREP investment criteria
- SREP SC endorses IP as a basis for moving forward to develop proposed projects ideas and approves funding requested for project preparation.
- SREP SC provides comments on draft Project Concept Note at time of endorsement of the investment plan
- Program and project activities will be prepared and implemented in accordance with relevant MDB procedures

11

Investment Plan

CIF

What is an Investment Plan?

- Country owned, multi-year proposals that includes:
 - Description of programmatic goals for creating new economic opportunities and increasing energy access through renewables
 - Proposed uses of SREP resources,
 - Proposed activities of other development partners
- IP should also include:
 - Concept briefs for proposed investment for SREP funding
 - Requests for any IP preparation grants

Structure of Investment Plan is presented in Annex E of the Programming Modalities

Similar to structure of Clean Technology Fund Investment Plans, accessible on our website:
<http://www.climateinvestmentfunds.org/cif/Country%20Investment%20Plans>

12

Key Elements of IP

CIF

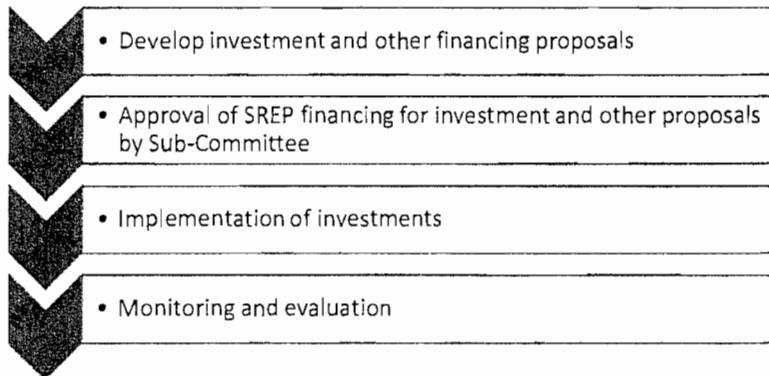
- Country context (sector description, needs assessment, barrier analysis)
- RE sector context (Gov plans, ongoing activities, analysis of options, institutional structure and capacity)
- Proposed program description (justification of specific investments, technical assistance requirements)
- Co-financing, leveraging, partnership
- Primary and co-benefits
- Transformational impact
- Budget envelop, recipients, implementation arrangements
- Risk assessment
- Monitoring and Evaluation
- Investment concept brief for each IP component

13

Implementation

CIF

Phase 2: Implementation of Investment Plan



14

Preparation and approval of Investments

CIF

Preparation of SREP Projects

- Based on Investment plan, MDB(s) work with public/private partner to prepare proposal
- MDB policies, procedures, and safeguards apply

Approval of SREP Financing for Investments

- Project proposals approved by mail by the Sub-Committee on a no objection basis
- After approval, MDB follow internal procedures for final board approval

15

Investment Criteria

CIF

Projects and Investments should address the following criteria:

- Increased installed capacity from renewable energy sources
- Increased access to energy through renewable energy sources
- Low Emission Development
- Affordability and competitiveness of renewable sources
- Productive use of energy
- Economic, social and environmental development impact
- Economic and financial viability
- Leveraging additional resources
- Gender
- Co-benefits of renewable energy scale up

16

Grants for Preparation activities

CIF

Up front financing for country-based activities to prepare:

SREP Investment Plans in countries lacking an adequate basis for preparation.

- **A preparation grant**, based on country needs, up to \$1.5m may be requested by the country. It should be submitted to the CIF Adim Unit for MDB approval. Requests for greater amounts would need SC approval.
- Activities to be covered include: consultations with stakeholders, policy development and planning, and other technical assistance and capacity building activities.
- **An advance of this grant**, up to \$375,000, may also be request after the scoping mission.
- All preparation grant funding would be included within the envelope of SREP funds allocated to country.

SREP projects and programs:

- Development of quality investments
- ¹⁷ Preparation grants also available (see annex B in programming modalities).

SREP Quality Assurance

CIF

- Draft IPs disclosed for public consultations
- Review and endorsement of IPs by MDBs
- External peer reviewers
- Approval by SREP sub-committee

Scoping Mission to Nepal Objective

CIF

- Identify key development partners and other stakeholders; this exercise should also lead to identification of potential co- financiers of the SREP;
- Undertake a stocktaking of existing activities and documentation
- Agree on a timetable as well as financial and human resources required to prepare the Investment Plan;
- Terms of Reference for Joint Programming Mission; and
- Agree on the areas to be considered while preparing IP.

Scoping Mission: Scaling Up of Renewable Energy Program (SREP), Nepal: ADB-WB-IFC			
02 - 08 February 2011			
Date/Time	Person to Meet	Designation	Parallel Meeting
Wed, 2 Feb			Organization/Address/Telephone
1630 hrs	Sue Goldmark Rajeev Gopal	Country Director Country Representative	World Bank / 4226792 -9109 / Kiran/Yak&Yeti Complex IFC
Thurs, 3			
	Kick Off		
1000 hrs	Dr. Ganesh Raj Joshi Batu Krishna Uprety Dr. Narayan Chaulagain	Secretary Joint Secretary Executive Director	Ministry of Environment / 4211641 / Hari Krishna Phuyal/Singha Durbar Ministry of Environment / 4211692/upretybk@gmail.com/grjoshi20@yahoo.com AEPIC / 5539237 / 5539390/9851111006
1430 hrs	L S Ghimire Bhuban Karki	Joint Secretary Under Secretary	Ministry of Finance/Singha Durbar / 4211837 /4211371/Promod 4211305
1600 hrs	Mr. Govind Babu Tiwari Mr. Surendra Bhusan Mr. Gopal Sharma Mr. Raghu Krishna Shrestha	CEO DGM Sr. Manager Sr. Manager	Nepal Bangladesh Bank/New Baneswor/4783972,4783975,4783976/Basati mdoffice@nbbi.com.np
1600 hrs	Mr. Prithivi Bdr Pande Mr. Shivanth Pande Mr. Rajan Amatya Mrs. Shrijana Pandey Mr. Samyog Pradhan	CEO Research and Development Dy General Manager Relationship Manager, Corp. Relationship Manager - Corp.	Nepal Investment Bank / Durbar Marg/ 4228229 -Lobsang 206 4005058/4005058
Fri, 4 Feb			
1000 hrs	Dr. Subarna Das Shrestha Mr. Pradeep Gangol Dr. Sandeep Shah	President Executive Manager Ex President	IPPAN / 4240975 / Heritage Plaza/Kamaladi pradeep@ippan.com.np/9851090951 At World Bank
1000-1200	Working Group	At World Bank/Durbar Marg	Confirmed
1400 hrs	Financing Facility Working	At ADB/Kamaladi	Confirmed
1500 - 1700	Donors Meeting	At ADB/Kamaladi	Confirmed
Sat, 5 Feb			DFID/Norway/Danida/JICA/EU/Finland/USAID/AusAid/SDC/UNDP/KOICA KW/GIZ

Date/Time	Person to Meet	Designation	Parallel Meeting	Organization/Address/Telephone
Sun, 6 Feb 0900 hrs	Dr. Narayan Chaulagain AEPC Team	Executive Director		AEPC / 5539237 / 5539390/5548468/5550184 / 5550183 Khumaltar Heights Lalitpur Sabita / Sharmila
1100 hrs	Mr. Sheetal Babu Regmi Dr. Jivendra Jha Mr. Sunil Bahadur Malla	Secretary MD Director General	Confirmed	Ministry of Energy / 4211516/Geeta /Fax 4211510 / 4200041 Nepal Electricity Authority / 4153007/Fax 4153009/Neelima Department of Electricity Development/ 4480326 / sunilbmalla@gmail.com / 9841380199
1300 hrs	Dr. Dinesh C Devkota Gopi Nath Mainali	Member JS	Confirmed	NPC/4211694 / Shanker / Fax 4211700 / Singha Durbar
1300 hrs	Dr. Jivendra Jha	MD GM, Rural Electrification GM, Transmission GM, Distribution	Confirmed	Nepal Electricity Authority /Ratna Park/ 4153007/Fax 4153009 Christma
1300 hrs	Mr. Radesh Pant Mr. Sanjay Poudyal Mr. Sanjay Poudyal Mr. Bikas Khanal	CEO Head of Corporate Strategy Risk Head of Credit Risk	Confirmed	Kumari Bank / Durbar Marg, 4226568/Pushpa
1500 hrs	Mr. Sashin Joshi Mr. Neeraj Shrestha Mr. Bimal Daga Mr. Saroj Shrestha	CEO General Manager-Business Assistant General Manager - Senior Manager-Business	Confirmed	NIC Bank / Kamaladi

Date/Time	Person to Meet	Designation	Parallel Meeting	Organization/Address/Telephone
Mon, 7 Feb 1100 hrs	Mr. Kush Kumar Joshi Pradeep Jung Pandey	President Vice President	Confirmed	FNCCI / 4262003/Uttam/Fax 4261022 / uttam.lakhey@fncci.org Pachali Shahid Shukra FNCCI Milan Marg, Teku
1300 hrs	Mr. Manoj Goyal Mrs. Barsha Shrestha Mr. Kishor Dhungana Mr. Dinesh Dulal Mr. Sujjan Poudel	CEO General Manager Head - Credit Renewable Energy & Micro Renewable Energy & Micro	Confirmed	Clean Energy Development Bank /4221095, 4221094 / Durbar Marg / Sanju 4223526
1330 hrs	Mr. Binod Chaudhary Mr. Narendra K Basnyat	President Sr VP	Confirmed	CNI / 4244686, 4243711 / Rosier/303 Bagmati Chamber, Teku
1500 hrs	Wrap Up Rameshwore Khanal Bhuban Karki Dr. Ganesh Raj Joshi Batu Krishna Upteri Mr. Sheetal Babu Regmi Dr. Narayan Chaulagain	Secretary Under Secretary Secretary Joint Secretary Secretary Executive Director	Confirmed	Ministry of Finance /Singha Durbar/ 4211332/ 4211161 Ministry of Finance / Singha Durbar/4211305 Ministry of Environment / Singha Durbar/4211641 Ministry of Environment /Singha Durbar/ 4211692 Ministry of Energy / 4211516/Geeta /Fax 4211510 / 4200041 AEPC / 5539237 / 5539390/5548468/5550184 / 5550183 / Sabita / Sharmila
Tue, 8 Feb 1000 hrs	Mr. Bibek Chapagain	Director, REPSO Nepal	Confirmed	Winrock International / 4467087 / Baneshowor / bchapagain@winrock.org.np

Scaling Up Renewable Energy Programme (SREP)

The Scaling up Renewable Energy Programme (SREP) in the low income countries Sub-Committee has agreed on 22 June 2010 to select Nepal as one of the SREP Pilot country. The programme is a part of the World Bank's Climate Investment Funds' Strategic Climate Fund (SCF). Nepal attended the SREP Pilot country meeting on 11 Nov 2010 in Washington. As per the request of the Government of Nepal (GoN), SREP Scoping Mission composed of ADB, WBG and IFC has scheduled to visit Nepal from 3 to 8 February 2011.

The GoN (Hon'ble Minister's level) has constituted the Steering Committee (SC) on 31 January 2011 (B.S. 2067.10.17) in order to expedite, coordinate and support the works of SREP. The SC composition is as follows:

1. Secretary, Ministry of Environment (MoE)	Chairman
2. Representative (Joint-Secretary level), NPC Secretariat	Member
3. Representative (Joint-Secretary level), Ministry of Finance	Member
4. Representative (Joint-Secretary level), Ministry of Energy	Member
5. Representative (Joint-Secretary level), Nepal Rastra Bank	Member
6. Executive Director, Alternative Energy Promotion Centre (AEPC)	Member
7. Chairperson, Federation of Nepalese Chambers of Commerce and Industry (FNCCI)	Member
8. Chairperson, Nepal Micro-hydro Development Association	Member
9. Chairperson, Solar Electrical Manufacturers' Association	Member
10. Chairperson, Nepal Biogas Promoters Association	Member
11. Joint-Secretary (Tech.), Climate Change Management Division Ministry of Environment	Member-Secretary

The first meeting of the Steering Committee was held under the chairmanship of Dr. Ganesh Raj Joshi, Secretary of the Ministry of Environment on 02 February 2011, Wednesday. The meeting was attended by representatives from Ministry of Finance, Ministry of Energy, Nepal Rastra Bank (Central Bank of Nepal), and chairpersons of the above three associations.

In order to facilitate the works of the Scoping Mission, the SC has identified to focus SREP activities on the following areas on priority basis:

1. Micro and mini hydro power
2. Solar (mini-grid and/or targeted to the poor people)
3. Community biogas (and waste management)
4. Improved water mills

Nepal's Climate Change Policy, 2067 (approved by the GoN) on 17 January 2011) equally focuses on promotion and usage of renewable energy to contribute to reduce global GHG emissions.

2 February 2011, Wednesday

LIST OF DOCUMENTS COLLECTEDAlternative Energy Promotion Centre (AEPC)

- a) Joint Review of Energy Sector Assistance Programme (ESAP II) Nepal, Draft Review Report, NORAD, January 3, 2011
- b) Biogas Credit Fund Operation Guidelines Revised at 2011 (A.D.), AEPC Credit Unit
- c) Assessment of Nepal's Renewable and Rural Energy Sector and its Institutional Framework, ESAP, October 13, 2010
- d) Assessment of Biogas Credit Component Managed by Alternative Energy Promotion Centre, Netherland's Development Organization (SNV Nepal), October 2010
- e) Three Year Plan of Alternative Energy Sector (2010/11-2012/13), AEPC, September 2010
- f) AEPC Strategic Organization Development Plan 2010 (Draft), AEPC, August 2010
- g) Feasibility Study on the Possibility of the Sector Wide Approach (SWAp) in Rural and Renewable Energy Sector and Identification of Its Indicators, AEPC, August 15, 2010
- h) Renewable (Rural) Energy Subsidy Delivery Mechanism 2010, AEPC, February 2010
- i) ESAP II Annual Progress Report (July 2008-June 2009), DANIDA & Norway, July 2009
- j) Subsidy Policy for Renewable (Rural) Energy 2009, AEPC, July 2009
- k) Renewable Energy Data Book 2009 (Mid July 2007 – Mid July 2009), AEPC

Ministry of Environment

- a) Rural Energy Policy 2006, Ministry of Environment, November 2006

Nepal Electricity Authority (NEA)

- a) NEA Annual Report 2010, NEA
- b) NEA Annual Report 2009, NEA
- c) NEA Annual Report 2008, NEA
- d) NEA Annual Report 2007, NEA

Department of Electricity Development (DoED)

- a) Conceptual Framework for Peoples Hydropower, DoED, July 2010

National Planning Commission (NPC)

- a) Three Years Interim Plan 2008-2010, Chapter 31 Electricity and Energy, NPC

Water and Energy Commission Secretariat

- a) Energy Sector Synopsis Report 2010, Water and Energy Commission Secretariat, July 2010
- b) National Energy Strategy for Sustainable Development of Nepal, Er. Kishore Thapa, WECS, April 16, 2010

Ministry of Finance

- a) Economic Survey FY 2007 – 2008, Executive Summary, Ministry of Finance, July 2008
- b) Economic Survey FY 2009 – 2010, Chapter 10 Energy and Forestry, Ministry of Finance, July 2010

Ministry of Water Resources

- a) National Electricity Crisis Management Action Plan, Ministry of Water Resources, January 2008

GTZ

- a) Administering Micro-hydro Debt Fund, GTZ
- b) Drafting Regulations for Formation of the Rural (Renewable) Energy Central Coordination Committee, 2010 (Draft Report), Vipramshree Energy Pvt. Ltd. in JV with Entec AG and Legal Research and Development Pvt. Ltd., Nov 2010
- c) Drafting Regulations for Formation of the Central Rural (Renewable) Energy Fund, 2010 (Draft Report), Vipramshree Energy Pvt. Ltd. in JV with Entec AG and Legal Research and Development Pvt. Ltd., November 2010

World Bank

- a) Power and People: Measuring the Benefits of Renewable Energy in Nepal, South Asia Energy Unit, Sustainable Development Department, World Bank, May 2010
- b) Nepal – Removing Barriers to Hydropower Development, British Power International & Total Management Services, November 2009
- c) Nepal: Assessing the Social Impact of Rural Energy Services (Report on Monitoring and Evaluation Framework), PwC India, May 2009

OUTLINE TERMS OF REFERENCE FOR JOINT MISSION

I. Executive Summary

Nepal has been selected as one of the pilot countries of Scaling Up Renewable Energy Programs in Low Income Countries (SREP) under the Climate Investment Funds. After the joint MDB scoping mission on 3 – 8 February 2011, a Joint Programming Mission will be undertaken to assist Government of Nepal (GoN) in developing its Investment Plan. GoN has appointed the Ministry of Finance and Ministry of Environment as the focal points for SREP engagement. Alternative Energy Promotion Center (AEPC) being the agency responsible for the development of the renewable energy sector in Nepal has been nominated by the Ministry of Environment as the lead agency to deal with SREP related activities under the guidance of the Steering Committee. The first Joint Programming Mission is scheduled for around end April or early May 2011. The exact date will be finalized considering the status of preparatory activities and discussions with the GoN, MDBs and other development partners.

II. Mission Objectives, Outputs and Process

The main objective of the Joint Programming Mission(s) is to collaborate with Government of Nepal in developing its investment plan. The main outputs of the Joint Programming Mission will be (i) completion of a consultation process engaging key stakeholders in the design of SREP support to Nepal; (ii) a draft SREP Investment Plan document; and (iii) a report documenting next steps for SREP in Nepal.

The Joint Mission is a process of multiple consultations with government representatives and stakeholders to identify a pipeline of public and private sector investments and their associated cost. During this process, the Mission will explore synergies and mobilize complementary resources. The Joint Mission is expected to include two Joint Missions which will be conducted at the beginning and final phase of the preparation of the investment plan.

III. Introduction/Background

Despite being endowed with huge hydropower potential and other renewable energy resources, more than 40 percent of Nepalese households do not have access to electricity. Extending the national grid, development of hydropower (mostly on-grid) is managed by Ministry of Energy through Nepal Electricity Authority and Department of Electricity Development. On the renewable energy of off-grid front, the Government of Nepal has initiated several rural energy programs through the Alternative Energy Promotion Center (AEPC) under the Ministry of Environment. SREP is assisting Nepal in its efforts to expand energy access and stimulate economic growth through the scaled-up deployment of renewable energy solutions and provide a trigger for transformation of the renewables market through a programmatic approach that involves government support for market creation, private sector implementation, and productive use of energy. Up to \$40 million has been allocated for Nepal under SREP.

IV. Scope of Work

a) *Pre-mission activities*

Following completion of the Scoping Mission and before the Joint Programming Mission, several steps are needed. The main outputs of the pre-mission period will be (i) preparation and approval of the TOR for the Joint Mission, including provisions for MDB costs, (ii) a GON request for the Joint Mission's conduct to the MDBs as partners, (iii) inception of work financed through the preparation grant, (iv) detailed planning and scheduling of formal consultations, and (v) the completion of sufficient preparation of background materials through the grant and other means to enable effective conduct of the Joint Mission.

b) *Preparatory work for Joint Programming Mission*

The experts engaged through the preparatory TA should carry out adequate work to enable the Joint Mission to proceed effectively. Advance planning for stakeholder consultations will need to be carried out, including the preparation of materials, lists of participants, designation of the timing and venues.

c) *Coordination among other development partners*

The Mission will coordinate with other development partners including bilateral and UN agencies to explore synergies and mobilize complementary resources. This will also serve as a follow up to the earlier interactions during the scoping mission.

d) *Consultations with other stakeholders*

Besides further in depth discussions with SREP focal points, AEPC and SREP Steering Committee, the Mission will have detailed interactions with various government agencies including Ministry of Energy and Department of Electricity Development, Nepal Electricity Authority, Central Bank of Nepal and other banks, Micro-finance Institutions, Federation of Nepalese Chamber of Commerce and Industries, Confederation of Nepalese Industries, various technology specific associations such as micro-hydro association, solar association, biogas association, independent power producers association etc. Other NGOs and civil society will also be consulted with.

e) *Mission composition (team members, assignments and experts outputs)*

The Mission will comprise of experts from ADB, IFC and the World Bank. It is also expected that UN agencies and bilateral agencies will also participate in the mission. The final list of team members, their assignments and outputs will be prepared after further consultations with the Government and MDBs as well as other development partners.

f) *Mission agenda/schedule*

The Mission is tentatively scheduled for about 1-2 weeks around end April to Mid May 2011. The Mission activities will include interactions with government agencies, private sector, NGOs, banks as well as a field visit. A workshop with the key stakeholders will be organized to have structured discussions on key issues and areas for SREP interventions. Final Mission agenda/schedule will be developed in consultation with GoN before the actual Mission.

g) *Contacts (MDBs and Government)*

Government:

Mr. Lal Shankar Ghimire
Joint-Secretary and Chief
Foreign Aid Coordination Division
Ministry of Finance
Kathmandu, Nepal

Mr. Batu Krishna Uprey
Joint-Secretary
Ministry of Environment
Kathmandu, Nepal

MDBs

ADB:	Priyantha Wijayatunga (pwijayatunga@adb.org)
IFC:	Hemant Mandal (HMandal@ifc.org)
World Bank:	Mikul Bhatia (mbhatia2@worldbank.org)

**Existing Donors Working on Rural Energy
Alternative Energy Promotion Centre**

Donors	Program	Focus	Progress	Duration	Budget
Danish	ESAP	Micro/mini-hydro, solar, biomass (ICS, Pilot gasification and pilot bio-briquette, Institutional strengthening	Micro/mini hydro: 4.4 MW constructed 7 4.1MW under construction SHS: 185,321 Biomass: (ICS:0.44million, 1 gasification piloted, Bio-briquette piloted in 3 communities	2007 -2012 March	(150+18.3+154) million DKK
Norway	ESAP	Micro-hydro, solar, ICS, Institutional strengthening	1.97 MW constructed before WB joined	1996-2012 Dec.	(35.5+125+22.4) million Nok
UNDP	REDP	Subsidy & technical support prior to WB joined Technical support for Micro-hydro, Decentralization of RE	1.97 MW constructed before WB joined	1996-2012 Dec.	11.03 million USD plus 1.6 million USD (April 2011-Dec 2012)
World bank	REDP, BSP	Micro-hydro, Biogas,	MHVEP: 3.5MW constructed, 5.5 MW under construction GPOBA: *	Micro-hydro:2003-2012 Biogas: 2007-2012	MHP: (9.3 + 12) million USD GPOBA: 5 million USD
SNV/DGIS	BSP, IWMP	Biogas, IWM	Biogas: 225,000 household biogas* IWM: 6,150 TWMM improved	Biogas: 1992-2010 IWM: 2003-2010	12 million Euro
KfW	BSP, ESAP	Biogas, S/SHS, Solar Water Pumping	Biogas:* Solar: 49,769 SHS	Biogas: 1997-2012 March Solar: 2009-2012	Biogas: 7.5 million Euro subsidy & 2.5 million Euro for micro-credit Solar: 8.5 million Euro
EU	REP	Institutional Solar PV & Thermal, Solar water Pumping & grinding mills	-50% installation completed (target: 1.023 MW, 933 systems) -933 community Energy Service	2004-2012 Feb	15.675 million USD

				Provider formed)		
DFID	Climate & carbon	Carbon mitigation, CC adaptation through RE		-All RE programs are in pipeline for carbon project - 3 Pilot DCEP under preparation - national low carbon development strategy initiated	July –Dec 2010	Euro 0.123 million
ADB	IWM	Technical support, credit financing			2010-2012	1 million USD
USAID	Centre for MHP Excellency	Technical support			2010-	Agreement has not been signed
GIZ	NEEP, MHP Credit fund	Industrial Energy efficiency, credit financing			NEEP:2009-2013 MHP Credit: 2010-2011	EE: MHP Credit: 500,000 Euro

*Total household biogas plants installed since 1992 under biogas support program i.e. support from SNV, KfW, WB & GoN

Future Donors in Rural Energy

Donors	Program/Focus	Amount	Remarks
UNDP	Renewable Energy and Rural Livelihood (RERL)	1.6 million(April 2011- Dec 2012)	Waiting for GEF (3 million) & UNDP (3 million) funding from 2012 onward
ADB	Wind, Solar PV	Yet to be decided	
DFID	Climate Change-RE (Carbon mitigation, develop low carbon development strategy, develop and implement climate and energy plans)	Yet to be decided	There will be agreement with GoN for climate change support. How much budget will be allocated for RE has not yet decided.
EU	High hill biogas, centralized grid solar & wind		