



TERMS OF REFERENCE

Scaling-up Renewable Energy Program (SREP)

Technical Mission

June 3-6, 2013

Armenia



EXECUTIVE SUMMARY

Objectives of the Technical Mission

1. The main objective of the Armenia SREP Technical Mission is to discuss and agree with the Renewable Resources and Energy Efficiency Fund (R2E2 Fund) and the counterparts from the Ministry of Energy and Natural Resources (MENR) on the next steps for the development of the SREP Investment Plan (IP). Jointly with the (R2E2 Fund and key stakeholders, the Technical Mission will primarily (i) review the draft inception report prepared by the Consultant, (ii) discuss priorities in the renewable energy sector, and (iii) agree on next steps for the preparation of the IP.

Dates of the Mission

2. The proposed dates for the Technical Mission are June 3-6, 2013.

Activities undertaken before the Technical Mission

3. Since March 2012, various activities were conducted by the Government with support from the MDBs including:

- a. A Scoping Mission was conducted by the joint MDB team¹ from July 2-12, 2012 to identify the key development partners, undertake stock taking of existing activities and documentation available on a range of analytical, strategic and programming activities related to renewable energy in Armenia.
- b. An advance preparation grant request of \$300,000 for SREP Phase I (IP Preparation) activities was submitted and approved by the MDB Committee.
- c. The Grant Agreement for SREP advance preparation grant was signed between the IBRD and R2E2 Fund, the recipient and the implementing agency for SREP IP preparation, and declared effective.
- d. The process of hiring of Consultant to support the Government with preparation of the Investment Plan was completed.
- e. Preparation of the inception report by the Consultant.

Activities to be undertaken during the Technical Mission

¹ The Technical Mission will include representatives from World Bank (WB), International Finance Corporation (IFC), Asian Development Bank (ADB), and the European Bank for Reconstruction and Development (EBRD).

4. The main activities of the Technical Mission will be to:
 - a. Hold consultations with the new Government and the main stakeholders to discuss the inception report prepared by the Consultant;
 - b. Discuss with the ministry of energy changes in the renewable energy sector priorities, if any;
 - c. Agreeing on the next steps for preparation of the IP;
 - d. Agreeing on the date for the Joint Mission in August/September.

Expected results and outcomes

5. The main deliverables to be expected at the completion of the Technical Mission are:
 - a. Detailed comments on the inception report prepared by the Consultant hired to support the Government with preparation of the SREP IP;
 - b. Identification of key priorities of the Government in the renewable energy sector;
 - c. Time-table for preparation of the SREP IP for Armenia;
 - d. An Aide Memoire describing the process, key findings and recommendations of the Technical Mission.

CONTEXT OF THE MISSION

6. The Climate Investment Funds (CIF) was established in 2008 with the goal of promoting international cooperation on climate change issues, and supporting the mitigation and adaptation efforts of low income countries. SREP was developed under the CIF umbrella that was approved in 2009 to demonstrate the social, economic, and environmental viability of low carbon development pathways in the energy sector. It seeks to create new economic opportunities and increase energy access through the production and use of renewable energy.

7. Armenia was selected by the SREP Expert Group, set up by the SREP sub-committee, to be among 6 reserve countries under the program primarily due to the past efforts made by the Government to promote renewable energy projects and a carbon neutral economy, vulnerability of the country to the effects of climate change, the scale of impact achievable by moderate funding, and strong private sector participation in the energy sector among others.

8. In March 2012 the SREP sub-committee ranked Armenia fourth in the list of priority countries (after Tanzania, Liberia and Yemen) and agreed that, should additional resources be made available, Armenia would qualify for concessionary financing. The SREP sub-committee agreed on an indicative allocation of up to \$40 million for Armenia. The Government confirmed its interest in SREP participation to the SREP Sub-committee in August 2012.

9. SREP will support investments to scale-up renewable energy generation in Armenia, and facilitate the development of the country's sustainable energy agenda. Armenia engagement in SREP activities is expected to result in:

- Development of a clean energy IP for the first five years that would help Armenia to scale up RE and move towards low carbon development;
- Improved investment climate for private sector participation in the renewable energy sector;
- Enhanced legal and regulatory frameworks in the renewable energy sector.

10. Increase in renewable energy generation will help the country address two of the key challenges facing the energy sector – adequacy of energy supply and energy security.

- a. Armenia remains vulnerable to energy supply shortages in the long run. By 2022, Armenia is estimated to need at least 850 megawatts of new power generation capacity to meet the increasing demand and make up for power supply shortfall, when old thermal power units are discontinued and the existing nuclear power plant is decommissioned. The investments needs for new generation capacity are large, will have substantial fiscal implications, and require tariff increases, which would adversely affect the affordability of energy for residential customers and the overall economic competitiveness. The Bank Group and other development partners are supporting the Government through selected sector investments and AAA to help address these challenges.
- b. Increased reliance on indigenous energy resources will enable Armenia to reduce dependence on imported fuel to meet energy demand. Currently, Armenia imports gas and nuclear fuel required for 70% of annual electricity generation.

11. The World Bank is supporting the Government to address a number of challenges in the energy sector through investment lending and informs the Government thinking on power sector challenges and potential solutions through analytical sector work. Specifically, the World Bank is currently supporting rehabilitation of a 230 km backbone section of power transmission network, which will help to improve the reliability of power transmission network.

12. ADB is working with the Government to help improve power supply reliability through rehabilitation of key high-voltage substations.

13. EBRD is helping the Government to improve energy security and economic competitiveness by investing in energy efficiency. Specifically, Armenia Sustainable Energy Financing Facility of EBRD supports private enterprises' access to energy efficiency investment funds through line of credit to local commercial banks.

14. IFC Sustainable Energy Finance Project supports establishment of a sustainable market for energy efficiency and renewable energy investments. For energy efficiency, IFC project primarily

supports financial institutions to develop energy efficiency lending and awareness raising on sustainable energy finance.

PREPARATORY ACTIVITIES

15. Since Armenia was selected as a pilot country for the SREP, the Government supported by the MDBs has undertaken a number of preparatory activities including: (i) Joint MDB team dialogue with the Government on SREP commencement, (ii) engagement of MENR and R2E2 Fund for preparation of SREP IP, (iii) a stocktaking exercise, and (iv) a Scoping Mission including a technical workshop and consultations with national stakeholders.

16. Initial discussions among the MDBs and the Government in July 2012 focused on identifying the SREP team, and the proposed timeline for completion of the SREP Phase I activities.

17. From July 2-12, 2012 ADB, the World Bank Group, and the EBRD participated in a Scoping Mission led by the Government. The objectives of the Scoping Mission were to:

- Identify relevant government counterparts, development partners and stakeholders for the proposed SREP activities;
- Hold discussions about the objectives of the SREP programme, its benefits and the modalities of its implementation in Armenia to ensure a common understanding by all stakeholders;
- Initiate discussions and consultations with the identified stakeholders and development partners;
- 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;
- Agree on the scope and outline of the investment plan;
- Agree on the timeline as well as financial and human resources required to prepare the investment plan;
- Finalize the TOR for the selection of the consultant to support the Government with the preparation of the SREP investment plan; and
- Agree on the terms of reference for the next MDB Joint Mission.

18. During the Scoping Mission preliminary consultations were held with government agencies, private sector, and local lending institutions to explore the barriers to renewable energy development in Armenia, and approaches for leveraging SREP funds to address these barriers.

19. A consultative workshop was also held and attended by 60 participants from the Government, private sector, donors, and the academe. In addition, the MDB team also conducted site visits to two small hydro power plants, a biogas power plant, and a solar water heating installation.

20. The findings during the Scoping Mission underscored that the existing legal and regulatory framework in Armenia supports renewable energy. The Energy Law and the Law on Renewable Energy and Energy Efficiency clearly articulate the importance of renewable resources and provided a framework for facilitating their development. Among others, the legal framework provides for 15 years off-take of

electricity produced for all small renewable power plants at the tariffs set by the regulator, Public Services Regulatory Commission (PSRC). Amendments have been initiated to eliminate a number of bottlenecks in the legal framework and reduce the legal/regulatory risks of private investors in the sector.

21. Following the completion of the Scoping mission, the Government and the MDBs agreed on the following key activities to proceed with preparation and approval of the investment plan for Armenia:

- The stocktaking exercise will be continued and completed during the Technical Mission to provide basis for the development of the IP, and to finalize the Terms of Reference (TOR) for preparing the IP;
- Preliminary identification and characterization of a set of priority investments and technical assistance to be considered in the IP by the Government;
- Initiate selection of the Consultant to assist the Government with development of the SREP IP;
- Submission of a preparatory grant request for SREP Phase I activities. It was agreed that the funds will be channeled through the World Bank and the IBRD will provide the grant to the R2E2 Fund.

22. The Government indicated its intention to formally submit its SREP IP for approval at the SREP sub-committee meeting in November 2013.

COMPOSITION OF THE MISSION

23. The Technical Mission will be coordinated by the Government through the R2E2 Fund, which is the implementing entity for SREP in Armenia.

24. The SREP mission team will include Gevorg Sargsyan (SREP Program Coordinator, World Bank); Arthur Kochnakyan (Energy Economist, Task Team Leader for Preparation of SREP IP, World Bank), Tigran Parvanyan (Operations Officer, IFC), Remon Zakaria (Energy Efficiency and Climate Change Business Development Manager, EBRD), and Cindy Tiangco (Energy Specialist, ADB).

25. The MDBs focal points for SREP are:

- WB: Gevorg Sargsyan (gsargsyan@worldbank.org)
- IFC: Joita M. Mukherjee (jmukherjee1@ifc.org)
- EBRD: Andreas Biermann (BiermanA@ebrd.com)
- ADB: Jiwan Acharya (jacharya@adb.org)

26. The Government focal point is: Ms. Tamara Babayan (Director of Renewable Resources and Energy Efficiency Fund, director@r2e2.am).

27. Table I presents a tentative agenda and timetable for the activities for the Scoping Mission.

Table I: Tentative Agenda and Timetable

<i>Date</i>	<i>Morning</i>	<i>Afternoon</i>
June 3, 2013	Internal MDB team meeting	Kick-Off Meeting with Deputy Minister of Energy and Natural Resources
June 4, 2012	Technical meeting with R2E2 Fund	Meeting with development partners; meeting with the Consultant supporting the Government with preparation of SREP IP
June 5, 2013	Technical Meeting with the Consultant continued	Technical discussions with the Consultant and the Ministry of Energy and Natural Resources and the R2E2 Fund
June 6, 2013	MDB drafting of Aide Memoire	Wrap-up meeting with Minister of Energy and Natural Resources

MAIN CONTACTS (MDB and Government)

Government

Mr. Areg Galstyan, Deputy Minister of Energy and Natural Resources

Mr. Hrach Tsughunyan, Head of Development Department, Ministry of Energy and Natural Resources

Ms. Tamara Babayan, Director of Renewable Resources and Energy Efficiency Fund

Multilateral Development Banks

The World Bank

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