Ministry of Energy and Minerals



United Republic of Tanzania

TERMS OF REFERENCE Scaling-up Renewable Energy Program in Tanzania JOINT MISSION



March 18 to 22, 2013

Dar es Salaam

Tanzania







EXECUTIVE SUMMARY

Objectives of the Mission

The main objective of thisSREP-Tanzania Joint Mission is to support the Government of Tanzania in fine-tuningthe SREP Investment Plan. In consultation with the national stakeholders, the joint mission will more specifically (i) validate the suggested investment priorities, (ii) review all the necessary elements to ensure the timely finalization of the Investment Plan and (iii) assist in developing the concept notes of the projects that will enable the implementation of the Investment Plan under Phase 2.

Dates of the Mission

The proposed dates for the joint mission are from March 18 to 22, 2013 under the leadership of the Government of Tanzania. The week before, starting March 13, 2013 some technical activities related to SREP investments will take place.

Government Contacts

The mission leadership will be ensured by the SREP National Focal Point, Mr. Edward Leonard Ishengoma, Assistant Commissioner - Renewable Energy at the Ministry of Energy and Minerals.

Mr. Edward Leonard Ishengoma Email: e_leonardishe@yahoo.co.uk
Assistant Commissioner - Renewable Energy Tel. No. +255 22 2117156-9/+255 755

898 679

Ministry of Energy and Minerals Fax No. +255 22 2120799

Activities undertaken before the Joint Mission

Since mid-2012, various activities were conducted by the national team with support from the Multilateral Development Banks (MDBs): (i) a mission from the Rural Energy Agency (REA) attended the SREP pilot country meeting and learning workshop held in Nairobi - Kenya from March 5 to 7, 2012,(ii) a draft Investment Plan has been preparedby the Ministryof Energy and Minerals and the Rural Energy Agency; (iii) a joint MDB scoping mission was conducted from 17 to 20September, 2012 to inform the national stakeholders about SREP, get a better understanding of key issues and barriers for renewable energydevelopment in the country, and prepare for the joint mission; (iv) a technical mission was hold from January 14 to 24, 2013 in order to clarify potential investment options.

Activities to be undertaken during the Joint Mission

During the joint mission, the main activities will consist in (i) interacting with national stakeholders to discuss the investment priorities proposed by the National SREP Task Force, (ii) assisting the SREP Task Force in finalizing and validating these investment priorities, (iii) supporting the finalization of the investment plan based on the inputs provided by the MDBs,(iv) supporting the design of the various program/projects' concept notesthat will lead to the implementation of the SREP Investment Plan under Phase2, and (v) working on the development of the M&E framework of the program. Sites visits may be planned as part of the Joint Mission.

Expected results and outcomes

The main deliverables for this joint mission are: (i) the investment priorities are discussed and agreed on with national stakeholders;(ii) the InvestmentPlan is finalizedfrom information gathered during the workshops and meetings;(iii) draftprogram/projects' concept notes for the implementation of the investment plan are completed; (iv) the M&E results framework is prepared based on the validated investment priorities.

The documents expected by the end of this mission are: (i) an Aide Memoire describing the process, key findings and recommendations of the joint mission; (ii) a final draft investment plan - which will include the results of the public consultations, the proposed investment priorities (see criteria in Annex 1), knowledge management and capacity building activities for Phase 2 implementation, a tentative schedule for implementation and the definition of the roles and responsibilities of the various stakeholders for the implementation of the investment plan; (iii) draft programs/projects' concept notes for Phase 2 implementation.

CONTEXT OF THE MISSION

- 1. Climate Investment Funds (CIF), managed by the Multilateral Development Banks (MDBs), are aimed to promote international cooperation on climate change and support the efforts of developing countries to mitigate the increase in greenhouse gas emissions and adapt to climate change. Two funds were created under the CIF: (i) the Clean Technology Fund (CTF) that supports projects and programs that contribute to the demonstration, deployment and transfer of low carbon technologies, (ii) the Strategic Climate Fund (SCF), that supports three programs with potential for scaled-up, transformational action aimed at a specific climate change challenge or sectoral response. The three programs are: the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP) and the Program for Scaling-Up Renewable Energy in Low Income Countries (SREP).
- 2. The SREP is aimed at demonstrating 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. The SREP program will enable Tanzania to initiate the process to achieve a transformational change, one that will lead the country towards a low GES emission development. This will be made possible by harnessing the renewable energy potential of the country instead of developing the economy based on expensive and polluting fossil fuels, and on inefficient use of biomass.
- 3. The private sector, as the basis for economic growth, has an important role to play in promoting renewable energy development. By opting for aninvestment plan that combines public sector and private sector interventions, the SREP will work to remove economic barriers (among others) and increase private investments in support of achieving the objectives of the SREP. Improved market and financial conditions, as well as strengthening of investors' confidence, could facilitate this transformation by stimulating public and private investments in renewable energy projects.

- 4. The SREP program will support both investments for capacity building to reform the institutional framework, and investments for infrastructure to deploy renewable energyequipment in the country. So, ultimately, the investment plan will:
 - Create an enabling environment by implementing public policies and improve the legal and regulatory framework;
 - Encourage growth in the share of renewable energy investment in total energy investment;
 - Have a transformational impact on energy markets and increase access to energy by maximizing the social benefits and positive impacts on the fight against poverty;
 - Improve the economic viability of renewable energy in the long term.
- 5. Tanzania was selected to be a pilot country under the SREP in March, 2012because of (i) the critical issues facing the country (energy crisis, climate change impacts and land degradation, high population growth and therefore energy demand steadily increasing, rising prices of fossil fuels which increases the level of poverty of the people, etc.) and (ii) the efforts already made by the Government to create an adequate legislative and institutional framework, strong commitment to further develop its RE resources and generating investments interest in the private sector, etc.
- 6. Since then, the MDBs have supported the Government in carrying out the preparatory activities that aimed to facilitate this Joint Mission and develop the Investment Plan. A Joint MDB ScopingMission took place from 17 to 20 September, 2012 in Dar es Salaam (see next section for details) and a technical mission was hold from January 14 to 24, 2013.

PREPARATORY ACTIVITIES

- 7. Since Tanzania was selected as a pilot country for the SREP program, the Government, supported by the MDBs, has undertaken a number of preparatory activities, including: (i) the nomination of the SREP National Focal Point for preparing the SREP Investment Plan (phase1), (ii) Formulation of National SREP Task Force, (iii) a scoping mission including a technical workshop and consultations with national stakeholders, (iv) the preparation of a draft IP by the SREPnationalTask Force; (v) participation on CIF forum in Istanbul from October 29 to November 7, 2012, (vi) submitted a draft SREP Investment Plan (SREP IP) to MDB Team for comments, and (vii) a Technical Mission from January 14 to 24, 2013.
- 8. From January 14 to 24, 2013 the Government led atechnical mission. The objective of the mission wasto get the draft IP ready for public consultations, with a clear story line, a good understanding of main sector challenges that need to be addressed in order to scale up renewable energy in the country, and strong rationale for the proposed SREP investments.

- 9. The mission confirmed that (see Aide Mémoire for more details):
 - Broad agreement was reached with the Task Force on priority use of SREP funds. These are support for:
 - Geothermal energy sub-sector development to supply power to the Tanesco national grid; specific activities/investments will be clarified in the coming weeks;
 - Support for renewable energy for off-grid rural electrification meet electricity needs of communities that cannot be reached through Tanesco's grid extension for economic or technical reasons - specific activities/investments will be finetuned in the coming weeks.
 - The Task Force indicated that SREP support for interventions for improving sustainable fuelwood supply and to support use of alternative fuels, particularly those using agricultural residues, would be valuable. The Task Force will consult with relevant stakeholders, assess other interventions that are ongoing, and propose biomass sector interventions that are appropriate for inclusion in the SREP IP.
 - The donor community may be available to complement or support renewable energy interventions. It will be important for the SREP IP to show how some of these resources are used to leverage SREP funds and to ensure that there is no duplication of work using SREP funds for work funded by these resources.
 - ➤ In the interest of ensuring that the SREP IP is up to the quality acceptable to the Government and necessary for submission to the SREP, and to ensure broader stakeholder consultation and consensus building, it was agreed that the SREP IP would not be submitted to the May 2013 SREP Subcommittee meeting, rather to submit it for intercessional review and approval by the SREP Subcommittee.
 - > The tentative timeline for the finalization and submission of the IP is as follows:
 - Revised draft SREP IP submitted to the MDBs for review: February 28, 2013
 - Joint SREP Mission: March 18 22, 2013
 - Finalize SREP IP: March 24 29, 2013
 - GOT discussions: April 1 5, 2013
 - Public disclosure: April 8 12, 2013
 - Independent Technical Review: April 15 26, 2013
 - MDB Final Review: April 29 May 3, 2013
 - Final revision of SREP IP and printing: May 6 17, 2013
 - Submission to SREP Subcommittee: May 20, 2013
 - Proposed SREP Subcommittee consideration of the Tanzania SREP IP: June/July 2013.

JOINT MISSION ACTIVITIES

10. On the basis of the preparatory activities carried out during the past few months, the Government and the MDBs have agreed on having a Joint Mission that could support the SREP Focal Point and Task Force in fine-tuningthe Investment Plan. Everything will be done to ensure that this Joint Mission provides sufficient inputs to finalize quality Investment Plan. Field visits might be organized but this will be further defined in the coming weeks.

Share of Responsibilities

- 11. The Joint Mission will be led by the SREP National Focal Point with support from the members of the SREP Task Force. In coordination with the SREP National Focal Pointand his team, the MDBs willprepare draft program/projects' concepts in order to facilitate the discussions during the joint mission. The members of the Task Force will be supported by the other national institutions during the mission.
- 12. The three MDBs will participate in the joint mission. The AfDB is responsible for the overall mission, with support from the WB and IFC. The needs (country readiness) and availabilities of experts will be reassessed two weeks before the mission to ensure adequate technical assistance is provided.

Consultations with the Stakeholders

- 13. During the joint mission, consultations with key stakeholders will be held in Dar es Salaam, including national institutions/authorities, development partners, NGOs, local communities and the private sector. A consultation workshop, as well as a series of meetings, will be organized as part of the mission to identify concrete opportunities for investment that could lead to large-scale development of renewable energies.
- 14. Consultations with stakeholders, already initiated during the scoping mission, should help strengthen national ownership, mobilize co-financing for SREP investments, harmonize support to public policies and promote complementarity with ongoing or planned activities. Additional financial resources mobilized to complete SREP funding will be included in the Investment Plan.
- 15. Bilateral and multilateral partners will be involved in the mission to provide inputs, contribute to the discussions on the investments priorities, assess the opportunities for potential co-financing on their side, etc. Development partners that have expressed specific interest in contribution to the mission (EU, DFID, AFD, Norway, Sweden, KfW, USAID, MCC and the Netherlands) will be closely associated.
- 16. The mission will consult the following actors, either through meetings (group or bilateral), or as part of the planned technical workshop¹:

¹The Terms of Reference of the workshop will be developed by the Task Force at least 15 days before the beginning of the joint mission.

National Institutions:

- Ministry of Energy and Minerals
- Ministry of Finance
- Energy and Water Utilities Regulatory Authority (EWURA),
- Rural Energy Agency (REA),
- Tanzania Electric Supply Company (TANESCO)
- Geological Survey of Tanzania (GST)

PrivateSectorOrganizations:

- Sweco
- > TCCIA
- ➤ TPC
- Songas
- ➤ TAREA
- ➤ Stanbic Bank –TZ
- ➤ CRDB
- Mkonge Energy Systems-Katani Ltd.
- ➤ NBC
- Voltzon
- Symbion
- Devergy
- ACRA Tanzania (Hydro)
- > TANWAT (Biomass)
- Mwenga (Hydro)
- Ngombeni Mafia (Biomass)
- Kilombero Sugar Company (Biomass bagasse)
- Andoya Hydro Electric Co
- Mapembasi Hydro
- > Tanzania Investment Bank
- Etc.

Civil Society Organisations:

- Global Village Energy Partnership (GVEP)
- > TATEDO
- Etc.

Development Partners (other than MDBs):

- European Union (EU)
- Agence Française de Développement (AFD)
- Department for International Development (DFID)
- Embassy of Norway
- Embassy of Sweden
- United Nation Development Program (UNDP)
- Embassy of Netherlands
- ➤ USAID
- ➤ MCC
- > JICA
- ▶ kFW
- ➢ GIZ
- Etc.

Validation of the Investment Priorities and Identification of the InvestmentProjects

- 17. One of the major objectives of the Joint Mission is to collectively discuss and agree on strategic investment priorities for the scaling-up of renewable energies in Tanzania. This work will be done through:
 - a) Before the Joint Mission, drafting of the investment priorities by the SREP Task Forceon the basis of the preparatory work (stocktaking exercise, scoping mission, technical mission, etc.);
 - As part of the Joint Mission, and during a technical workshop, presentation of the proposed investment priorities by the SREP National Focal Point and Task Force and discussion with national stakeholders;
 - c) During the Joint Mission, series of meetings to discuss with the stakeholders the proposed investment priorities and pre-identify the projects for implementing the Investment Plan under Phase 2;
 - d) Under the current roadmap, finalization of the Investment Plan should be done in the weeks following the Joint Mission; the document should be circulated for public consultations on the website of the Ministry of Energy & Minerals to ensure that the Investment Plan submitted reflects stakeholders' priorities and concerns.

Support to the Tanzania Government in Updating of the Investment Plan

- 18. MDBs will support the Government of Tanzania in finalizing the draft Investment Plan. To do so, a small group composed of MDBs staff and members of the SREP National Task Force will work together to fine tunethe IP, in parallel with other mission activities. The finalization of the IP will be continued during the following weeks, by the same group with assistance from additional MDB specialists as needed.
- 19. In accordance with the SREP "programming guidelines", the IP will consist of the sections mentioned in Annex 2. The investment plan should entail program/projects' concept notes for projects to be implemented under Phase 2. The MDBs will work with the SREP national Task Force during the joint mission to prepare the concept brief for each identified project.

COMPOSITION OF THE MISSION

- 20. The mission will consist of various experts from the three MDBs. The areas of expertise will be as such :
 - Energy Specialist Power Engineers
 - Renewable Energy Specialist
 - Energy Economist
 - CIF/SREP Coordinator
 - Climate Change Specialist
 - Private Sector Expert
 - Social Development / Gender Specialist
 - Environment / Safeguards Specialist
 - ➤ M&E Expert

- Knowledge Management Expert
- Procurement and Financial Specialists

Annex 4 shows the list of Government Team and MDB Mission Team Composition.

21. In addition to MDBs experts and Government staff, the mission will be based on the broad participation of national stakeholders. This broad participation is designed to ensure ownership of the program and support its implementation by the Government, national stakeholders and development partners.

MISSION CALENDAR/AGENDA

22. Anagenda is proposed in Annex-3 below for the mission activities. This agenda will be further refined in the coming weeks and specific TORs will be developed for the workshop.

MAIN CONTACTS (MDB& GOVERNMENT)

Government

Mr. Edward Leonard Ishengoma Assistant Commissioner - Renewable Energy, Ministry of Energy and Minerals

Email: e_leonardishe@yahoo.co.uk

Tel. No. +255 22 2117156-9 Fax No. +255 22 2120799

Multilateral Development Banks

African Development Bank

Mrs Mafalda Duarte CIF Coordinator

E-mail: m.duarte@afdb.org

World Bank

Mr. GevorgSargsyan CTF/SREP Coordinator

Email: gsargsyan@worldbank.org

IFC

MrsJoyitaMukherjee SREP Coordinator

Email: JMukherjee 1@ifc.org

Annex 1: Criteria for the Sub-Committee to Assess the Investment plan

- a) Increased installed capacity from renewable energy sources: A high priority for most low income countries is expanding their generation capacity in order to ramp up modern energy use and energy access. Therefore, SREP-funded investments should result in increased MW from renewable energy, as well as increased energy (GWh) per capita in the country.
- b) Increased access to energy through renewable energy sources: SREP may support grid extensions and decentralized energy systems with a view to expanding the percentage of the population with access to non-fossil-fueled electricity. Investment proposals should demonstrate how the investments are part of the Government's long term commitment to increasing energy access.
- c) Low Emission Development: SREP may support the use of renewable energy technologies for electricity generation and services to replace fossil fuel technologies that would be deployed in a business-as-usual scenario aimed at substantially increasing commercial energy use in low income countries. In particular, benefits from SREP investments will often arise from "leapfrogging" technologies, in which low income countries will be assisted to mainstream renewable energy technologies into the overall energy system.
- d) Affordability and competitiveness of renewable sources: Affordability is essential for increasing access and for ensuring the long term renewable energy market development. SREP funding should address clearly-defined cost barriers to adoption of renewable energy technologies, such as connection costs for rural consumers, higher capital costs of new technologies, transmission costs related to grid-connected renewables, and risk adjusted rates of return sought by investors.
- e) **Productive use of energy**: SREP programs should promote the generation and productive use of energy.
- f) **Economic, social and environmental development impact**: Investment proposals for SREP financing should demonstrate the generation of economic, social and environmental benefits.
- g) **Economic and financial viability**: Investment proposals should demonstrate the economic viability of investments and the financial viability with the inclusion of time bound SREP resources.
- h) **Leveraging of additional resources**: Activities should maximize the leverage of funds from other partners.
- i) **Gender:** SREP investments should seek to strengthen the capacity of women to be active participants in the economic sector and avoid negative impacts on women.
- j) Co-benefits of renewable energy scale-up: SREP investments should include decreased air pollutants from energy production and consumption as well as the potential to reduce stress on forest resources. Investments and activities should elaborate on the potential positive effects on air quality and natural resource management through the adoption of renewable energy technologies.

Annex 2: Suggested Structure for the Investment plan

I. Proposal Summary (2 pages)

- Objectives
- Expected outcomes
- Program criteria, priorities and budget

II. Country Context (3-4 pages)

- Energy sector description (market structure, demand supply, and dispatch composition, electricity cost and pricing) incl. renewable energy status
- · Gap/barrier analysis; needs assessment

III. Renewable Energy Sector Context (3-4 pages)

- Analysis of RE options (technology, cost, mitigation potential, barriers)
- Government plans or strategy for the sector (willingness to move towards renewable energy investments, existing or envisioned policy, regulation, plans, and resource allocation)
- Institutional structure and capacity (technical, operational, financial, equipment supply, information)
- Role of private sector and leverage of resources
- Ongoing/planned investment by other development partners

IV. Contribution to National Energy Roadmap (2 pages)

- Likely development impacts and co-benefits of SREP investment
- How SREP investment will initiate a process leading towards transformational low carbon growth

V. Program Description (6-8 pages)

- Capacity building and advisory services
- · Investment preparation activities
- Technology deployment investments
- Parallel activities to be funded by other development partners
- Environmental, social and gender co-benefits

VI. Financing Plan and Instruments (3-4 pages)

- Budget envelop for investments
- Costs and sources of funding
- SREP assistance (grant, concessional debt, etc.)
- Recipients of funding

VII. Additional Development Activities (2-3 pages)

• Leverage complementary co-financing with other development partners such as bilaterals, private sector, and financial institutions

VIII. Implementation Potential with Risk Assessment (2 pages)

- Country/regional risks institutional, technology, environmental, social, financial
- Absorptive capacity for SREP and leveraged resources

IX. Monitoring and Evaluation (1/2 page)

Results framework table

Annexes

Information should be included in annexes on the following areas:

- assessment of country's absorptive capacity
- stakeholder consultations
- co benefits
- existing activities in the field of renewable energy, particularly activities of other development partners

For each project to be implemented under the Investment Plan, an investment concept brief (maximum two pages) will be prepared as part of the Annex to the Investment Plan.

A suggested outline of an Investment Concept Brief includes:

- Problem statement (1-2 paragraphs)
- Proposed contribution to initiating transformation (1-2 paragraphs)
- Implementation readiness (1-2 paragraphs)
- Rationale for SREP financing (1-2 paragraphs)
- Results indicators
- Financing plan
- Project preparation timetable
- Requests, if any, for investment preparation funding

Annex - 3. Agenda of Joint Mission Participants

	March 13	March 14	March 18	March 19	March 20	March 21	March 22	Following week
AM	Geothermal workshop co- organized with DFID	Geothermal workshop co- organized with DFID	Arrival of all MDBs	Consultations with key stakeholders: National and local authorities - 9am to 10:30am Development Partners - 10:30amto 12pm	Workshop: Plenary Opening Presentation of the SREP Presentation of the Stocktaking Findings Presentation of the proposed strategic priorities Discussions	Group 1: M&E framework Group 2: Assistance to Task Force for fine tuning the SREP investment plan Group 3: Dedicated work on environmental & social aspects	9am to 12pm: Meeting MDBs/ Task Force to discuss the roadmap until the submission of the Investment Plan + the Aide Mémoire	Potential follow up on technical issues for proposed investments according to the needs
PM	Geothermal workshop co- organized with DFID	Geothermal workshop co- organized with DFID	2pm: MDBs Meeting and consultants 3:30pm: Meeting MDBs/ Focal Point and Task Force 5pm: Meeting with the Minister of MoEM	Consultations with key stakeholders: Civil Society - 2pm to 3:30pm Private Sector -3:30pm to 5pm	Workshop: Final discussions on investment priorities and ideas of projects Reading of the Workshop Report	Group 1: Assistance to Task Force for fine tuning the SREP Investment Plan Group 2: dedicated work on knowledge management	Restitution and presentation of the Aide Mémoire to the Minister of Energy & Minerals	
19 h00			Meeting of the Mission Core Team	Meeting of the Mission Core Team	Meeting of the Mission Core Team/ Write Up	Meeting of the Mission Core Team /Write Up	Meeting of the Mission Core Team /Write Up	

Annex 4: SREP Government Team and Joint-Mission MDB Team Composition

SREP Government Task Force Team					
Institution	Name	Title	E-mail		
Ministry of Energy and Minerals	Edward Leonard Ishengoma	Assistant Commissioner – Renewable Energy	e_leonardishe@yahoo.co.uk		
Rural Energy Agency	Elineema Mkumbo	Acting Project Identification and promotion Manager	emkumbo@rea.go.tz		
TANESCO	Kato Kabaka	Research Manager	Kato.kabaka@tanesco.co.tz		
Geological Survey of Tanzania (GST)	TaramaelMnjokava	Principal Geochemist	mnjott@yahoo.co.uk		
EWURA	N'ganga Kiboko	Principal commercial Officer	kiboko@ewura.go.tz		
TaTEDO	Jensen Shuma	Resource Mobilization	Jensen.shuma@tatedo.org		

Some MDB experts will join the mission on the ground, while others will join by audio-conference for key meetings.

MDBs							
Institution	Name	Expertise	E-mail	Tanzania based			
AfD	AfDB						
AfDB	Mafalda DUARTE	Mission co-Leader; CIF Coordinator	m.duarte@afdb.org				
AfDB	Florence RICHARD	Mission co-leader; Senior Climate Change Specialist	f.quintanilha@afdb.org				
AfDB	Stella MANDAGO	Senior Energy Specialist	s.mandago@afdb.org	Yes			
AfDB	UmangGoswami	Private sector specialist	u.goswami@afdb.org				
AfDB	MagdalineNkando	Knowledge Management Specialist	m.nkando@afdb.org				
AfDB	AmelMakhlouf	M&E Specialist	a.makhlouf@afdb.org				
AfDB	Rachel ARON	Social and gender Specialist	r.aron@afdb.org				
AfDB	Anil Cabraal	RE expert	racabraal@msn.com				
WB							
WB	GevorgSargsayan	SREP Program Coordinator	gsargsayan@worldbank.org				
WB	Dana Rysankova	Senior Energy Specialist	drysankova@worldbank.org				
WB	Stephanie Nsom	Energy Specialist	sgbanerjee@worldbank.org				
WB	Anders Pedersen	Renewable energy specialist	apedersen@worldbank.org				

IFC				
IFC	JoyitaMukherjee	CIF/SREP Coordinator	JMukherjee1@ifc.org	
IFC	Murefu Barasa	Renewable Energy Specialist	murefu.barasa@camcoglobal.com	
IFC	Itotia Njagi	Program Manager, Lighting Africa	Anjagi@ifc.org	
IFC	Pepukaye Bardouille	Senior Energy Specialist, Clean Energy	PBardouille@ifc.org	