



# Scaling-up Renewable Energy Program in Uganda

## TERMS OF REFERENCE

### JOINT MISSION



17 – 25 August 2015

Kampala

Uganda

## EXECUTIVE SUMMARY

### Objectives of the Joint Mission

The main objective of the Scaling-up Renewable Energy Program (SREP) Uganda Joint Mission is to support the Government of Uganda (GoU) in preparing the SREP Investment Plan (IP). In consultation with the national stakeholders, the Joint Mission will more specifically aim at the following: (i) validate the suggested investment priorities, (ii) continue collecting and reviewing all the necessary elements to ensure the timely finalization of the IP, and (iii) validate and develop project concept notes for implementation of the IP during phase 2 of SREP programming.

### Dates of the Joint Mission

The proposed dates for the Joint Mission are from 17<sup>th</sup> to the 25<sup>th</sup> of August 2015 under the leadership of the GoU. During these dates a Stakeholder Consultative Workshop will be organized to validate earlier discussions with the different stakeholders participating in the Joint Mission.

### Government Contacts

The mission leadership will be ensured by the SREP National Focal Point, Mr. James Baanabe, Ag. Commissioner of the Energy Efficiency and Conservation Department and SREP Focal Point, Ministry of Energy and Mineral Development.

Mr. James Baanabe

Email: [baanabe@energy.go.ug](mailto:baanabe@energy.go.ug)  
[baanabej@gmail.com](mailto:baanabej@gmail.com)

### Activities undertaken before the Joint Mission

Various activities were undertaken since Uganda was selected as a pilot-country under the SREP. These included: (i) the SREP Scoping Mission held in Kampala between the 19<sup>th</sup> and 23<sup>rd</sup> January 2015 to inform the national stakeholders about SREP and to get a better understanding of key issues and barriers for renewable energy development in the country with the cooperation of MDBs, (ii) a mission from the SREP National Task Force to Hague, The Netherlands, to attend a SREP Pilot Countries Workshop in February 2015, which main objective was to assist SREP pilot countries in presenting and sharing experiences among new and existing pilot countries on progress and bottlenecks in the development and implementation of SREP IPs, (iii) a Technical Mission held in Kampala between the 17<sup>th</sup> and 19<sup>th</sup> of June 2015 to develop a methodology to

identify and prioritize key areas/technologies for SREP intervention, to advance the drafting of the Investment Plan and to agree on the way forward with a view for IP endorsement by November 2015, and (v) with the support of AfDB, a local and an international consultant were hired to support the SREP National Task.

**Activities to be undertaken during the Joint Mission**

During the Joint Mission, the main activities will consist of: (i) develop pre-identified investment areas in connection with the SREP Investment Criteria, (ii) assisting the SREP Task Force in validating these investment priorities, (iii) supporting the preparation of the IP based on the inputs provided by the Multilateral Development Banks (MDBs), (iv) initiate the design of the various program/projects’ concept notes that will lead to the implementation of the SREP IP under Phase 2 of SREP programming, and (v) work on the development of the SREP M&E framework and other key sections. Site visits may be planned as part of this Joint Mission or considered at a later stage if required. In addition, given the tight timeframe for a possible IP endorsement by November 2015, a subsequent technical mission might be considered to complement the Joint Mission.

**Expected results and outcomes**

The main outcomes of the Joint Mission are: (i) investment priorities are discussed the National SREP Task Force and presented/discussed with national stakeholders; (ii) all information required to finalize the IP is gathered during the workshops and meetings; (iii) draft program/projects’ concept notes are defined and all information required for their finalization is obtained; (iv) the M&E results framework is prepared based on the validated investment priorities, and (v) an action plan up to IP endorsement is developed.

**CONTEXT OF THE MISSION**

1. The Climate Investment Funds (CIF) are aimed at promoting 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, and (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

sectorial response. The three programs include the SREP, the Pilot Program for Climate Resilience (PPCR) and the Forest Investment Program (FIP).

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 Uganda to initiate the process to achieve a transformational change, one that will lead the country towards a low greenhouse gas 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 an IP 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 may support both investments for capacity building to reform the institutional framework, and investments for infrastructure to deploy renewable energy technologies in the country. Ultimately, the IP may propose interventions that:

- 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. In June 2014, the SREP Sub-Committee selected Uganda as a SREP pilot country pursuant to the submission of an Expression of Interest by the GoU that was analyzed by an Independent Expert Group that reviewed and ranked a total of 40 applications. The rationale for the selection of Uganda, despite the fact that there was visible progress in renewable energy deployment following the introduction of Independent Power Producers in the country during the 90s,

renewable energy deployment still requires significant capital amounts. In order for that investment to materialize, investors require information on the different forms of renewable energy resources available in the country and a suitable investment climate with a clear risk allocation.

6. Since then, the MDBs have supported the GoU in carrying out the preparatory activities that aimed to facilitate this Joint Mission including the Scoping Mission that took place from 19<sup>th</sup> to 23<sup>rd</sup> January 2015 in Kampala (see next section for details).

## PREPARATORY ACTIVITIES

7. Since Uganda was selected as a pilot country for the SREP, the GoU, supported by the MDBs, has undertaken a number of preparatory activities, including: (i) the nomination of the SREP National Focal Point to lead the preparation of the SREP IP (SREP Programming Phase 1), (ii) the set-up of a 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 SREP National Task Force; (v) participation on the SREP New Pilot-Countries Workshop in Hague, The Netherlands, (vi) submitted a draft IP to MDBs for comments.

8. The main findings and agreements reached during the Scoping Mission were as follow:

- National Task Team: The MEMD confirmed that a multi-agency National Task Force would be set up to lead the preparation of the IP with the oversight of the SREP Focal Point and shall include representatives from: (i) MEMD, (ii) the Uganda Electricity Generation Company Ltd, (iii) the Uganda Electricity Transmission Company Ltd, (iv) the Uganda Electricity Distribution Company Ltd, (v) Electricity Regulatory Authority, (vi) the Rural Electrification Agency, (vii) the Uganda SE4All Secretariat, and (viii) the Ministry of Finance, Planning and Economic Development
- Potential Areas of Engagement: The SREP National Task Force will work to align the SREP IP with all national strategies and policies relevant to Uganda without prejudice to the SREP investment criteria and to ongoing activities in the sector. The team will also benefit from the Energy Sector Working Group that, in addition to the GoU, includes participants from different Development Partners in the country. The IP shall demonstrate how the proposed activities will lead to the reduction of barriers for

renewable energy development and market transformation. Potential areas of SREP intervention might include renewable energy technologies in niche on-grid and off-grid areas such as geothermal, wind, solar photovoltaic, hybrid generation systems, renewable resource mappings and dissemination of sustainable energy systems with a strong focus on increasing access to energy with private and public sector participation. The GoU envisions the potential involvement of local commercial banks to facilitate financing at more competitive terms to Small and Medium Enterprises as well as households seeking to invest in renewable energy technologies. Discussions with different stakeholders led the Scoping Mission to conclude that there are areas requiring further support from the Development Partners (including MDBs) in order to boost energy access across the country such as planning coordination, resource mapping and capacity building.

- The GoU has agreed to develop a first draft of the IP as well as a list of concept notes ahead of the Joint Mission and in sufficient time to allow all interested stakeholders to review and provide their inputs. These concept notes should include an estimate of the resources required by the GoU not only to address policy and governance issues hindering the deployment of specific renewable energy technologies, but also estimates for the preparation of the SREP investment projects.
- Preparation of the IP: The GoU has requested support from the MDBs to help the country in writing the IP, ideally, without accessing resources under the available IP Preparation Grant (up to USD 300,000). AfDB hired a local consultant to fast track the preparation of the proposed IP. The Scoping Mission highlighted that the preparation of the IP should be done in a very participatory way and that ultimately the IP is to be owned by the Government as a whole and should represent the views of the various national stakeholders for the development of renewable energy in the country. Therefore, it is important that various partners, including Government representatives, private sector, commercial and development banks, and Non-Governmental Organizations (NGOs) be invited to contribute to the discussion and final selections of the priority investments.
- Renewable Resources: Overall, the challenges for renewable energy in Uganda appear to be not about a low proportion in the energy mix, but rather a limited diversification among renewable energy technologies in the portfolio of existing power plants. Currently the country's energy mix constitutes 73% from large hydro, 8% mini hydro, 12% from thermal and

8% from Cogeneration. The limited diversification can be explained by the fact that the country has been blessed with abundant hydropower resources that are easier and cheaper to harness than other RE sources. The challenge, therefore, appears to be about increasing the diversification of renewable energy technologies in the energy mix to the extent possible but at competitive development costs. At the moment, the main tool of the GoU's diversification strategy is the RE-FIT/GET-FIT incentives program that provides premium tariffs to electricity derived from various renewable energy sources, including solar, biomass, landfill gas and others. This tool will soon be exhausted yet there is still a lot of renewable energy potential that is not fully exploited. One of the key challenges is the lack of quality renewable energy resource assessments and mappings to support investment promotion, decision-making and energy planning. On geothermal, for example, even though the country is in the rift valley, the information on the available resource is not sufficient or reliable for investment decisions. Not a single exploration borehole has been drilled yet due to lack of public funding and the natural reluctance by the private sector to bear exploration risks needed to quantify the geothermal resource potential. Investments in wind energy are similarly hampered by the lack of data from systematic resource assessment and mapping. Any diversification plan involving solar and wind is further challenged by the high intermittency of these resources and the consequently very limited total penetration possible unless investments in relatively expensive mitigation measures are made to prevent possible negative impacts on grid stability. Cogeneration from 3 sugar mills now sell surplus clean energy to the grid which currently is 8% of the energy mix. The potential from the remaining factories and the growing sugar industry needs to be explored and fully utilized. This is a low hanging fruit that SREP can support.

## JOINT MISSION ACTIVITIES

9. On the basis of the preparatory activities carried out during the past few months, the GoU and the MDBs have agreed on having a Joint Mission that could support the SREP Focal Point and the National Task Force in preparing the IP. Everything will be done to ensure that the Joint Mission provides sufficient inputs to prepare a quality IP. Field visits might be organized depending on their value-added to the process.

## Share of Responsibilities

10. The Joint Mission will be led by the SREP National Focal Point with support from the members of the National Task Force. MDBs will contribute to a constructive discussion and focus on supporting the development of strong and well developed program/projects' concept notes that, on one hand, are in line with SREP Investment Priorities and, on the other, can realistically be implemented during SREP Programming Phase 2.

11. AfDB (lead-MDB), the World Bank (WB) and the International Finance Corporation (IFC) will be three MDBs participating in the Joint Mission. The needs (country readiness) and availability of experts will be reassessed two weeks before the mission to ensure that adequate technical assistance is provided.

## Consultations with the Stakeholders

12. During the Joint Mission, consultations with key stakeholders will be held in Kampala, including national institutions/authorities, development partners, NGOs, local communities and private sector, among other relevant actors. A Stakeholder Consultative Workshop, as well as a series of meetings, will be organized as part of the Joint Mission to identify and discuss the merits of concrete opportunities for investment that could lead to large-scale deployment of renewable energies.

13. The consultations with stakeholders, already initiated to a significant extent during the Scoping Mission, should help in: (i) strengthening the national ownership, (ii) mobilizing co-financing for SREP investments, (iii) harmonizing support to public policies and promote complementarity with ongoing or planned activities. Any additional financial resources mobilized to complete SREP funding may be included in the IP.

14. Bilateral and multilateral partners will be involved in the Joint 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 contributing to the Joint Mission include – as of May 17: AfDB, World Bank and IFC.

15. The Joint Mission will consult the following actors, either through meetings (group or bilateral), or as part of the planned Stakeholder Consultative Workshop. The National SREP Task Force will be responsible for developing the Terms of Reference of the workshop as well as handle all the required logistics.



***National Institutions:***

- Ministry of Energy and Mineral Development
- Ministry of Finance Planning and Economic Development
- Electricity Regulatory Authority
- Rural Electrification Agency
- Uganda Electricity Generation Co Ltd
- Uganda Electricity Transmission Co Ltd
- Uganda Energy Credit Capitalization Co
- National Environment Management Authority
- Uganda National Bureau of Standards

***Private Sector Organizations and Civil Society Organisations:***

- Uganda National Chamber of Commerce and Industry
- Uganda Investment Authority (UIA)
- Uganda Manufacturers Association (UMA)
- Global Village Energy Partnership International (GVEP)
- Private Sector Foundation Uganda (PSFU)
- Sugar Corporation of Uganda Ltd (SCOUL)
- Center for Research in Energy and Energy Conservation (CREEC)
- Biomass Energy Efficient Technology Association (BEETA)
- Joint Energy and Environment Projects (JEEP)
- Kinyara Sugar Limited
- Uganda Sugar Manufacturers Association (USMA)
- Uganda Banker's Association
- Other Independent Power Producers present in the Country.
- Uganda National Alliance for Clean Cooking
- World Wide Fund for Nature
- Renewable Energy Business Incubator
- SNV
- Women Entrepreneurs Association
- Other NGOs active in the sector.

***Development Partners (other than MDBs):***

- Federal Republic of Germany
- Royal Norwegian Embassy
- Kreditanstalt für Wiederaufbau (KfW)
- Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)
- French Development Agency (AFD)
- Japan International Cooperation Agency (JICA)
- USAID
- DFID
- UNDP

## **Validation of the Investment Priorities and Identification of the Investment Projects**

16. 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 Uganda. This will be achieved as follows:

- a) Before the Joint Mission, the SREP National Task Force will, with the support of two consultants, initiate a prioritization exercise of SREP interventions on the basis of the preparatory work (scoping mission, etc.);
- b) As part of the Joint Mission, and during the Stakeholder Consultative Workshop, presentation of the proposed and previously discussed investment priorities by the SREP National Focal Point and Task Force;
- c) During the Joint Mission, a series of meetings with interested stakeholders to discuss the proposed investment priorities and pre-identify the projects for implementation under Phase 2 of SREP Programming;
- d) Develop a realistic action plan with a view to ensure that the IP is finalized in sufficient time for endorsement by the SREP Sub-Committee before the end of 2015. It is noted that the IP will be reviewed by an independent expert and will be posted online for national and international public consultations on the website of the Ministry of Energy & Minerals to ensure that the IP submitted reflects stakeholders' priorities and concerns.

## **Support to the Government of Uganda in Preparing the Investment Plan**

17. MDBs will support the GoU in preparing the IP. To do so, a small group composed of MDBs staff and members of the SREP National Task Force will work together to prepare the IP, in parallel with other mission activities. The finalization of the IP will continue with the support of the same group with assistance from additional MDBs' specialists if need be.

18. In accordance with the SREP Programming Modalities and following preliminary work, the SREP Uganda IP will consist of the sections mentioned in Annex 2.

## COMPOSITION OF THE MISSION

19. The mission will consist of various experts from the three MDBs. The areas of expertise to be covered are the following:

- Energy and Power Experts
- Economists and Finance Experts
- CIF/SREP Coordinators
- Climate Change Experts
- Private Sector Experts
- Social Development and Gender Experts
- Environment and Social Safeguards Experts
- Monitoring and Evaluation Experts
- Energy Policy Experts

Annex 4 includes the composition of all participants on the Joint Mission from the GoU and the MDBs

20. In addition to the MDBs' experts and involved Government staff, the Joint 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 GoU, national stakeholders and development partners.

## MISSION CALENDAR/AGENDA

21. An agenda is proposed in Annex 3 for the Joint Mission activities.

## MAIN CONTACTS

### Government of Uganda

1. Name: James Baanabe (National Focal Point)  
Position: Ag Commissioner Energy Efficiency and Conservation Department and Focal Officer SREP  
Institution: Ministry of Energy and Mineral Development  
Email: [baanabe@energy.go.ug](mailto:baanabe@energy.go.ug)
2. Name: Zion Okama  
Position: Socio Economist Ministry of Energy and Mineral Development  
Email: [z.okama@energy.go.ug](mailto:z.okama@energy.go.ug)

## Multilateral Development Banks

African Development Bank  
Name: Alemayehu Wubeshet-Zegeye  
Position: Chief Power Engineer  
Email: [a.wubeshet-zegeye@afdb.org](mailto:a.wubeshet-zegeye@afdb.org)

African Development Bank  
Name: Leandro Azevedo  
Position: Climate Finance Officer  
Email: [lazevedo@afdb.org](mailto:lazevedo@afdb.org)

International Finance Corporation  
Name: Joyita M. Murkherjee  
Position: CIF Coordinator  
Email: [jmukherjee1@ifc.org](mailto:jmurkherjee1@ifc.org)

International Finance Corporation  
Name: Jason Lee  
Position: Investment Officer  
Email: [jlee15@ifc.org](mailto:jlee15@ifc.org)

World Bank  
Name: Mbuso Gwafila  
Position: Senior Energy Specialist  
Email: [mgwafila@worldbank.org](mailto:mgwafila@worldbank.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 "leap-frogging" 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

- 1 COUNTRY CONTEXT
- 2 ENERGY SECTOR
  - 2.1 Overview
  - 2.2 Electricity Supply and Demand
  - 2.3 Electricity Tariffs
  - 2.4 Rural Electrification
  - 2.5 Gender Inclusiveness in the Energy Sector
- 3.1 National Policy and Vision
- 3.2 Energy Policy and Strategy Framework
- 3.3 Global Framework
- 3.4 Institutional Framework
4. ROLE OF DEVELOPMENT PARTNERS
5. RENEWABLE ENERGY SECTOR
  - 5.1 Uganda's Renewable Energy Potential: Overview of Issues
  - 5.2 Exploited Resources
  - 5.3 Untapped Resources
  - 5.4 GoU Strategy and Interventions
  - 5.5 Renewable Energy technologies: Status and Prospects
  - 5.6 Legal and regulatory framework for RE promotion
  - 5.7 Matrix of barriers to RE development and mitigation measures
6. CONTRIBUTION OF SREP TO NATIONAL ENERGY ROADMAP
  - 6.1. Policy background
  - 6.2 SREP foreseen projects in 2040 Vision, and its benefits
  - 6.3 Overall SREP benefits
7. STRATEGIC INVESTMENT AREAS
  - 7.1 Selection Criteria (SREP & National Criteria)
  - 7.2 Summary of scoring table
  - 7.3 Priority areas and projects
8. PROGRAM DESCRIPTION
  - 8.1 Introduction of overall program
  - 8.2. Objectives OF SREP program
  - 8.3 Impacts of SREP program

## 8.4 Project Descriptions

## 9. PROGRAM IMPLEMENTATION ARRANGEMENT

9.1. Overall Supervising Entity and Implementing Entities and their roles

9.2 Organogram of Implementation Structure

## 10. ENVIRONMENTAL AND SOCIAL ASPECTS

10.1 National Policy and Legal Framework on Environment and Social Aspects

10.2 Environment and Social Assessments

10.3 Institutional Framework

10.4 Environmental and Social Assessments

10.5 Anticipated Environmental and Social Impacts

## 11. MONITORING AND EVALUATION

11.1 Challenges to Monitoring and Evaluation

11.2 Results Framework

11.3 Knowledge Management

## 12 RISK ASSESSMENT

Annexes



### Annex 3: Agenda of Joint Mission

	Day 1	Day 2	Day 3	Day 4	Day 5	Following week
<i>AM</i>	<p>8.30:9.30: Initial Meeting between MDBs and Consultants</p> <p>10.00:10.30: Kick off Meeting with MEMD</p> <p>11.00:12.00 Finalization of Joint Mission Schedule and Logistics for the mission including consultations</p>	<p>9.00:12.00: Consultation Meeting between MDBs, SREP National Taskforce and Development Partners</p>	<p>9.00:12.00: Consultation Meeting between MDBs, SREP National Taskforce and National Institutions, CSOs, NGOs and other relevant stakeholders</p>	<p>9.00: 12.00: SREP IP validation work (M&amp;E, knowledge management, technical assistance and capacity building, and Environmental and Social aspects</p>	<p>8.30:13.00: Stakeholder Consultative Workshop between SREP National Taskforce, MDBs and Stakeholders:</p> <ul style="list-style-type: none"> <li>• Opening</li> <li>• SREP Presentation</li> <li>• Presentation of proposed SREP priorities</li> <li>• Presentation on Implementation Modalities</li> </ul>	<p>Finalize Technical Report and Aide Memoire and address outstanding issues</p>
<i>PM</i>	<p>14.00:18.00 Meeting between MDBs and the SREP National Taskforce (Presentation from the National Consultant on identified priorities for SREP the intervention</p> <p>19.00: MDBs Core Team Meeting</p>	<p>14.00:18.00: Consultation Meeting between MDBs, SREP National Taskforce and Private Sector</p> <p>19.00: MDBs Core Team Meeting</p>	<p>13.30:18.30: Discussion between MDBs and National Taskforce on the outcomes of the consultations undertaken</p> <p>SREP IP validation work (key institutional aspects and priority investments suggested)</p> <p>19.00: MDBs Core Team Meeting</p>	<p>14.00:18.00: SREP IP validation work (investment concepts)</p> <p>19.00: MDBs Core Team Meeting</p>	<p>14.30:18.30: Prepare Workshop Technical Report (One team)</p> <p>14.30:18.30: Prepare Aide Memoire (One team)</p>	

#### 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 Mineral Development	James Baanabe	Ag Commissioner Energy Efficiency and Conservation Department	baanabe@energy.go.ug
	Zion Okama	Socio Economist	z.okama@energy.go.ug
	Kato Vincent	Ag Commissioner Geothermal Department	Kato_vincent@hotmail.com
	James Natukunda	Principal Energy Officer	jfnatukunda@gmail.com
	Wafula Wilson	Principal Energy Officer	Wafula@energy.go.ug
	Hatimu Muyanja	Energy Officer	h.muyanja@energy.go.ug
	Usamah Kaggwa	Energy Officer	ukaggwa@gmail.com
	Electricity Regulatory Authority	Dr. George Okoboi	Director Economic Regulation
Isaac Vivian Kinhonhi		Principal Economists	i.v.kinhonhi@era.or.ug
Rural Electrification Agency	Benon Bena	Manager Projects	bena@rea.or.ug
	Patrick Mutabingwa	Projects Engineer	pmutabingwa@rea.or.ug
Uganda Electricity Generation Co Ltd	Dan Mayanja	Technical Manager	dmayanja@uegcl.co.ug
	James Otto	Mechanical Engineer	jotto@uegcl.co.ug

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

Institution	Name	Expertise	E-mail
AfDB	A. Wubeshet-Zegeye	Energy Specialist	a.wubeshet-zegeye@afdb.org
AfDB	L. Azevedo	Climate Finance	lazevedo@afdb.org
AfDB	Komal Hassamal	Climate Finance	k.hassamal@afdb.org
AfDB	J. Jakoet	Financial Management	jjakoet@afdb.org
AfDB	J. Cunha	SREP Coordinator	j.cunha@afdb.org
AfDB	D. Isooba	Infrastructure Specialist (Field Officer)	d.isooba@afdb.org
AfDB	J. Byaruhanga	Senior Private Sector Officer (Field Office)	j.byaruhanga@afdb.or
WB	M. Gwafila	Energy Specialist	mgwafila@worldbank.org
IFC	Jason Lee	Investment Officer	Jlee15@afdb.org