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AFRICAN DEVELOPMENT  
BANK GROUP

**PROJECT: RWANDA SCALING UP ENERGY ACCESS II  
PROGRAM**

**COUNTRY: REPUBLIC OF RWANDA**

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**STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT SUMMARY**

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# STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT [SESA]

## SUMMARY

Project Title: **SEAP II PROGRAM**

Project Number: **P-RW-F00-016**

Country: **REPULIC OF RWANDA**

Department: **PESD**

Division: **PESD 1**

Project Category: **2**

### 1. INTRODUCTION

The Government of *Rwanda's Energy Sector Strategy Plan (ESSP) 2017-2024* has been proposed for financing under the Scaling Energy Access Programme II (SEAP II) using the African Development Bank's innovative Results Based Financing (RBF) - which links the disbursement of funds directly to the delivery of defined results. The financing instrument builds on increased reliance on Country borrower's safeguard and oversight systems.

The programme development objectives is to improve the power supply reliability, increase on and off grid access in Kigali city and in the southern and western provinces and enhance institutional capacity for effective implementation of the Government's electrification programme. *The RBF will contribute to four key results areas derived from the 8 sector priority areas of high level targets of the ESSP.* The following outcome indicators will be used to measure achievement of the Project Development Objectives (PDOs): (i) PDO Indicator 1: Reduction in average number and frequency of interruptions linked to HLTO2 and also HLTO6 (ii) PDO Indicator 2: Number of household and productive usage customers provided with on-grid electricity service; linked to HLTO4 and HLTO3; (iii) PDO Indicator 3: Number of people provided with off-grid electricity access; Linked to HLTO3, and (iv) PDO Indicator 4: Improved planning and implementation capacity of the electricity sector ( to support the achievement of above)

In line with the environmental and social requirements within the Board approved RBF instrument, a limited Strategic Environmental and Social Assessment (SESA) has been developed by the Bank to guide the programme implementation unit (PIU) Rwanda Energy Group (REG) to manage the identified environmental and social impacts associated with the program component activities especially under Program Areas 1, 2 and 3.

This SESIA Summary Report highlights the key environmental and social assessments and management plans developed jointly by the Bank and REG to guide implementation of the proposed project component activities to comply with both national and the African Development Bank's E&S policy requirements (Integrated Safeguard System- ISS).

### 2. POLICY LEGAL AND ADMINISTRATIVE FRAMEWORK

Rwanda has adopted environmental and social legislation, including environmental impact assessment procedures. According to the *National Policy on Environment issued in 2003*, Environmental Impact Assessments must be carried out prior to development of infrastructure projects. Rwanda Environmental Management Authority (REMA) was set up to implement this policy.

In April 2005, Rwanda adopted a legal framework in accordance with its National Policy on Environment, the *Organic Law N° 04/2005 of 08/04/2005* determining the modalities of protection, conservation and promotion of environment in Rwanda. Article 67 of this law stipulates that “Every project shall be subjected to an environmental impact assessment, before obtaining authorization for its implementation. More specifically, ESIA’s must be carried out for large and medium scale infrastructure projects for which some of the planned programme activities may qualify and must outline the costs and benefits of the protection of related ecosystems. The terms of reference for the preparation of the ESIA’s and the actual ESIA’s following completion shall be submitted to the Rwanda Development Board (RDB) for review and approval via permitting to ensure compliance monitoring by REMA.

Other relevant national and applicable legal framework and policies include, *The National Land Policy, 2004, The National Energy Policy, 2015, The National Policy for Water Supply and Sanitation Services, 2010, The Rwanda Development Vision, 2020, The Public Transport Policy of Rwanda 11, 2012, The National Forestry Policy 13, 2010, The Rwanda Wildlife Policy, 2013, The National Policy on HIV/AIDS, 2003, The Rwanda Tourism Policy, 2009, The Occupational Safety and Health Policy, 2006, The National Strategy for Growth and Reduction of Poverty (NSGRP II), 2010, General Guidelines and Procedure for Environmental Impact Assessment, 2006, Law No. 32/2015 of 11/06/2015 Relating to Expropriation in the Public Interest, The Water Resources Management Act, 2014, Law N°. 70/2013 of 02/09/2013 Governing Biodiversity in Rwanda, Prime Minister’s Order N°. 006/03 of 30/01/2017, Drawing Up a List of Swamp Lands, their Characteristics and Boundaries and Determining Modalities of their Use, Development and Management, Law N°. 43/2013 of 16/06/2013 Governing Land in Rwanda, Ministerial Order N°. 007/2008 of 15/08/2008 Establishing the List of Protected Animal and Plant Species, Ministerial Order N° 002/16.01 of 24/05/2013 Determining the Procedure for Declaration, Authorization and Concession for the Utilization of Water, Law N° 13/2009 of 27 May 2009 Regulating Labour in Rwanda*

#### AfDB’s Operational Safeguard Review

The programme has been assigned a category 2 rating on the 29/06/2018 by the Bank because the potential environmental and social impacts are not significant, limited in scope and can be managed by a robust Environmental and social management Plan. Operational Safeguards (OS) 1 on Environmental Assessment have been triggered because the component activities have the potential to generate significant environmental and social impacts to identified receptors within its area of influence. Operational Safeguard (OS2) has also been triggered because the planned component works under Areas 1, 2 and 3 could require land acquisition which could result in limited displacement (economic and/or physical) or restriction on access to assets. **ARAPs will be prepared where required but no subprojects requiring the preparation of FRAP (more than 200 PAPs) will be supported under the programme.** OS 3 is also triggered because the LV and MV distribution lines would traverse nationally designated biodiversity areas although is perceived to be minimal. OS 4 is triggered because the construction and operational development components include potential community health and safety impacts from road traffic management and risk of pollution and explosion. OS 5 on Labor, Working Conditions, Occupational Health and Safety is applicable since the minor construction works will involve management of construction workers.

### **3. PROJECT DESCRIPTION AND JUSTIFICATION**

The SEAP II will geographically upscale the components of the earlier AfDB funded SEAP I project. The programme will increase access by extension of the LV and MV distribution networks and upgrade of existing substations to realize efficiency gains.

The proposed RBF programme to be supported by the Bank will seek to improve the power supply reliability and increase on and off grid access in Kigali city and nationwide. The Government of Rwanda (GoR) has an ambitious plan to reach universal access by 2024 and improve the system reliability. The expansion and rehabilitation of the distribution network as well as the improvements in reliability will contribute to make more electricity available for consumption by consumers in the region.

The areas of focus submitted by the GoR were discussed with AfDB and are in line with the high-level target set in the ESSP. The program will be implemented over a period of 3 years, from 2018/19 to 2020/22. There are 4 key areas which include 4 High Level Target Objectives (HLTO) of the ESSP as follows;

### **3.1 Programme Component Activities**

The SEAP-II is a 3-year program starting in 2018 with 28% of the loan allocated to improving power system reliability, 65.4 % of the loan amount will be directed to increasing on-grid access, 3.8 % of the loan for increasing off-grid access, while 2.8% for strengthening the institutions, capacity building and technical assistance. The four areas supported are closely intertwined, as follows:

**Results Area 1:** Improve reliability of electricity supply: The activities under this component will involve distribution system expansion and upgrading of the 30/15kV lines, upgrade of substations and installation of Supervisory Control and Data Acquisition/Distribution Management System (SCADA/DMS system). This improvement will help reduce outages and voltage fluctuations. The relevant indicators for the frequency and duration of outages are the System Average Interruption Frequency Index (SAIFI) and the System Average Interruption Duration Index (SAIDI). Decreases in the frequency and duration of outages and in voltage fluctuations in areas supported by the program will measure the improvement of reliability and quality of services. The indicative amount allocated to this area is US\$76M.

**Results Area 2:** Increase on-grid access for household and productive usages: The main objective is to increase on-grid customer base by connecting additional 51,254 customers in Kigali city to reach the 100% access by 2019, connecting 2,112 productive-use customers, and 140,000 other customers with prepaid meters countrywide. The activities will involve extension and constructing medium voltage (30 and 15kV) distribution lines, constructing additional LV lines, installing distribution transformers, procuring and installing prepayment meters. The number of customers connected to the network would measure the degree of additional access achieved by the program. It is worth mentioning that the expansion and rehabilitation of the distribution network as well as the improvements in reliability under Results Area 1 above will contribute to make more electricity available for consumption by consumers in the Kigali city and other regions of the country under Results Area 2 activities. The indicative amount allocated to this area is US\$177M.

**Results Area 3:** Increase off-grid access to renewable energy: Low-income, isolated rural households will be supported in accessing off-grid solutions such as solar home systems (SHS) to increase access. Activities under this area mainly includes SHS for remote areas of the country with challenging terrain and scattered settlements where grid connection is difficult and where neither the grid nor the private sector distribution channels will reach in the near term. In line with the National Electrification Plan (NEP), the proposed RBF will support selected off-grid service delivery activities, for 124,800 households in selected two (2) provinces (Southern and Western) where the electrification rates are currently below 50%. The number of SHS installed will measure the degree of additional off grid access achieved. To address gender inequality, 52% of people to have access to electricity will be female. The Bank's RBF off-grid area shall be implemented in a manner to ensure complementarity with ongoing private sector led initiatives, and in line with GoR's energy sector policies. The

indicative amount allocated to this area is US\$10.2M.

**Results Area 4:** Institutional strengthening and capacity building: A range of conventional and new skills is required to deliver the SEAP-II. A capacity building and technical assistance programme will address identified specific skills gaps in REG in planning, procurement, program management, contract management, E&S, Engineering design etc. The indicative amount allocated to this area is US\$7.5M.

**Excluded activities under the RBF program:** Consistent with the Bank’s RBF Policy, the following activities will be excluded from the proposed RBF operation: (i) Any activity that will require the preparation of Full Resettlement Action Plan (RAP) and any other high risk/impact activity classified as Category One (1) under the Bank’s Integrated Safeguards System (ISS); and (ii) High-value individual contracts (US\$50M for works, turnkey & supply & installation contracts, US\$30M for goods; US\$20M for IT systems & non-consulting services, US\$15M for consulting services). The following table summarizes the key results

The scope of the Results Areas is summarized in Table 3.1 below.

**Table 3.1: Scope of Results Areas**

Scope Results Area	
Expected Results	Geographic Scope
<b>Results Area 1: Increase power system reliability</b>	
Reduce the frequency and duration of power outages	Countrywide with focus on Kigali
<b>Results Area 2: Increase on-grid access for household and productive-use customers.</b>	
Increase access by connecting 193,000 new customers including 191,254 household and 2,112 productive-use customers	Kigali city and countrywide
<b>Results Area 3: Increase off-grid access to renewable energy</b>	
Increase access by connecting 124,800 new customers with SHS	Western and Southern regions
<b>Results Area 4: Institutional Strengthening and capacity building</b>	
Improved reporting system and training to REG, EDCL, EUCL	REG, EUCL and EDCL

### 3.2 Selected Disbursement Linked Indicators (DLI)

Selected Disbursement Link Indicators (DLIs) have been agreed with the programme implementing agencies (REG/EDCL/EUCL) which will form the basis for disbursement. The DLIs are expected to enhance the focus on key results and improve the reliability of the system as well as increase on-grid and off-grid access. They are a blend of outcome, output, and process indicators. There are in total eight (8) DLIs including one (1) prior result DLI as indicated within Table 3.2 below

### 3.3 Verification Protocol for the programme

In line with the RBF Policy the Borrower will retain an Independent Verification Agency (IVA) on a Terms of Reference acceptable to the Bank to verify the achievement of the DLI results (see Figure 3.1 below). MINECOFIN has identified the Office of the Auditor General (OAG) as the IVA for the programme’s DLIs. The OAG will verify results through Management reports, quarterly and annual reports, financial audits, procedural verification, and physical inspection that will test the accuracy and quality of results claimed by REG. The loan proceeds will be disbursed against submission to the Bank of the OAG’s Program Results Verification Report on the achievement of DLIs.

The indicative timelines for DLI achievement are in fiscal years (July 1 to June 30), for which the annual targets are proposed to be achieved. However, the Government can request the Bank for disbursement when significant results have been achieved. Per Government of Rwanda (GoR) request, the first verification for disbursement is expected to start March 2019 and for

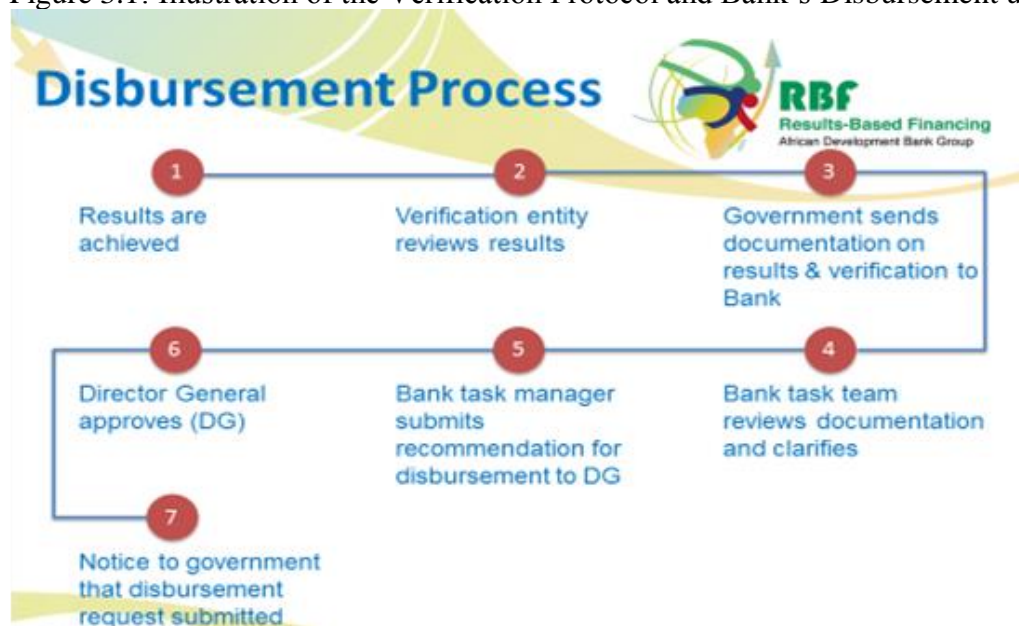


Year 1 (2018/2019). All subsequent disbursements will be on annual basis following the fiscal year, except Year 1 (2018/2019).

Table 3.2- Programme Disbursement Link Indicator (DLIs)

Results Areas and DLIs	Unit	Indicative Loan allocation per area and per DLI	% of allocation per area and per DLI without advance	FY 2018/19 Prior amount	FY 2018/19 Advance amount
Total RBF financing 2018-2022	US million USD	269.89	100.00%	1.50	67.10
				0.56%	25%
<b>Target date for disbursement</b>				<b>Nov-18</b>	<b>Oct-18</b>
<b>Results Area 1 : Increased power system reliability</b>	US million USD	75.64	28.02%	0.00	18.91
<b>DLI-1.1</b> Improve System Average Interruption Duration Index (SAIDI) for 30/15 kv	US million USD	49.16	18.22%	0.00	12.29
<b>DLI-2</b> Installation of Scada DMS	Installation of DMS system	26.47	9.81%	0.00	6.62
<b>Results Area 2: Increase on-grid access for household and productive-use customers</b>	US million USD	176.54	65.41%	0.00	44.14
<b>DLI-2.1</b> Additional number of new household customers connected to the grid of which 52% are women	US million USD	96.92	35.91%	0.00	24.23
<b>DLI-2.2</b> Additional number of productive usage customers connected to the grid	US million USD	32.15	11.91%	0.00	8.04
<b>DLI-2.3</b> Additional length of MV (30/15 kV) distribution lines constructed and or upgraded	US million USD	47.48	17.59%	0.00	11.87
<b>Results Area 3: Increase off-grid access to renewable energy</b>	US million USD	10.23	3.79%	0.00	2.56
<b>DLI-3-1</b> Additional number of new household customers provided with SHS of which 52% are women	US million USD	10.23	3.79%	0.00	2.56
<b>Results Area 4: Institutional strengthening and capacity building</b>	US million USD	7.48	2.77%	1.50	1.49
<b>DLI-4-1</b> Implementation of the approved annual agreed capacity building and technical assistance program	US million USD	5.98	2.24%	0.00	1.49
<b>DLI-4-2</b> Recruitment of an Independent verification agency (IVA)	US million USD	1.50	0.56%	1.50	0.00

Figure 3.1: Illustration of the Verification Protocol and Bank’s Disbursement under the RBF



#### 4. DESCRIPTION OF THE PROJECT ENVIRONMENT

The ESIA conducted a baseline survey of the entire project area of influence and summarized in the following paragraphs;

##### 3.1 Physical Environment

###### Topography

Rwanda’s relief can be divided into four broad categories: the Congo-Nile Ridge, the Central

Plateau, the lowlands of the East and the Bugarama plains.

The Congo-Nile Ridge is dominated by eight giant volcanoes namely Nyamuragira, Nyiragongo, Mikeno, Karisimbi, Bisoke, Sabyinyo, Gahinga and Muhabura (Mehta and Katee 2005). The tallest of these Virunga volcanoes and indeed the highest point in the country is Mount Karisimbi, whose summit elevation is 4507m above sea level. The altitude of the Central Plateau ranges between 2000-1500m. The plateau's relief largely consists of steep hills separated by valleys that plunge by depths of between 15-50m. Owing to the ridge and the plateau's rugged mountainous relief, Rwanda is fondly referred to as 'the land of a thousand hills.'

The eastern lowlands are dominated by a depressed relief, whose altitude undulates between 1500m at its highest elevation and 1 100m at its lowest. The Bugarama Plains located in the south west of Rwanda have an altitude of 900 m and are part of the Great Rift Valley.

### *Climate*

Even though Rwanda is entirely situated within the equatorial zone, it enjoys a moderate tropical climate due to its high altitude, and temperatures average 20°C. Rainfall follows a bimodal cycle although it is generally abundant throughout the year. The impact of rainfall on the programme component activities will be very low.

### *Rainfall*

The rainfall characteristics for Rwanda are known to exhibit large temporal and spatial variation due to varied topography and existence of large water bodies near the country. However, two rainy seasons are generally distinguishable; one centred on March – May and the other on October – December. For the area of concern, rainfall averages in the range of 900-1200mm/yr, as may be observed from the figure below, in the central region of the country. Figure 6.3 below shows the national rainfall distribution within the country

### *Temperature*

The average annual temperature for the intervention area of the Eastern Province will rise slightly above 18°C but not exceeding 25°C, during the dry season, while it might drop to 15°C in the wet season as the figure below indicates. Figure 6.4 overleaf indicates the temperature distribution within country and notably with the beneficiary provinces of the proposed programme.

### *Noise*

No data exist on the present noise situation within the planned areas. However, due to the remoteness of the project site and the long distances to major roads and settlements, noise levels and impacts are considered very low to the project.

### *Hydrology*

Rwanda is endowed with abundant water resources distributed in a very dense hydrological network consisting of 101 lakes covering 149,487 ha, 860 marshlands covering a total surface of 278 536 ha and 861 rivers with a combined length of 6 462 km. However the impact from the planned programme component activities on national hydrology is low and of short duration especially during the construction works.

## **3.2 Biological**

### *Protected Areas*

Rwanda's rich biodiversity is mainly conserved in protected areas (three national parks, natural forests, wetlands). These cover almost 10 per cent of the national territory while the rest of the

country is densely populated. Although Rwanda is a small country, it has a remarkable variety of ecosystems and of flora and fauna. Its location at the heart of the Albertine Rift eco-region in the western arm of the Africa's Rift Valley is a contributory factor. This region is one of Africa's most biologically diverse regions. It is home to some 40 per cent of the continent's mammal species (402 species), a huge diversity of birds (1,061 species), reptiles and amphibians (293 species), and higher plants (5,793 species). The impact on protected areas from the proposed program activities are considered to be low to moderate and of limited duration.

#### *Flora*

Rwanda harbours very diverse flora due to a considerable geo-diversity and a climatic gradient from west to east. The number of vascular plants is estimated at around 3000 species originating from the different bio-geographical regions (Fischer and Killmann 2008). About 280 species of flowering plants from Rwanda are considered to be endemic to the Albertine Rift. Of these endemic species, about 20 are restricted to Rwanda, 50 species confined to Rwanda and Eastern Congo and 20 species found only in Rwanda and Burundi.

#### *Fauna*

Rwanda shelters 151 different types of mammal species, eleven of which are currently threatened and none of which are endemic. Among them are the primates (14 to 16), with half of the remaining world population of mountain gorillas (*Gorilla gorilla berengei*). Others includes the owl-faced monkey (*Cercopithecus hamlyni*), the mountain monkey (*Cercopithecus hoesti*) in Nyungwe, the Chimpanzee (*Pan troglodytes*) in Nyungwe and Gishwati, and the Golden monkey (*Cercopithecus mitis kandti*) found in Volcanoes National Park. There are also about 15 species of antelope, and a wide diversity of species such as buffalo, zebra, warthog, baboon, elephant, hippopotamus, crocodile, tortoise and rare species such as the giant pangolin. Rwanda is one of the top birding countries with 670 different birds having been recorded.

### **3.3 Human Environment**

#### *Population and Demographics*

Rwanda is a densely populated (507 ha/km<sup>2</sup>) compared to other African countries with a population of about 12 million people and a total area of 26,338 km<sup>2</sup>.

Population density is high in all Districts but varies tremendously from one District to another. The least densely populated Districts are found in the Eastern Province (178 in Kayanza, 280 in Bugesera). The most densely populated Districts are the Kigali City's ones: Nyarugenge (2,124), Kicukiro (1,911) and Gasabo (1,234). Rubavu in the Western Province has the highest population density outside Kigali City with 1,039 inhabitants per square kilometer. The population density which was already high in 1978 (183 inhabitants per square kilometer) has more than doubled in 34 years, reaching 414 inhabitants per square kilometer in 2012.

#### *Land use and Tenure*

Rwanda is a small country with total arable land of about 1.4 million ha. Currently, the land tenure system in Rwanda operates in a dual legal system: On one hand, there is: the customary law, which governs almost all the rural land and promotes the excessive parceling out of plots through the successive father-to-son inheritance system. And on the other, there is the written law, which mostly governs land in urban districts and some rural lands managed by churches and other natural and legal persons. This law confers several land tenure rights to individuals such as land tenancy, long term lease and title deeds (particularly in towns).



### *Economic Livelihoods*

Because so many livelihoods depend on agriculture, factors linked to agriculture such as lack of adequate land or non-productive soils are widely seen as a major cause of poverty and hindrance to economic development. The main food crops are bananas, beans, sorghum, sweet potatoes, Irish potatoes, cassava, maize, and rice. Vegetable crops are mainly tomatoes, cabbages, and peas. Crop yields are generally low, but the agro-diversity present in Rwanda is greater than in many other parts of Africa. Commercial crops such as coffee, tea, pyrethrum, and cut flowers also provide important cover and protection functions.

Animal husbandry, especially cattle raising, is an important component of the farming systems in the country. The main areas are the eastern province and southern province.

## **5. JUSTIFICATION AND PROGRAMME ALTERNATIVES**

### *The Do-Nothing or No Programme Alternative*

The No-programme alternative assumes no action is taken to achieve Rwanda ESSP's objectives with all the attendant economic demerits. Furthermore, the Do-Nothing option will mean the following programme benefits will not be realized;

- There would be no temporary employment or supply services and provisions for workers and to contractors during the construction phase,
- Within the respective project areas there would be no opportunities for petty trading and small business service provision along the power line routes,
- Potential beneficiary enterprises such as small industries and other agricultural processing businesses lacking electricity would still be affected,
- Data management with computers and communication facilities like access to internet, charging of mobile phones; electric lighting at night, extended opportunities for work and study would be evidently missed out,
- Socio-economic development would not be achieved if the project is not implemented,
- Generally, employment opportunities that would be created by the programme would be miss out.

### *Selected Programme Areas*

The three programme areas forming the components of the Programme have been careful selected in conjunction with the different Programme Stakeholders to minimize the risk of not achieving the programme outcomes. Furthermore, many of the subprogram component activities were removed because they would result in significant environmental and social impacts which are not supported using the RBF instrument. The proposed beneficiary communities will also see significant economic and social improvements as a result of the extension of the distribution lines.

### *Comparison of Alternatives*

The selected line routes were the most feasible in light of the availability of electricity network in the beneficiary communities, use of the RBF financing instrument and pose the least environmental and social impacts to identified receptors within the programs area of influence and the wider environment. The 'do- nothing' programme alternative is not feasible because the risk of not meeting the Policy objectives of the ESSP and the follow on socioeconomic benefits far outweigh the identified environmental, social and climate change impacts of the programme.

## 6. POTENTIAL IMPACTS

Overall, the environmental impacts scoped and assessed to be associated with the planned programme component activities are deemed to be of ***Low to Moderate in magnitude and limited and/or localized in scope*** requiring site specific mitigation.

Some of the **Program's Environmental Benefits** which are substantial and long-term are listed as follows;

*Benefits from provision of electricity to households and businesses:*

- Reduction in use of diesel or gasoline-powered generators and other equipment such as grain mills, pumps, leading to reduced emissions of air pollutants, greenhouse gases (GHG), and noise
- Reduction in consumption of kerosene for lighting and other uses, resulting in improved indoor air quality.
- Improvements in the social life and general security of the beneficiary communities especially during the night.

Some of the programme's environmental risks and impacts are summarized below;

*Risks from clearing of way leave for distribution lines that cannot be located in the road reserve (10m width for 33 kV, 5m width for 11 kV)*

- Loss of vegetative cover and habitat
- Increase in soil erosion until revegetation
- Plant material removed from site causes GHG emissions and air pollution if burned
- Obstruction of bird movements

*Workplace and health and safety risks*

- Electrocutation hazard during operation of generating plants and installation and maintenance of power distribution lines
- Injury from falls when working at heights, or from falling objects
- Injury or fatality from heavy construction equipment
- Injury or fatality from explosion and fire at gasification plants

*Air Quality;*

The impacts of the programme scope of works under Areas 1, 2 and 3 on local air quality is localized but moderate in magnitude due to the ground works involved which could generate dust within densely populated areas for the planned distribution lines. The following mitigation measures should be considered in line with the mitigation hierarchy;

- The construction contractor shall inspect dust generation from stockpiles of soil, aggregates and vegetative debris.
- Stockpiles shall be covered or watered when necessary. The monitoring, including appropriate actions to prevent dust generation shall be recorded on sheets designed for that purpose.
- The construction contractor shall inspect daily if stockpiles not in use are covered with waterproof nylon material as required in the ESMP.
- EDCL and EARP shall monthly inspect vehicles and engines maintenance to ensure that they are in a fully serviceable conditions to minimize gaseous pollution.

*Noise and Vibration;*

Impact from the noise and vibration to local residents within the beneficiary communities for the last mile distribution lines could be moderate but localized in nature. Prolong noise from site workers and equipment such as pole mounting trucks and idling of lorry engines could impact residents especially the vulnerable such as the elderly, sick and infants. The following

mitigation and monitoring recommendation should be included in any work package in line with the mitigation hierarchy;

- Noise levels along the perimeters of any worksite area shall be monitored periodically or following complaints and recorded to ensure that activities at the site are not exceeding applicable international standards<sup>1</sup>. EDCL and EARP E&S staff of the PIU are responsible for the execution of the monitoring and reporting.
- Each on-site contractor shall daily inspect the use of personal protective equipment and record the results on sheets for that purpose. EDCL and EARP will do bi-weekly inspection to ensure this is executed according to the ESMP.
- EDCL and EARP shall daily inspect that all minor construction work associated with the activities under Area 2 are only carried out during day-time hours.
- EDCL and EARP shall monthly inspect vehicles and engines maintenance of any appointed contractors to ensure that they do not generate excessive noise.

#### *Biodiversity;*

The impact of the planned works under Areas 1, 2 and 3 of the programme is unlikely to impact any areas of significant biodiversity conservation and/or ecosystem services as defined by Operational Safeguard 3. The overall impact on biodiversity is deemed as low to Moderate as most of the beneficiary communities are within urban and peri-urban areas with very limited presence of and requirements for biodiversity conservation. However the following precautionary measures are recommended within the work specific method statements for each contractor's attention;

- Prior to ground breaking works, contractors shall inform their workers of the importance of limiting vegetation clearance. Actions to avoid clearance of native mature trees shall be emphasized. This shall be documented to EDCL and EARP and reported in the quarterly or annual monitoring report and within the ARAP where payment of compensation is required as approval to approve cutting.

#### *Waste Management;*

Impact from site derived wastes from the planned activities could pose low to moderate risk to the beneficiary communities and general environments. Waste streams could include packaging materials including plastics, wire strips and other similar waste streams from electrical materials. The following mitigation measures shall be included in any work specific method statement for the appointed contractor;

The waste management plan will include, but is not limited to the following:

- Required training for workers.
- Identification and segregation of types and quantities of waste.
- Proposed waste management sites.
- Waste management options, with an attention to hazardous waste. The plan will emphasize the use of licensed disposal contractors if available.
- Monitoring and reporting measures.

#### *Emergency Response*

Emergency response arising from spillage of hazardous substances from minor construction related works could pose a low to moderate impacts to identified receptors including surrounding environments but localized in nature. The following mitigation measures (Spill

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<sup>1</sup> World Bank Group General and Sector Specific EHS Guidelines  
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Response Plan) shall therefore be included in the work specific method statement; the spill response plan will include, but is not limited to the following:

- Identification of hazardous materials used on the construction- and drilling sites.
- Storage of hazardous materials in a safe environment (secondary containment).
- Availability of spill kits.
- Action in case of spills.
- Monitoring measures.
- Responsible persons.
- Required training of workers.

### **Conclusion on environmental risks**

Nearly all of the identified environmental impacts and risks can be easily managed through the development of project specific and robust ESMP, best practice Occupational Health and Safety mitigation measures and application of good design and construction practices. The key to managing workplace health and safety risks is supervision and enforcement of adherence to rules and procedures. All construction contracts must include workplace health and safety requirements and compliance monitoring and reporting.

REG's safeguard team in EDCL's and EARP have developed several Environmental and Social Impact Assessments (ESIAs) for the Phase I of the SEAP Programme which broadly complied with the Bank's ISS requirements. All the ESIAs have been reviewed and approved by the RDB via the issuance of EIA permits for the sub projects. However this SEAP II programme requires national coverage and therefore EDCL and EARP will require capacity support in personnel and periodic health and safety training to effectively implement the programmes safeguard arrangements including preparation of several ESIAs and ESMPs for the various work packages and supervision of their implementation by the successful contractors. One (1) dedicated FTE environmentalist position have been proposed to help with the staff capacity for the SEAP II programme to ensure effective implementation of the ESIA and ESMPs.

## **8.1 SUMMARY OF SOCIAL BENEFITS AND RISKS**

The anticipated negative social impacts from the planned Programme component activities are not expected to be significant provided that land and way leave acquisition process are conducted in a manner consistent with the AfDB's Operational Safeguard 2. However, the Social benefits, on the other hand will be significant and of long term in nature.

The main low to moderate **Social impacts** from the extension of the MV and LV distribution lines of the programme are listed as follows;

### *Risks from land and way leave acquisition:*

- PAPs might lose part of their livelihoods in the process of clearing the wayleave, such as their cash crops, mainly cashew nuts, banana, mango, coconuts and other fruit bearing trees.
- PAPs are unable to replace land or assets that were acquired, because of inadequate amounts of compensation, or pressure to "contribute" land voluntarily
- PAPs experience diminished quality of life following completion of the last mile extensions.
- Physical cultural resources may be damaged or encroached on

*Risks from provision of electricity to households and businesses:*

- Risk of electrocution from substandard internal wiring, meter tampering, illegal connections, or lack of knowledge of electrical systems
- Risk of fire from faulty internal wiring, meter bypass, or illegal connections

*Risk that community benefits ('productive uses') are not sustainable*

- Electric service for social services such as schools, health centres, and water pumps under management of the Local Authority may be interrupted if central government has not budgeted for payment to REG (EUCL).
- Demand may exceed supply, especially in some of the peri-urban and small towns that will eventually grow into big urban centres due to several government policies including large scale infrastructure development such as road and railways.

*Cultural Heritage;*

Impact to cultural heritage from the planned programme works especially under Areas 1, 2 and 3 could be moderate in high in magnitude but limited in scope. The ground breaking works for the erection of the distribution poles could unintentionally be sited on sites of significant historical/cultural importance (such unmarked grave/tombs and idols for worship or shrines) to families within the beneficiary communities. The following mitigation measures shall be included as part of the work specific method statements for the works;

*Change Finds Procedure*

The main objective of the *Chance Find Procedure* is to ensure correct action is taken to minimize damage or loss in case unknown features/objects are encountered during programme activities. In case unknown features or objects are encountered especially during ground breaking works, the procedure should stop the work and require investigation by an qualified and approved archaeologist.

*Procedure upon discovery*

- Upon discovery of features or objects that may be of archaeological or historical interest, the responsible contractor shall stop any work that may damage or alter the position of the observed feature or object.
- When work has been stopped, the contractor shall immediately report to a named contact in EDCL/EARP who shall seek advice from an archaeologist on the next steps.
- The contractor shall submit a Chance Find Report within one day from the find to EDCL/EARP. The report shall include the following information:
  - Date and time of discovery
  - Location of the discovery
  - Description of the observed feature or object
  - Temporary protection measures
- EDCL/EARP shall send local cultural authorities the report immediately.
- The contractor shall follow guidelines from local cultural authorities. In case cultural authorities fail to give guidelines within two days from the finding, EDCL/EARP may have the authority to instruct the contractor to remove objects that were found or undertake other mitigation measures and resume work. Such additional work can be charged to the contract.
- All delays caused by decisions of local cultural authorities cannot be charged to the contract. In such cases, the contractor can claim compensation according to Rwandan laws. The contractor will be entitled to establish an agreement with the cultural authorities for additional services.
- EDCL/EARP can issue an instruction to recommence the work following a written approval from cultural authorities.



### *Traffic and Transport*

The overall impact from road traffic and transport impacts is deemed to be low to negligible due to the small number of work gang involved. Standard road safety management procedures in line national and international best practice will suffice mitigation of the potential risks.

### *Landscape and Visual*

The overall impact to landscape and visual is low.

The main significant and long term **Social benefits** from the extension of the MV and LV distribution lines of the programme are listed as follows;

#### *Benefits from provision of electricity to households:*

- Reduction in respiratory diseases caused by indoor air pollution from kerosene lighting
- Electricity for refrigeration, water pumping, entertainment, communication, and computers.
- Lighting for students doing homework
- Generally improved quality of life
- Reduced time and energy spent by women at water pumping stations and rivers/streams
- Opportunities for women and youth to open new business
- Reduction in time in the girl child fetching fire wood for cooking and lighting.

#### *Benefits from provision of electricity to businesses:*

- Improved workplace health conditions because of reduction in use of diesel or gasoline-powered generators and other equipment such as grain mills, pumps, leading to reduced emissions of air pollutants, greenhouse gases (GHG), and noise
- Higher productivity
- Longer business working hours
- Reduced cost of doing business

#### *Benefits from provision of electricity to communities:*

- Improvements in operation of schools, clinics, and government offices
- Street lighting improves convenience, safety and security
- Electric pumps reduce effort needed to fetch water.

## **GENDER**

This project has been categorized as Category 3 as according to the Bank's Gender Marker System. The 2010 National Gender Policy promotes gender equality and MININFRA developed the Infrastructure Gender Mainstreaming Strategy in 2017. Under the SEAP II, gender-differentiated considerations will be mainstreamed as part of the utility operations and increased access to electricity. Women, girls and children will disproportionately benefit from these provisions as well. There is no readily available information to estimate the exact number of female headed households currently connected on the grid in order to assess the additional number that will benefit as a result of the SEAP II Programme. However, it is estimated that 52% of woman<sup>2</sup> will have access to electricity under the program. SEAP II will ensure results are disaggregated where relevant and capacity development activities target female and male staff. The project will also dedicate resources for the development of gender mainstreaming

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<sup>2</sup> Data from the 4<sup>th</sup> Population and National Housing Census data of female to male ration, 2012.

programmes, guidelines and action plan to strengthen procedures within REG to promote equitable access allocation of benefits and impacts of rural electrification.

Women, girls and children will disproportionately benefit from these provisions as well. Supply of electricity in the health posts and clinics translate to better hygiene, safer deliveries, and better care of sick children. In schools it makes it possible for children (especially the girl child) to have access to computers or other devices that will not work without electricity.

Women and girls are the primary fetchers of water and firewood. Electric pumps will make their daily tasks less strenuous; moreover, it will allow for access to more water, helping the health of the family in general. Street lighting makes walking at night safer for women and girls. Access to power eliminates the time spent by the Girl Child in looking for firewood.

The above benefits notwithstanding, the following risks to equitable access to the planned programme benefits requires attention:

*Risk that vulnerable groups will not share equitably in project benefits provision of electricity to communities:*

- Female-headed households may be disadvantaged in obtaining access to electricity (statistics show that this normally happens in urban areas)
- Persons with low income – the poor, elderly, or handicapped – may not be able to afford the cost of connections or of proper internal wiring
- Vulnerable groups may not be able to benefit fully from the provision of electricity due to their life style (for instance pastoralists).

### **Conclusion on social risks**

Most of these social risks can be mitigated, through education on hazards of electricity, house wiring inspections, education on environmental conservation and management of catchment areas, and programs to assist the vulnerable groups. Particular care will be needed to carry out acquisition of land and wayleaves in accordance with the national system and AfDB's Operational Safeguard 2 through the preparation of ARAPs. Project designs should take into consideration sensitive cultural and spiritual places, with full consultation and participation of the affected communities and, where possible, avoid them. Finally, there should be an official commitment from districts for provision of budget for the electrical bills for social infrastructures called productive usage under the programme. All of these mitigation measures shall be followed by a quarterly monitoring programme and ARAP Completion Audits to assess their compliance with the applicable legislation and their implementation effectiveness.

## **7. ENVIRONMENTAL MANAGEMENT PLAN (ESMP)**

The limited SESA has developed an ESMP to manage the most common construction related environmental and social impacts from the programme component works. Additional site specific ESMPs shall be developed by EDCL and EUCL to guide the contractors during the construction phase of each work package. The ESMP contains mitigation measures developed in line with the mitigation hierarchy with their associated estimated budget (US\$ **2,059,600**), names of the responsible implementing units/agencies, monitoring regimes for the adopted performance indicators and evaluation to assess both compliance and performance as summarized in Table 7.1 overleaf;

Table 7.1: Environmental and Social Management Plan and cost

Item #	Mitigation Measure	Responsible Entity	Deadline	Monitoring Frequency	Budget
<b>1. REG Develop and Implement an ESMS</b>					
1.1	Develop E&S Policy for REG	REG management	During first year of RBF Implementation	Quarterly monitoring and Verification Report	US\$ 30,000
1.2	Set objectives and targets consistent with E&S Policy.				US\$ 30,000
1.3	Define roles and responsibilities for persons responsible for implementation of the EMS and provide the necessary awareness training to develop and build capacity.				US\$ 50,000
1.4	Develop document control procedures and templates to ensure quality of data entry for the EMS system.		During second year of RBF Implementation		US\$ 50,000
1.5	Develop operational control procedures for operations that are associated with the identified environmental and social aspects of TANESCO's daily operations and those of their approved contractors and suppliers.				US\$ 50,000
1.6	Develop a monitoring programme and system which will allow performance evaluation and review of the EMS for continuous improvement.				US\$ 50,000
1.7	Define performance monitoring indicators and how to measure them to assess performance of the EMS.				US\$ 40,000
1.8	Carry out environment awareness trainings on EMS for both Senior and operational staff of EDCL/EARP and EUCL and other relevant staff of approved contractors and suppliers.				US\$ 50,000
<b>2. Road Traffic Impact Management</b>					
2.1	Develop and implement a road traffic and community safety management plan as part of each work package contract prior to commencement of the works under Areas 1, 2 and 3.	EDCL and EARP safeguard teams assisted by Contractor.	Prior to commencement of installation of the distribution units on site	Quarterly monitoring and Verification Report	US\$ 40,000
<b>3. Waste Management</b>					
3.1	Develop and Implement waste management plan as part of each work package contract. Special attention will be taken to minimize and reduce the quantities of solid waste produced during site preparation and construction. Restriction of burning any vegetation and combustible waste at the site. Reusable inorganic waste (e.g. excavated sand/soils) will be stockpiled away from drainage features and used for in filling where necessary and/or possible. Unusable construction waste, such as damaged pipes, formwork and	EDCL and EARP safeguard teams assisted by Contractor.	Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and Verification Report	US\$ 40,000

Item #	Mitigation Measure	Responsible Entity	Deadline	Monitoring Frequency	Budget
	<p>other construction material, must be disposed of at an approved dumpsite. Provision of solid waste receptacles and storage containers, particularly for the disposal of plastic bags and boxes, so as not to block drainage system and to prevent littering of the site. Other measures for management of hazardous wastes shall include Collection, storage and disposal of hazardous wastes under a strict regime in line with Government requirements for management of such wastes. ,</p> <p>The plan will emphasize the use of licensed disposal contractors if available.</p>				
<b>4. Emergency Response Plan</b>					
4.1	<p>Develop and implement an emergency response management plan as part of each contract work package. Maintaining spill response kits with each work gang and at the site office (where applicable), Preparation and display on site spill response procedures and Training of workers on spill response and management.</p>	EDCL and EARP safeguard teams assisted by Contractor	Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and Verification Report	US\$ 40,000
<b>5. Impact to cultural heritage</b>					
5.1	Implement the Chance Find Procedure as part of each work package contract.	EDCL and EARP safeguard teams assisted by Contractor	Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and Verification Report	US\$ 40,000
<b>6. Impact from Air Quality, Noise and Vibration</b>					
6.1	Implement standard dust suppression methods as part of each contract work package for works under Areas 1, 2 and 3.	EDCL and EARP safeguard teams assisted by Contractor	Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and number of complaints against dust and noise	US\$ 30,000
6.2	Implement standard Noise and vibration abatement methods as part of each contract work package for works under Areas 1, 2 and 3. These shall include but not limited to Restrict noisy construction activities to normal working hours (8am - 5pm). Inform local residents beforehand, via notices and advisories, of pending noisy periods and solicit their tolerance well before the commencement of piling works. Workers operating equipment that generate noise should be equipped with noise protection gear including ear muffs and plugs. Workers operating equipment generating noise levels greater than 80 dBA continuously for 8				US\$ 30,000

Item #	Mitigation Measure	Responsible Entity	Deadline	Monitoring Frequency	Budget
	hours or more should use earmuffs whereas those experiencing prolonged noise levels of 70 - 80 dBA should wear earplugs. Limit pickup trucks and other small equipment to an idling time of five minutes, observe a common-sense approach to vehicle use and encourage workers to shut off vehicle engines whenever possible. All construction equipment should be regularly inspected and serviced.				
<b>7. Vegetation Clearance</b>					
7.1	Minimize vegetation clearance especially within peri-urban and rural areas through selection of sites for the poles of the last mile distribution line works.	EDCL and EARP safeguard teams assisted by Contractor	Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and Verification Report	US\$ 40,000
<b>8. Water Pollution</b>					
8.1	Deposition of excavated materials away from all watercourses and rivers. Storage of bulk fuel, drums and other chemicals in secured storage areas to prevent oil pollution. Provision of drip-pans for catching oil to vehicles being fueled or repaired, and stationery machinery. New and waste oil and fuel to be stored carefully and safely on-site until used, or removed from site to an appropriate facility for its safe disposal, or re-used in an environmentally safe and sound procedure. Except in an emergency, no vehicle will be fueled, lubricated or repaired except within the bounds of a project camp or depot. Similar precautions will be applied to paint or other chemicals or potentially toxic materials of any sort. Prohibition of washing vehicles in any watercourses. Prohibition of disposal of any waste material in an uncontrolled manner and especially into the rivers. Providing adequate sanitary facilities for workers located in carefully selected areas to avoid underground water contamination	EDCL and EARP safeguard teams assisted by Contractor.	Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and Verification Report	US\$ 40,000
<b>9. Worker occupational and Community health and Safety</b>					
9.1	Engage only those workers that are trained to operate specific machines and equipment. Proper signs on site to warn workers of safety requirements as regards machines with moving parts and other equipment at site. Provide a First Aid box and have a trained person to handle site emergencies and	EDCL and EARP safeguard teams assisted by Contractor	During implementation but Prior to commencement of the works under Areas 1, 2 and 3.	Quarterly monitoring and Verification Report	US\$ 40,000



Item #	Mitigation Measure	Responsible Entity	Deadline	Monitoring Frequency	Budget
	incidences. Provide safe scaffoldings and railings for workers working at heights. Proper specialized training should also be provided for such workers. Provide washing (enclosed bathroom) and toilet facilities at site with both drinking and washing water. The number of workers engaged determines the number of the toilets and bathrooms provided. Providing personal protective equipment (PPE) such safety helmets, safety masks, safety boots, uniforms and hand gloves to the workers. Using well-maintained equipment by qualified personnel. Train workers on work site safety issues Monitor and control illegal connection of electricity. The substation site shall be fenced and provided with safety signs. Emergency assembly points will be appointed at the substations site prior to commencement of construction work. Educate local populations to safe behavior in the presence of high voltage power lines. Ensure the developments of local and regional emergency plan and local major outbreaks in case of infrastructure breakdowns, especially near roads or residential areas.				
9.2	Conduct Training on construction health and safety, first aid, firefighting, emergency response drills, use of PPE including HIV (estimated to cover 1749 persons over 3yr @ US\$400 per head)				US\$ 699600
<b>10. Recruit Dedicated safeguard staff to improve on capacity for SEAP II Implementation</b>					
10.1	Recruit one (1) FTE Environmental safeguard specialist for the EDCL/EARP team	REG Management	Before end of first Quarter following Programme approval by the Bank	Verification Report	US\$ 300,000
10.2	Recruit one (1) FTE Social safeguard specialist for the EDCL/EARP team				US\$ 300,000
<b>11. Develop Gender Policy</b>					
11.1	Develop Gender Policy to mainstream gender outcomes into the SEAP II Programme	REG Management	By November 2019	Study Report approved by the Board	US\$ 20,000
<b>Grand Total</b>					<b>(US\$) <u>2,059,600</u></b>

## 8. ENVIRONMENTAL AND SOCIAL MONITORING PROGRAM

The Environmental and Social Management Plan will be subject to monitoring by both the PIU, contractors and bank supervision team. The monitoring plan is complementary to the audits, inspections and reporting activities defined in the framework for implementation of the ESMP as summarized in Table 7.1.

## 9. ESMP IMPLEMENTATION ARRANGEMENT AND TRAINING AND CAPACITY DEVELOPMENT

### PIU

REG and its two (2) subsidiary entities EDCL and EUCL will be the PIUs for the SEAP-II programme. Two (2) dedicated staff (one environmental specialist and one sociologist) shall be recruited to screen, assess and implement any designed management plans for the programme component activities. Work package specific ESMPs shall be developed by EDCL and EARP to guide the contractor to comply with ISS and national requirements. The ESMPs shall be submitted to the RDB for approval and permitting to allow regular supervision monitoring by both the REMA and Bank Safeguard team. EDCL and EARP shall also prepare ARAPs where required to manage any programme related land acquisition process to ensure compliance with the ISS.

The PIU shall supervise the Contractor to ensure effective implementation of the ESMP. The PIU will prepare quarterly reports on the overall ESMP and ARAP implementation including the performance and compliance with the Construction Contractors' ESMP which will be submitted to the Bank and other stakeholders for review and compliance assessment.

REG will also establish a Program Technical Unit (PTU) to oversee the day-to-day implementation of the RBF and facilitate collection and collation of evidence of achievement of DLIs. The PTU shall comprise key specialists including REG Head of Planning as the Secretary, Head of EARP as Chairperson, EDCL Director of Primary & Social Energies Department, EDCL Director of Energy Planning, EUCL Director of Operations, REG Head of Quality Assurance, EDCL Head of Procurement, REG Head of M&E, REG Head of Human Resources Development, and REG Financial Management.

### Contractors

The Contractors shall develop work specific ESMPs monitor their compliance with the Construction ESMPs. The Contractors will perform routine (monthly and quarterly reports to be shared with the bank) monitoring reporting using pre-established checklists.

### Government

MININFRA, jointly with the Ministry of Finance and Economic Planning (MINECOFIN) will provide overall oversight and strategic guidance. MININFRA generally supervises REG project development and implementation activities and coordinates DP activities through the Energy Sector Working Group (SWG) to ensure efficiency in sector planning and the use of resources.

***ESMP Induction Training and Awareness:*** this training should be for visitors or individuals who do not have direct roles or responsibilities for implementing the ESMP, and should cover basic Project environmental and social commitments.

***ESMP Management Training and Awareness:*** this training focuses attention on management, covering key aspects of the ESMP and providing an overview of the Project's environmental and social impact management expectations and the supporting processes and procedures prescribed in the ESMS to meet performance expectations.

***ESMP Job-specific Training and Awareness:*** job-specific training should be provided to all personnel who have direct roles and responsibilities for implementing or managing

components of the ESMP. This training should also include all people whose specific work activities may have an environmental or social impact.

### ***Estimated Budget for ESMP Implementation***

To effectively implement the mitigation and monitoring measures recommended in the ESMP, a total estimated cost of **USD\$ 2,059,600** has been budget exclusive of additional budget to be included within the Contractors costs for supervision. The cost of mitigation by the EPC Contractor shall be included in the contract as part of the project implementation cost.

## **10. PUBLIC CONSULTATION AND DISCLOSURE**

Stakeholder consultation and participation has been initiated mainly with the government programme development partners during the SEAP II Programme design. This includes REG and its subsidiary members EDCL and EUCL, MININFRA, MINICOFIN, RDB, REA, OAG, RURA, RDB and REMA (See Annex 2 for details of consultation). EDCL and EUCL shall develop project level Stakeholder Engagement Plan to steer the consultation with potential affected communities and other interested parties during programme implementation. This will allow provision of updates, changes and receipt of new concerns to be addressed by the PTU.

### ***Grievance Redress Mechanism***

EDCL and EUCL shall develop a project specific Grievance Redress Mechanism (GRM) that will be used to facilitate receipt and management of programme work specific complaints prior to commencement of the programme works especially for the proposed works under Areas 1, 2 and 3 of the programme.

EDCL's existing GRM which it has used for management of other similar last mile distribution for the parent SEAP I Project works shall be enhanced and sustained on this Programme to address all potential concerns of both Affected and Interested parties for especially for the planned scope of works under Areas 1, 2 and 3.

## **11. CONCLUSION**

This SESA Summary report responds to the environmental assessment requirements of Rwanda's EIA regulations and the African Development Bank's Integrated Safeguard System for the Results Based Financing Instrument. Most of the anticipated adverse impacts associated with the programme component activities can be readily managed to acceptable levels with implementation of the recommended mitigation measures within the ESMP. In general, the proposed programme component activities will result in an appreciable benefits to the country and create opportunities for both social and economic developments.

The following actions are recommended for completion prior to commencement of site construction works;

- ✚ *An Abbreviated Resettlement Action Plan (ARAP) shall be developed where required to guide any subprogram related land acquisition.*
- ✚ *Development of robust SEP incorporating a GRM to address construction related concerns from the Affected Communities and Interested Parties. The SEP shall include Community Liaison officers who will serve as first point of contact for the Affected Communities.*
- ✚ *Development of an Environmental and Social Management System (ESMS) by REG to mainstream environmental and social due diligence and management throughout its day to day operation via its two subsidiary units of EDCL and EUCL.*

## ANNEX 2: LIST OF PERSONS MET AND CONSULTED

Consultations were held in Kigali during the Appraisal mission of the Bank with the following stakeholders and persons:

List of Persons Met at Development Partner Offices				
Name	Position	Institution	Email	Phone
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## **REFERENCES AND CONTACTS**

*Draft Report, Limited Strategic Environmental and Social Assessment Report for the Results Based Financing Rwanda Scaling Up Energy Access II Programme, African Development Bank, August 2018.*

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