1. Country and Sector Background
Rwanda has made remarkable progress since the 1994 genocide and civil war. Peace and political stability have been re-established, reconciliation efforts are continuing, and democratic institutions and processes are being strengthened. Poverty and social indicators have also improved. However, infrastructure bottlenecks in the urban areas and limited access in the rural areas have emerged as a significant constraint to continuing economic growth and human capital development. The Rwanda Economic Development and Poverty Reduction Strategy (EDPRS, 2008-2012) therefore targeted to support Economic growth by improving infrastructure service provision – especially transport, power, and communications. The original project approved in June 2010 have helped launch the national electricity access rollout program (EARP) that has supported increase of electricity access from 6 percent in 2009 to about 13% by mid-2012. The proposed Additional Financing (AF) will support a portion of the second Rwanda Economic Development and Poverty Reduction Stagey (EDPRS 2) whose main objective is “to increase the quality of life of all Rwandans through rapid and sustainable economic growth and accelerated poverty reduction”. A core to the country’s economic transformation and rural development is increased access to modern energy services as energy is an important input to all sectors of the economy; providing electricity to industry, commerce, agriculture, and important social services such as education and health.

2. Objectives
The project development objective is to improve access to reliable and cost effective electricity services for households and priority public institutions.

3. Rationale for Bank Involvement
The original project has been an important catalyst in accelerating the Rwanda Electricity Rollout Program. The annual increase in electricity access has gradually evolved toward the
current annual rate of new connections, starting from about 23,000 in 2008 to about 100,000 in 2012. Given the significance of the energy sector as a key contributor to economic growth and the importance and urgency the client attaches to rapid scale-up of access both in rural and urban areas, the objectives of the additional financing are in line with the objectives of improved access to and quality of infrastructure services of the Country Assistant Strategy (CAS 2009 to 2013). Improved infrastructure is the core to the objective of the CAS, aiming to contribute to EDPRS 2 objective of increasing the quality of life of all Rwandans through rapid and sustainable economic growth and accelerated poverty reduction. In addition, the project is aligned to the World Bank’s Regional Infrastructure Action Plan focus on expanding access to infrastructure services such as increasing energy access for the poor by extending electricity access to community-based institutions used by the poor, such as schools, clinics, and hospitals.

4. **Description** – The project components include:

**Component A - National Grid Rollout** - Project investments will target areas identified during the EARP access network planning that would be suitable for grid connection following a least-cost prioritization model. The AF will scale-up the following sub-components: (a) Grid intensification in Urban and peri-urban areas; (b) Electrification of additional districts and sectors including MV extensions and LV reticulation; (c) Backbone MV/HV grid strengthening, improved operational capacity and service network expansion.

**Component B - Green Connections** - The “green connections” component will continue to be driven by dual motives—affordability and efficiency. The proposed AF would support a range of activities to scale up affordability for the consumers, energy efficiency and productive uses. A connection policy has been prepared and forms the basis of the cost structure related to the buy down of connections costs for households enabling staggered payments. A similar cost structure has been developed for the increased uptake of Solar Water Heaters (SWH), initially targeting substitution of domestic electric heaters. To enhance the project impact related to energy efficiency and grid electricity substitution, additional activities under this component include: (i) efficient lighting for public buildings and street lighting; and (ii) SWH systems for public and commercial buildings targeting hospitals/health centers and hotels respectively.

**Component C - Technical Assistance, Capacity Strengthening, and Program Implementation** Support provides the technical assistance required to support project implementation, the SWAp framework and process, institutional development and sector strategies.

5. **Financing**

<table>
<thead>
<tr>
<th>Source</th>
<th>($m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BORROWER/RECIPIENT</td>
<td>6.6</td>
</tr>
<tr>
<td>International Development Association (IDA)</td>
<td>60</td>
</tr>
</tbody>
</table>

**Total** 66.6

6. **Implementation**

Rwanda Energy, Water and Sanitation Authority (EWSA) is the project Implementing entity.

7. **Sustainability**

Several elements of the project design and intervention will contribute to enhancing sustainability and these comprise: (i) near-term actions to strengthen EWSA to effectively
undertake the grid rollout; and (ii) actions to ensure continued commercial viability of EWSA in the medium term. The Bank team will continue to provide close supervision during the course of project implementation, including streamlining and strengthening the implementation by building the capacity of key participants and stakeholders to drive it.

8. Lessons Learned from Past Operations in the Country/Sector
The project design reflects lessons of experience from the Bank’s substantial engagement in Rwanda’s energy sector to date, and more generally from Bank-wide experience with national scale-up programs for electricity access and include: (i) the investment program is anchored by a well prioritized and planned least cost rollout plan driven by the EDPRS targets and guided by multi-sectoral developmental priorities of Rwanda; (ii) an overall financing policy for the program that strikes a measured and workable balance between affordability to beneficiaries, limited availability and opportunity cost of funds for investment in Rwanda, while also ensuring the commercial viability of EWSA and overall program sustainability; (iii) series of targeted interventions to lower the investment costs of the program and enhance affordability of connection costs to more beneficiaries as well as measures to help lower their electricity bills via energy efficiency measures.

9. Safeguard Policies (including public consultation)
A Resettlement Policy Framework (RPF), which sets out the guidelines for the resettlement action plans (RAPs) to be prepared for any subproject that triggers the Involuntary Resettlement Policy, was prepared and disclosed at the World Bank InfoShop and in-country at the RECO HQ and corporate website on 2 February 2009 for the Original Project, and continues to be appropriate for the additional financing. The disclosed RPF addresses any social impacts on vulnerable or marginalized peoples that may arise as a result of the limited land takings (e.g., for utility pole placement) that would be associated with the extension activities. The project is expected to continue to have significant positive effects both for households that directly benefit from a connection and for society as a whole. A majority of the country’s schools, health centers, and local administrative offices will be able to offer improved services with electricity access. The principal objective of the project is to make the benefits of electrical energy accessible, on an equal basis, to people who live near the existing grid and who choose to obtain those benefits, the project is expected to achieve the social development outcome of inclusion. A draft Socio-Economic Survey of a random sampling of project beneficiaries, among the Vulnerable Persons (elderly, low-income, widows, etc) has been prepared, to measure increases in welfare brought by the provision of electricity access. Other social impacts resulting from construction will be addressed through the existing Environmental and Social Management Framework (ESMF) that was also prepared under the Original Project.

In keeping with World Bank Operational and Procedural Policies, specifically OP 4.01, an Environment and Social Management Framework (ESMF) was prepared for the Original Project and will be applied in the context of the additional financing. The ESMF establishes a mechanism to determine and assess future potential environmental and social impacts of EWSA’s planned investments and activities under the proposed project. The ESMF outlines a sample Environmental Management Plan (EMP), outlining the measures that will be taken to mitigate the potential adverse impacts detailed above. It prescribes measures for: (a) screening (i.e., determining potential adverse environmental and social impacts), (b) mitigation, (c)
monitoring, and (d) institutional arrangements to be undertaken during planning, design, procurement, construction, and post construction stages of the project activities to be financed. These measures will eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. A draft Strategic Environmental Assessment has also been prepared that, once approved, will serve as an overarching document for additional sub-projects. A short site-specific EMP will still be prepared for all sub-projects. As with the Original Project, the AF is likely to have a positive impact on the environment in Rwanda. Any adverse impacts on the environment are not expected to be significant. The project will not pose major or important risks to biodiversity, natural habitats, and wetlands as it will not fund activities in protected areas, national parks, or wetlands.

10. List of Factual Technical Documents

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