Program Information Document (PID)

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Public Disclosure Authorized

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Rwanda	P173882	Rwanda Energy Supplemental DPO (P173882)	P169040
Region	Estimated Board Date	Practice Area (Lead)	Financing Instrument
AFRICA	28-Apr-2020	Energy & Extractives	Development Policy Financing
Borrower(s)	Implementing Agency		
MINECOFIN	MININFRA, MINECOFIN		

Proposed Development Objective(s)

The Program Development Objective (PDO) of the proposed operation is to enable fiscally sustainable expansion of electricity services in Rwanda. The proposed operation is built around two pillars: (i) containing the fiscal impact of the electricity sector; and (ii) improving the operational efficiency, affordability, and accountability of electricity service.

Financing (in US$, Millions)

SUMMARY

Total Financing	56.10

DETAILS

Total World Bank Group Financing	56.10
World Bank Lending	56.10

Decision

B. Introduction and Context

Country Context

1. **The proposed program represents a supplemental development financing of US$56.1 million equivalent to the Third Rwanda Energy Sector Development Policy Financing (DPO-3; P169040) approved by the World Bank Board on August 29, 2019.** DPO-3 was the third and final operation under a three-year program (3 x US$125 million) with the objective of enabling a fiscally sustainable expansion of electricity services in Rwanda. The proposed supplemental financing aims to mitigate the impact of the ongoing COVID-19 crisis on the reform program supported by DPO-3. The COVID-19 crisis may result in a substantial decline in economic growth in Rwanda, which will have direct and indirect impacts on the overarching objective of the DPO series to contain fiscal transfers to the energy sector as a percentage of the gross domestic product (GDP). Furthermore, the crisis, with its likely impact on the affordability of electricity services and the government's ability to invest in expanding the electricity infrastructure, may also derail Rwanda's ambitious electrification program.

2. **The COVID-19 global pandemic is causing an unprecedented decline in economic activity across the world and is threatening Rwanda's development agenda.** The exponential rise of the COVID-19 pandemic from one case in China in December 2019 to over a million cases across 190 countries by early-April 2020 has swiftly dampened economic activity. A global recession of the scale of the 2007-08 financial crisis, or worse, is anticipated for 2020. COVID-19 reached Rwanda in mid-March 2020, and as of April 6, 105 cases were recorded. As of March 27, the government had ordered all nonessential businesses to close, suspended air travel and travel between cities, and banned nonessential movement outside the house. This has brought most economic activity in Rwanda to a halt.

3. **The economic, social, and poverty impact of the COVID-19 pandemic in Rwanda could be far-reaching and will require immediate and targeted action from the Government to minimize its extent and intensity.** The coronavirus pandemic poses serious economic, social, and public health threats to Rwanda. Even though the COVID shock is expected to be transitory, the overall adverse economic impact on Rwanda will be substantial. The growth rate for 2020 is expected to decelerate to about 5 percent, with significant downside risks depending on the extent of COVID-19's spread in Rwanda and any delays in recovery of international flows of goods, services and people. Growth could be substantially lower and social and poverty impact substantially worse if there were going to be widespread cases in Rwanda, which would overwhelm the health sector and exact even more toll on economic activities. Containment of COVID-19, including immediate investments in health systems, and mitigation of social impact of the public health crisis, will require substantial fiscal resources.

4. **The economic performance of Rwanda prior to the pandemic had been robust, and the country has continued to make substantial progress towards the development objective of the DPO series.** In 2018, the economy expanded by 8.6 percent, the highest growth rate on the continent and well above Rwanda's average growth of the past 10 years of 7.2 percent. Investments were the main driver of growth, expanding by 23.5 percent and supported by strong public investments. After stagnation in 2016 and 2017, private consumption also grew by 6 percent. Under the DPO-supported reform program, the Government of Rwanda (GoR) continues to make impressive progress towards accomplishing the development objective. The GoR took follow-up actions to advance the reform agenda after Board approval of the last operation in the DPO series, including another round of electricity tariff reform in January 2020, as well as approval and setup of a new multi-donor program to pool and leverage concessional financing for grid and off-grid electricity access. In terms of results, electricity access rose to 54 percent nationwide (39 percent on-grid and 15 percent off-grid) in February 2020, up from 40.7 percent in September 2017, while system losses declined from 22 percent to 19 percent. Electricity reliability indicators improved dramatically over the same time frame and already outperform the targets set

for the series for 2021. Fiscal transfers to the electricity sector remained below 2 percent of GDP, with over 90 percent taking the form of grants for public investment, mainly for electrification. However, this progress of the energy sector modernization and reform program supported by the parent DPO series is at risk due to the economic consequences of the pandemic.

5. **The energy sector in Rwanda will be deeply impacted by the crisis at a time when maintaining reliable electricity services will be critical to ensure public service delivery, to partially mitigate the economic slowdown, and to ensure that the gains in energy access for the poor are sustained.** The measures taken to contain the spread of the pandemic will restrict the utility's ability to restore supply disruptions. In addition, a decline in electricity demand and in the ability of consumers to pay electricity bills will deteriorate the utility's financial situation, further impacting its ability to maintain reliable electricity supply. This will compound the impact of the crisis on industrial and commercial activities, and on the delivery of healthcare and other essential public services that depend on electricity, causing ripple effects across the economy and society. The supply of off-grid electricity will also be strongly hampered as the low-income households, affected by the crisis, will find it hard to make payments to service providers. Besides, the off-grid electricity service providers are also typically small firms with little access to credit facilities and fragile supply chains. Many of them may not survive the financial impact of the crisis to sustain operations post-crisis. Timely financial intervention in the energy sector will be imperative to maintain reliable supply of grid-electricity, mitigate the impacts on off-grid electricity services, and ensure that the sector is stable to jump start post-crisis recovery of the economy.

6. **The supplemental financing will enable the GoR to prepare a timely fiscal response to the economic shock from the COVID-19 pandemic, to put in place platforms for policy development and coordination of prevention and preparedness, and to safeguard the reform agenda supported by the DPO series.** The program was prepared in tandem with the Rwanda COVID-19 Emergency Response Project which supports the government's National Preparedness and Response Plan as part of the Bank's rapid response to the unfolding crisis. World Bank interventions are coordinated with Rwanda's other development partners, including the International Monetary Fund (IMF) which has approved additional budget support of US$109.4 million for the government through its Rapid Financing Instrument. Under the latest estimates, the government will require additional financing needs of 3.6 percent of GDP amid an expected decline in tax revenues and additional spending. Public debt will reach 65 percent of GDP. While Rwanda will be able to maintain debt sustainability despite the severity of this shock, borrowing from concessional sources for crisis mitigation will be key.

7. **The economic performance of Rwanda prior to the pandemic had been robust, and the country had continued to make substantial progress towards the PDO of the DPO series. In 2018, the economy expanded by 8.6 percent, the highest growth rate on the continent and well above Rwanda's average growth of the past 10 years of 7.2 percent. Investments were the main driver of growth expanding by 23.5 percent supported by strong public investments. After a stagnation in 2016 and 2017, private consumption also grew by 6 percent. Under the DPO -supported reform program, the Government of Rwanda (GoR) continues to make impressive progress towards the development objective. Follow-up actions by the GoR to advance the reform a**genda after Board approval of the last operation in the DPO series including another round of electricity tariff reform in January 2020 as well as approval and setup of a new multi-donor program to pool and leverage concessional financing for grid and off-grid electricity access. In terms of results, electricity access rose to 54 percent nationwide (39 percent on-grid and 15 percent off-grid) in February 2020, up from 40.7 percent in September 2017, while system losses declined from 22 percent to 19 percent and electricity reliability indicators improved dramatically over the same time frame and already outperform the targets set for the series for 2021. Fiscal transfers to the electricity sector remained below 2 percent of GDP, with over 90 percent taking the form of grants for public investment, mainly for electrification.

1. **The supplemental financing is required to enable a timely fiscal response to the economic shock from the COVID-19 pandemic, minimize the slowdown of developmental progress, and sustain the reform agenda supported by the DPO series.** The coronavirus pandemic poses serious economic and public health threats to Rwanda. Even though the COVID shock is expected to be transitory, the overall adverse economic impact on Rwanda will be substantial. The growth rate for 2020 will decelerate to around 5 percent, with Rwanda's strategic services exports sector to be hit the hardest. Containment of COVID-19 and mitigation of social impact of the public health crisis will require substantial fiscal resources. Government will face a 3.6 percent of GDP in additional financing needs amid expected decline in tax revenues and additional spending needs. Public debt will reach 65 percent of GDP. While Rwanda will be able to maintain debt sustainability despite the severity of this shock, borrowing from concessional sources for crisis mitigation will be key.

Relationship to CPF

2. **The proposed operation is one of the pillars of Bank's immediate response to mitigate the impact of the global crisis on Rwanda.** In parallel to this operation the Bank has prepared a US$15 million COVID-19 Emergency Response Project (IPF) to protect public health, invest early, and avert the high socio-economic costs associated with outbreaks. The project will focus on supporting the COVID-19 National Preparedness and Response Plan to assist Rwanda to respond swiftly to confirmed cased and enhancing the capacity of the public health system.

C. Proposed Development Objective(s)

3. **The Program Development Objective (PDO) of the parent DPO series (P162671; P166458; P169040) is to enable fiscally sustainable expansion of electricity services in Rwanda.** The DPO series is built around two pillars: (i) containing the fiscal impact of the electricity sector; and (ii) improving the operational efficiency, affordability, and accountability of electricity service.

Key Results

4. Result indicators under the three-part DPO series are categorized under the two pillars and constituting sub-pillars as follows:

Indicator Name	Baseline	Target
Results Indicator A1: Contain electricity subsidies [a] as percentage of GDP	FY2016/17: 1.4% of GDP	FY2020/21: No more than 1.5% of GDP
Results Indicator A2: Implement the quarterly tariff adjustment.	FY2016/17: No	FY2020/21: Yes
Results Indicator B1: Ensure all generation and transmission projects initiated or accepted by the Government over the past 24 months are consistent with the LCPDP and comply with the PPP Law and competitive procurement procedures	September 2017: No	December 2020: Yes
Results Indicator B2: Expand electrification rate nationwide (percentage of households)	September 2017: 40.7% (29.7% on-grid and 11% off-grid) 2016: 21% among female-headed households	December 2020: 61% (38% on-grid and 23% off-grid) 2019: 42% among female-headed households

Results Indicator B3: Expand electrification rate among rural households (percentage of households)	June 2017: 16%	December 2020: 25%
Results Indicator B4: The independent audits of REG, EDCL, and EUCL are in compliance with IFRS, without qualifications and published within the first two quarters of the following year.	September 2017: No	December 2020: Yes
Results Indicator B5: Reduce total electricity sector losses as a percentage of electricity supply	FY2017/18: 22%	FY2020/21: 19%
Results Indicator B6: Reduce average duration of interruptions (SAIDI) and average frequency of interruptions (SAIFI)	2017: SAIDI: 44 hours; SAIFI: 265	2020: SAIDI: 28 hours; SAIFI: 183.4
Results Indicator B7: Implement and publish annual customer satisfaction survey	2017: No	2020: Yes

Note: [a] Here, the Government subsidies are defined as budget transfers to the electricity sector as recorded in the official Government budget, including transfers for investment and operational expenditures.

D. Project Description

5. **The proposed program in amount of US$56.1 million is going to contribute to the financing package that the government has put together for crisis response.** The government has also requested financing under IMF's Rapid Credit Facility (RCF) as direct budget support in an equivalent to 50 percent of Rwanda's quota, or close to US$100 million. The authorities are seeking additional financing from multilateral and bilateral donors to cover the remaining financing needs. Government has placed a high priority on mobilizing additional financing resources in concessional terms, which highlights the role of Rwanda's multilateral development partners in mobilizing needed financial support.

E. Implementation

6. **A working group and a high-level steering committee were formed under the DPO series to monitor progress toward the prior actions and results indicators and continue to be active**. Monitoring the progress toward the achievement of the program's objectives is the responsibility of the line ministry, MININFRA, with support from REG and its subsidiaries. To facilitate the process, MININFRA has established a working group with representatives from MINECOFIN, MININFRA, REG, and its subsidiaries. In addition, a high-level Steering Committee has been set up to address any challenges in real time. Both remain active at the time of the Supplemental Financing.

F. Poverty and Social Impacts, and Environmental, Forests, and Other Natural Resource Aspects

Poverty and Social Aspects

7. **The prior actions under the DPO series are expected to have substantially positive poverty and social impacts by providing access to reliable and affordable electricity service of improved quality to households and businesses.** Relevant reform measures underpinning the DPO series include tariff review to raise average cost-recovery level establishing competitive procurement procedures for privately owned energy infrastructure, adoption of technically sound planning and investment procedures for expanding electricity access to all households and improving overall quality

of supply of electricity. Taken together, these measures are expected to increase REG's revenues, bring down the cost of supply of electricity, and enhance the availability, reliability, and quality of electricity supply to households and businesses. The tariff reviews in 2017, 2018, and 2020 have raised average tariffs while having minimal poverty impacts because almost all household consumption has been exempted from tariff increases. The development of new energy infrastructure, including of mini-grids, will follow international best practices with regard to land acquisition, an area where Rwanda has a good track record. A simplified licensing framework for mini-grids that has been approved by Rwanda Utilities Regulatory Authority (RURA) will ensure that project implementation conforms to national standards and that consumers are protected. The development impacts of these measures are expected to be driven through the typical channels through which electricity access helps alleviate poverty. For instance, the Impact Evaluation of the Rwanda Electricity Access Rollout Program and Sector-wide Approach Development Project found several positive impacts of electricity access, such as: increased income and consumption spending, quality and value of houses, and asset creation. Electrification was also found to decrease household monthly energy expenditure (excluding electricity) and biomass collection costs and time and increase time spent on education by children and time used for tutoring children.

Environmental Aspects

8. **The specific policies supported by the DPO series are not expected to have any negative effects on Rwanda's environment, forests, water resources, habitats or other natural resources, while certain prior actions are expected to have positive environmental impacts by supporting the development of renewable electricity in Rwanda**. By following least cost planning procedures and institutionalizing competitive procurement of electricity, the reforms under the DPO series are expected to improve the utilization of low-cost hydropower in the electricity mix and reduce the need for expensive and polluting fossil fuel capacity. Furthermore, adoption of planning and investment procedures to expand electricity access through off-grid sources would also facilitate substantial expansion of renewable sources of electricity. No prior actions under the DPO series are expected to have any negative environmental effects. Besides, Rwanda has in place adequate environmental controls and legislation under the mandate of Rwanda Environment Management Authority (REMA), providing support to line ministries including MININFRA in incorporating environmental guidelines in the operational manual for its programs. The World Bank is supporting REMA with technical assistance to take into account climate risks and opportunities and on land policy related issues, along with technical assistance to review sustainable land management practices.

G. Risks and Mitigation

9. **While the policy program supported by the DPO series was on track to achieve the PDO until March 2020, the widespread social and economic shock due to the COVID-19 pandemic has introduced substantial uncertainty and has increased the risks of achieving the series' objectives. B**y March 2020, the government had already achieved two out of the nine result indicators (reducing interruption duration and frequency and conducting customer satisfaction survey), was close to achieving two others (expanding rural electrification and reducing system losses) and was on track for the remaining five. The government had also undertaken reforms beyond those committed under the parent operation. However, the unexpected economic and social crises introduced by COVID-19 have added substantial uncertainty to the government's overall development agenda, and may destabilize the progress on the parent operation.

10. **The overall risk rating for the operation has increased to "High".** Given the widespread uncertainty introduced by the COVID-19 crisis, and the rapidly evolving situation, the risk rating for the operation has been increased from "Substantial" to "High". Key changes to risks and proposed mitigation measures are outlined in the following paragraphs.

11. **Macroeconomic (High; increased).** While the macroeconomic outlook for the parent operation was considered generally positive, a "Moderate" risk rating reflected the possibility of unforeseen events during the program period that

may have made it difficult for the government to contain electricity subsidies as a percentage of GDP while maintaining public spending on access. The expected economic slowdown due to the COVID-19 pandemic has materialized as such an unforeseen event, and uncertainty remains high, with potentially severe macroeconomic implications for Rwanda and its abilities to achieve the objectives of the DPO series. The Macroeconomic risk rating has thus been increased to "High."

12. **Sector strategies and policies (Moderate; reduced).** As the GoR has demonstrated continued strong commitment to implementing the reform program by taking concrete actions and steadily advancing towards results indicators (see Section 4), the risk rating for this category has been reduced from "Substantial" for the parent operation to "Moderate." The main risks of the parent operation were related to (i) suboptimal implementation of the LCPDP and competitive procurement of new generation capacity, leading to increased cost of service; (ii) suboptimal implementation of the NEP, leading to lower than targeted access rates; (iii) misalignment between subsidies for off-grid products and implementation of the Guidelines of Minimum Requirements for Off-grid Solutions; and (iv) poor progress on utility performance. As discussed in Section 4, the GoR has pursued its commitments on all of these fronts. Specifically: (i) no new generation capacity has been procured and future transmission investments are planned in alignment with the LCPDP; (ii) the GoR is preparing a universal energy access program that uses the NEP as its foundation to identify the areas for grid and off-grid electrification; (iii) the GoR is incorporating lessons learned from the pilot RBF for off-grid SHS in its scale-up of the off-grid electrification program; and (iv) the utility has either overachieved or is on track on the result indicators associated with its performance.

13. **Stakeholder risks (Moderate; reduced).** Since the appraisal of the last operation in the series, the GoR has put together a country platform to pool and leverage concessional financing from various DPs to achieve its electrification targets proposed in the NST1 and expanded in the NEP. The GoR's demonstrated ability to align a large number of stakeholders around these investments mean that stakeholder risks have declined from "Substantial" in the parent operation to "Moderate" for the supplemental financing.

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APPROVAL

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