Program Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 31-Mar-2023 | Report No: PIDA35574

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Dominican Republic	P178570	Second Electricity Reform for Sustainable Growth Development Policy Loan (P178570)	P175874
Region	**Estimated Board Date**	**Practice Area (Lead)**	**Financing Instrument**
LATIN AMERICA AND CARIBBEAN	12-May-2023	Energy & Extractives	Development Policy Financing
Borrower(s)	**Implementing Agency**		
Dominican Republic	Ministry of Finance		

Proposed Development Objective(s)

The Development Objective is to establish the policy foundations for: (i) strengthening sector governance, (ii) enhancing climate mitigation and social and environmental sustainability, and (iii) improving the financial sustainability and operational performance of the electricity sector.

Financing (in US$, Millions)

SUMMARY

Total Financing	400.00

DETAILS

Total World Bank Group Financing	400.00
World Bank Lending	400.00

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. **The Dominican Republic (DR) is an upper middle-income country, economic growth reached 4.9 percent growth rate in 2022; however, while the electricity sector has been catalytic for the country's economic growth and poverty**

reduction, it has also presented a significant fiscal burden to the state and a bottleneck to green, resilient and inclusive development. The steady annual increase in electricity demand of about 7 percent has mirrored the average growth rate of 6 percent in the past decades and the doubling of the electricity supply capacity in the last 15 years has largely sustained that growth momentum. The country is highly reliant on imported fossil fuels for power generation, with 84 percent coming from coal, oil and gas, which makes it vulnerable to adverse international fuel price shocks and contributes to high greenhouse gas (GHG) emissions.[1] The DR's electricity service quality indicators are among the lowest in the LAC region.[2] While performance improved from 2009 to 2019 due to implementation of loss reduction measures, most of those gains were reversed during 2020 and 2021 due to COVID-19 pandemic response measures that prevented the Electricity Distribution Companies (*Empresas Distribuidoras de Electricidad*, EDEs) from disconnecting illegal connections and non-paying consumers. Power distribution losses are particularly high in areas with high poverty rates, where distribution networks are poorly managed and highly vulnerable to fraud. As a result, poor and vulnerable households are disproportionally affected by unreliable access to basic electricity services. The sector is also highly vulnerable to the impacts of climate change, as many other Caribbean countries. Meanwhile, the sector deficit has also represented between 1 to 2.3 percent of gross domestic product (GDP) since 2014.[3]

2. **In February 2021, the Government of the Dominican Republic (GoDR) adopted the Electricity Pact (*Pacto Eléctrico*) to lay out an ambitious and comprehensive set of reforms in the electricity sector to be implemented by 2026**. The Electricity Pact was based on a broad and unprecedented consultation process, which took place over a period of five years and involved representatives of several political parties, consumer groups, local and national government leaders, and business organizations. The Pact includes commitments to improve efficiency and service quality, achieve cost-reflective tariffs that will be counterbalanced by direct cash transfers to the poorest and most vulnerable consumers, introduce better governance in electricity distribution with a goal to reintroduce private sector participation, and reduce the carbon intensity in the sector through an increased share of renewable energy (RE) and energy efficiency (EE), among others, with an overall implementation timeline extending to 2026.

3. **Following the adoption of the Electricity Pact, as evidenced by the first operation of the series that was approved by the World Bank Board of Executive Directors in March 2022, the GoDR took decisive actions to continue addressing the fundamental challenges of the electricity sector.** On the governance front, it assigned responsibilities for sector institutions to implement the reforms of the Electricity Pact and resolved to address the governance challenges of the distribution sector through initiating a privatization process (supported by DPL1 PA#1 and 2). On the climate sustainability front, the GoDR adopted time-bound targets to increase renewable energy, submitted an energy efficiency law to congress, and created a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector (supported by DPL1 PA#4, 5 and 6). On the regulatory and financial sustainability front, the GoDR, through the regulator, started implementing quarterly tariff increases towards convergence with cost reflective tariffs. In order to protect vulnerable customers, the electricity tariff subsidy *BonoLuz* was integrated into the national social protection program *Supérate* (supported by DPL1 PA#3 and 7).

4. **The DR's high exposure to climate-related disasters has compounded existing challenges in the electricity sector and calls for enhanced efforts to foster green and resilient growth.** Between 1997 and 2016, natural disasters resulted

[1] Meanwhile, the country is endowed with significant renewable energy resources, with a potential generation of 6 Gigawatt (GW) by 2030, of which only 750 Megawatt (MW) has been developed (*Comisión Nacional de Energia* (CNE) and International Renewable Energy Agency (IRENA), REmap 2030 – *A Renewable Energy Roadmap*. See: https://www.cne.gob.do/wp-content/uploads/2018/01/2820172920ESP20REmap20RD202030.pdf).
[2] The average customer on the public power grid experienced 18 interruptions and 22 blackout hours per month in 2020, far above the averages of regional peers such as Panama and Costa Rica. *https://sie.gob.do/sobre-nosotros/departamentos/estadisticas-direccion-regulacion/*
[3] International Monetary Fund, July 2022 Article IV Consultation, Country Report No. 22/217.

in average annual economic losses of around 0.26 percent of GDP. Like other Caribbean countries, increased incidence of natural disasters due to climate change carries significant risk of human and economic losses, including to energy generation, transmission, and distribution infrastructure. Most recently, in September 2022, Hurricane Fiona brought torrential rain and powerful winds, forcing 12,500 people out of their homes and leaving 709,000 people without power.[4] These events underline the country's vulnerability to climate change and the need to improve the resilience of the power sector.[5]

5. **The GoDR's macroeconomic policy framework is deemed adequate for the proposed operation.** The DR's external position remains sound with continued accumulation of reserves. The financial sector remains resilient, with increasing growth in credit and declining NPLs. The Superintendency of Banks has implemented a program to further strengthen supervisory capacity and a risk-based supervisory approach and are also working towards enhancing the macroprudential tool kit, stress testing frameworks, and a roadmap for the implementation of Basel II/III and IFRS (with IMF support). The GoDR temporarily expanded social programs in response to the food and fuel price hikes, while maintaining strong spending controls in other areas and proactively reducing debt service costs over the medium-term. The strong post-pandemic recovery was supported by a significant response package, while the upfront fiscal consolidation in 2021 and the unwinding of the temporary COVID-19 measures contributed to the stabilization of the debt-to-GDP ratio. Furthermore, debt-to-GDP is projected to gradually decline over the forecast period. Fiscal consolidation, primarily driven by a reduction in current transfers, is credible under current expectations that commodity prices will ease over time, but face risks. Compensatory adjustments in public investment, could hinder growth in the future. Fiscal consolidation could be reinforced by revenue mobilization, which could help preserve public investment. The authorities have started to work on a Fiscal Compact which included a tax reform, but the international price shocks of 2022 delayed this discussion until 2024. If the fiscal consolidation proceeds as expected, the authorities will be able to re-build needed fiscal buffers to respond to natural disasters. Efforts to improve the disaster risks financing strategy (supported by the recently approved World Bank CAT-DDO, Project 178122) constitute appropriate mitigation strategies against downside risks.

Relationship to CPF

6. **The proposed operation is fully aligned with the objectives of the World Bank Group's (WBG) Dominican Republic Country Partnership Framework (CPF) for FY22-26 discussed by the World Bank's Board of Executive Directors on March 31, 2022**[6]. It supports two of the CPF objectives under the first High Level Outcome 'Improved access to quality public service delivery.' The operation contributes to *Objective 1.1: Improved fiscal space and public spending efficiency,* by improving the energy sector's financial viability through the roll-out of an ambitious electricity tariff reform program while improving the targeting to ensure fiscal efficiency. It is also aligned with *Objective 1.2. Enhanced efficiency in electricity* by improving the efficiency and reliability of the electricity sector.

C. Proposed Development Objective(s)

[4] See: https://www.accuweather.com/en/hurricane/puerto-rico-outages-continue-in-fiona-aftermath-as-storm-moves-through-turks-and-caicos/1250040

[5] In addition to measures supported by this operation, the Bank is preparing the Country Climate and Development Report (CCDR – P179355) with the objective of analyzing how the country's development goals can be achieved in the context of mitigation and adaptation to climate change, and identifying ways to support that implementation.

[6] Report No. 167896-DO.

7. The Development Objective is to establish the policy foundations for: (i) strengthening sector governance, (ii) enhancing climate resilience and social and environmental sustainability, and (iii) improving the financial sustainability and operational performance of the electricity sector.

Key Results

8. **The proposed development policy loan (DPL) series aims to improve governance of State-Owned Enterprises (SOEs) as the country implements the unbundling of the Dominican Corporation of State Electricity Companies and the establishment of a framework to set and monitor key performance indicators, including the reduction of distribution losses for Electricity Distribution Companies.** The DPL series would also support the Dominican Republic's climate mitigation and resilience goals by enabling at least 500 Megawatt (MW) of private-led investments in renewable energy and the implementation of at least one national program on energy efficiency. Finally, it is expected that the reform of the social protection program *BonoLuz* will enable about 900,000 poor and vulnerable families, including female-headed households, to receive support to make basic electricity services affordable to them.

D. Project Description

9. **The proposed DPL series is built around three pillars**:

- Pillar 1: Strengthening sector governance: This pillar comprises measures aimed at updating the institutional and legal framework governing the energy sector and improving the governance in the electricity distribution segment.
- Pillar 2: Enhancing climate mitigation and social and environmental sustainability: This pillar includes reforms aimed at increasing renewable energy generation, which will contribute to reducing generation costs through competitive procurement of RE and reducing reliance on fossil fuels generation, thereby improving the resilience of the energy system to climate change. The pillar also includes measures for technical standards and tariff for electric vehicle charging stations to facilitate the decarbonization of the transport sector. Meanwhile, it also supports measures aimed at promoting the implementation of energy efficiency measures to reduce GHG emissions. In addition, the pillar also supports measures to improve the targeting and coverage of the social protection system to ensure affordability of electricity services for the vulnerable population, including and especially female-headed households.
- Pillar 3: Improving the financial sustainability and operational performance of the electricity sector: This pillar includes regulatory measures that will improve the quality and reliability of electricity services, thereby contributing to reduce energy consumption and GHG emissions, as well as technical standards to enhance the resilience of the power system against disasters and climate-induced weather events, and to allow greater integration of renewable energy.

E. Implementation

Institutional and Implementation Arrangements

10. **The Ministry of Finance is responsible for collecting and monitoring information related to program implementation towards the achievement of results for this DPL.** The Ministry of Finance is further responsible for coordinating necessary actions among the agencies involved in the reform program supported by this DPL, namely Ministry of Energy and Mines (MEM), the energy regulatory agency (SIE from its acronym in Spanish and *Supérate*. The WB will work with the Ministry of Finance to confirm the results framework through ongoing policy dialogue and technical

assistance projects.

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

Poverty and Social Impacts

11. **Policies under Pillar 1 are expected to have indirect positive impacts on social and poverty outcomes.** Policy reforms aimed at strengthening energy sector governance and operational performance of sector entities are expected to have indirect positive impacts in the short to medium-term. Two policies were analyzed, one is measures to increase transparency and improve the performance and efficiency of electricity sector entities, which can promote transparency and accountability, reduce corruption, improve overall efficiency of the sector, increase access to reliable and affordable energy, and support the transition to cleaner, low-carbon energy sources. The other policy is enhancing governance, efficiency, and transparency in electricity distribution and strengthening the control and supervision of distribution companies, which can lead to increased reliability and quality of the electricity supply, reduced power outages, and lower electricity prices for consumers.

12. **Prior actions supported under Pillar 2 are expected to have a positive impact on social and poverty outcomes in the country.** Improving the targeting and coverage of *Bonoluz* and expanding the number of beneficiaries of *Aliméntate* and *Bonogás* (PA 3) are expected to contribute to poverty alleviation and slightly improve inequality. The proposed reform on *Bonoluz* could lead to reduction in poverty and extreme poverty of around 0.6 and 0.3 percentage points, respectively. In addition, the expansion of *Bonogás* would reduce energy poverty and free up disposable income that could be spent in other goods and services. Furthermore, the program would promote the use of natural gas, which is a cleaner and more efficient source of energy than coal and oil and can help to reduce household air pollution (HAP) and its associated negative effects on health. Supported policies under PA 5 and PA 6 would help to mitigate the impacts of climate change (which disproportionally affects the most vulnerable households) and could also provide social benefits such as empowering communities and individuals, improving access to energy, creating jobs, and improving rural development and community building. No significant distributional impacts are expected from the supported PA 6.

13. **Policies supported under Pillar 3 are expected to have an indirect positive social impact.** The indirect impacts on household welfare of PA 7 and PA 8 are likely to happen by enabling the distribution companies to recover the full cost of efficient service, adjusting the distribution companies' annual revenue, and optimizing the cost-of-service delivery. Jointly with setting the norms for quality of service for the distribution of electricity will increase the reliability, safety, innovation, cost-effectiveness, and fairness of the electricity service. This is expected to improve the living conditions of Dominicans in multiple ways such as: creating jobs and income-generating opportunities, facilitate growth and productivity of small-business which has been proven as an effective tool on poverty alleviation and could also improve the quality of access to basic services such as education and healthcare. However, any impact on energy tariffs associated with those PAs in the future must include an additional distributional impact analysis.

Environmental, Forests, and Other Natural Resource Aspects

14. **The environmental analysis of the DPL found that most of the policies supported under Pillar 2 are expected to have significant positive effects on the environment and climate change and support the country's actions toward its National Determined Contribution (NDC) commitment.** Policy measures under PA 1 aim at strengthening the electrical system planning by incorporating energy efficiency, environmental policy and land use planning objectives which will in turn promote environmental sustainability and decarbonization. It will also strengthen MEM's institutional capacity, which

will be essential for the ongoing electricity reform and the country's commitment to the Electricity Pact. PA 2 promotes the strengthening of the institutional capacity of the EDEs, reinforcing their governance, building their institutional performance including their capability for environmental management and sustainability. PAs 4, 5, and 6 promote and incentivize the development and use of renewable energy projects, transitioning to a lower carbon electricity mix, contributing to climate change mitigation by improving energy efficiency and reducing fossil fuel consumption. PA 4 will promote the development of renewable energy projects, which will reduce the country's reliance on fossil fuels, and contribute to positive environmental and health benefits through the reduction of GHG emissions, black carbon, and other particulate matter (nitrogen oxides and sulfur oxides, among other primary and secondary pollutants). PA 6 will strengthen the legal and regulatory framework for energy efficiency, supporting the implementation of energy efficiency projects and contributing to a reduction in GHG emissions. Potential negative environmental effects related to the development or construction of renewable energy and energy efficiency projects are expected to be mitigated through the country's environmental regulatory framework. No environmental effects are expected from the implementation of measures supported under PAs 3, 7, and 8.

G. Risks and Mitigation

15. **The overall risk of the operation after considering mitigation measures is rated as Moderate.** The most relevant risks, which are assessed as substantial, are political and governance, and stakeholder risks:

i. **Political and governance risk**: Weak governance, corruption, and lack of adequate oversight of SOEs are deeply engrained and have prevented the successful implementation of numerous reform attempts over the past two decades. There is also a risk that political support for the expected reforms may erode, since establishing a strong track record of policy and regulatory enforcement will take time. The suspension of the gradual tariff increases was a clear demonstration of this type of risk. Mitigating factors are embedded in the design of the reform program by strengthening governance and transparency of decision making in the distribution companies as well as the steps to improve the sectors financial sustainability and reduce its fiscal burden. The GoDR has demonstrated their commitment to continue the sector reforms through their tight supervision of the reform progress as evidenced by weekly meetings in the Electricity Cabinet led by the Vice President of the Republic. Finally, by supporting an investment program in loss reduction measure that will complement the governance reform of the EDEs, the GoDR are talking the necessary steps to improve the reliability and sufficiency of electricity supply, further mitigating the risk of declining political support for the reform program over time.

ii. **Stakeholder risk**: The broad-based reform program will impact several stakeholders including electricity consumers, employees of SOEs, and private sector investors, among others. Impacts for different stakeholders will vary among them and across time. For example, consumers will perceive a negative impact from power cuts as a result of the loss reduction activities to reduce unmetered power consumption before they see a substantive improvement in the reliability and quality of electricity services they receive. To mitigate these risks, the reform program builds on a comprehensive consultation process including all key sector stakeholders which resulted in the signing of the Electricity Pact. All the regulatory reforms in this Program including the new cost-reflective methodology have been consulted with relevant sector stakeholders and the public. The GoDR is also implementing communications and awareness campaigns in support of the reforms of tariff methodology and payments for self-generation of power.

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APPROVAL

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