



The World Bank

Electricity Reform for Sustainable Growth Development Policy Loan (P175874)

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Report No: PGD279

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A

PROPOSED LOAN

IN THE AMOUNT OF US\$400 MILLION TO THE

DOMINICAN REPUBLIC
FOR THE

ELECTRICITY REFORM FOR SUSTAINABLE GROWTH DEVELOPMENT POLICY LOAN
March 4, 2022

Energy & Extractives Global Practice
Latin America And Caribbean Region

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Dominican Republic

GOVERNMENT FISCAL YEAR

January 1 – December 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of February 21, 2022)

Currency Unit = Dominican Pesos (RD\$)

RD\$57.50 = US\$1.00

ABBREVIATIONS AND ACRONYMS

CABEI	Central American Bank for Economic Integration	ISA	International Standards on Auditing
CAT-DDO	Catastrophe Deferred Drawdown Option	KWh	kilowatt hour
CCTs	Conditional Cash Transfers	MAPS	Methodology for Assessing Procurement Systems
CDEEE	Dominican Corporation of State Electricity Companies (<i>Corporación Dominicana de Empresas Eléctricas Estatales</i>)	MDB	Multilateral Development Bank
CES	Economic and Social Council (<i>Consejo Económico y Social</i>)	MEM	Ministry of Energy and Mines (<i>Ministerio de Energía y Minas</i>)
CNE	National Energy Commission (<i>Comisión Nacional de Energía</i>)	MENR	Ministry of the Environment and Natural Resources (<i>Ministerio de Medio Ambiente y Recursos Naturales</i>)
CO ₂	Carbon Dioxide	MPI	Multidimensional Poverty Index
CPF	Country Partnership Framework	MRV	Measuring, Reporting, and Verification
CPI	Consumer Price Index	NDC	Nationally Determined Contributions
CPS	Country Partnership Strategy	NDS	National Development Strategy
DGAPP	Public-Private Partnerships Directorate (<i>Dirección General de Alianzas Público-Privadas</i>)	PA	Prior Action
DGCP	General Public Procurement Directorate (<i>Dirección General de Compras y Contrataciones</i>)	PEFA	Public Expenditure and Financial Accountability
DO	Development Objective	PER	Public Expenditure Review
DPL	Development Policy Loan	PFM	Public Financial Management
DR	Dominican Republic	PLR	Performance and Learning Review
EDEs	Electricity Distribution Companies (<i>Empresas Distribuidoras de Electricidad</i>)	PPAs	Power Purchase Agreements
FDI	Foreign Direct Investments	PPP	Public Private Partnership
FOREX	Foreign Exchange	PV	Photovoltaics

GDP	Gross Domestic Product	RD\$	Dominican pesos
GHG	Greenhouse Gas	SIE	Superintendence of Electricity (<i>Superintendencia de Electricidad</i>)
GIZ	German Agency for International Cooperation	SIUBEN	Unified System of Beneficiary Identification (<i>Sistema Único de Beneficiarios</i>)
GoDR	Government of the Dominican Republic	SOEs	State-Owned Enterprises
GRID	Green, Resilient and Inclusive Development	US	United States
GRS	Grievance Redress Service	WB	World Bank
IDB	Interamerican Development Bank	VAW	Violence Against Women
IBRD	International Bank for Reconstruction and Development	WBG	World Bank Group
ICV	Life Quality Index (<i>Índice de Calidad de Vida</i>)		
IMF	International Monetary Fund		

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DOMINICAN REPUBLIC

ELECTRICITY REFORM FOR SUSTAINABLE GROWTH DEVELOPMENT POLICY LOAN

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**SUMMARY OF PROPOSED FINANCING AND PROGRAM****BASIC INFORMATION**

Project ID	Programmatic	If programmatic, position in series
P175874	Yes	1st in a series of 2

Proposed Development Objective(s)

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 self-sufficiency and operational performance of the electricity sector.

Organizations

Borrower: DOMINICAN REPUBLIC

Implementing Agency: MINISTRY OF FINANCE

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Financing	400.00
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DETAILS

International Bank for Reconstruction and Development (IBRD)	400.00
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INSTITUTIONAL DATA**Climate Change and Disaster Screening**

This operation has been screened for short and long-term climate change and disaster risks

Overall Risk Rating

Substantial



Results

Indicator Name	Baseline (end 2020)	Target (end 2024)
Pillar 1: Strengthening sector governance		
Indicator #1. Separate state-owned generation, transmission, and distribution companies regularly report and disclose information on key financial and operational performance indicators (binary)	No	Yes
Indicator #2. Electricity Distribution Companies operating under a public private partnership arrangement (number)	0	1
Pillar 2: Enhancing climate resilience and social and environmental sustainability		
Indicator #3. Extremely poor and poor households* benefiting from BonoLuz (number)	330,000	900,000
Indicator #4. Relevant energy or mining policy documents, plans, or programs approved by the Ministry of Energy and Mines in calendar year 2022 include targeted actions to improve gender equality in terms of employment and/or violence against women (binary)	No	Yes
Indicator #5. New renewable energy capacity contracted by distribution companies (megawatt)	0	500 MW
Indicator #6. National Energy Efficiency programs under implementation (number)	0	1
Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector		
Indicator #7. Share of the cost of efficient service provision recovered by end-use electricity tariffs (percentage)	60	80
Indicator #8. Electricity distribution losses (electricity invoiced/ electricity injected in the distribution network) (percent)	33.5%	21.1%**

* Families classified under Life Quality Index (*Índice de Calidad de Vida*) ICV1 (extreme poor) and ICV2 (poor) criteria in the Unified System of Beneficiary Identification (*Sistema Único de Beneficiarios*, SIUBEN) system.

** Target set in the Regulatory Decree of the Electricity Pact. The target will be finetuned based on successive analysis by Public-Private Partnerships Directorate (*Dirección General de Alianzas Público-Privadas*, DGAPP) and Superintendence of Electricity (*Superintendencia de Electricidad*, SIE) in 2022 in the context of the discussions for the Public Private Partnership (PPP) in electricity distribution.



**IBRD PROGRAM DOCUMENT FOR A PROPOSED ELECTRICITY REFORM FOR SUSTAINABLE GROWTH
DEVELOPMENT POLICY LOAN TO THE DOMINICAN REPUBLIC**

1. INTRODUCTION AND COUNTRY CONTEXT

1. The proposed Electricity Reform for Sustainable Growth Development Policy Loan (DPL) operation, in the amount of US\$400 million, supports the efforts of the Government of the Dominican Republic (GoDR) to implement a comprehensive reform in its electricity sector to address one of its most important and long-standing development challenges. The proposed operation is the first in a programmatic DPL series of two operations that will support the GoDR's comprehensive reform efforts to address the country's decades-long challenge of unreliable, high-cost, and carbon-intensive electricity services. The proposed DPL program supports fundamental policy and institutional reforms aimed at: (i) strengthening sector governance by updating the legal and regulatory framework and strengthening the institutional set-up, with an emphasis on tackling persistent governance challenges in electricity distribution; (ii) enhancing climate resilience and social and environmental sustainability by supporting measures to implement the country's low-carbon energy transition and strengthen system resilience to climate change; and (iii) improving the financial self-sufficiency and operational performance of the electricity sector, while protecting poor households. Together, these reforms are expected to support inclusive and resilient economic growth and put carbon dioxide (CO₂) intensity in a declining path, in line with the three dimensions set forth in the World Bank Development Committee paper "From COVID-19 Crisis Response to Resilient Recovery - Saving Lives and Livelihoods while Supporting Green, Resilient and Inclusive Development (GRID)" (2021).

2. The GoDR's reform efforts build on a unique stakeholder engagement process which materialized in the signing of the Electricity Pact (*Pacto Eléctrico*), providing an innovative approach to building broad-based consensus for the implementation of complex and socially sensitive reforms. The Dominican Republic (DR) is an upper middle-income country and despite a sharp Gross Domestic Product (GDP) contraction (6.7 percent) in 2020 due to the global COVID-19 crisis, economic recovery was strong in 2021 (12.3 percent). This positive development notwithstanding, electricity service quality indicators remain among the lowest in the Latin America and Caribbean region¹ and persistent deficits in the sector are a significant burden on public finances, representing between 1 to 2 percent of GDP during 2014-21. Numerous attempts at improving the sufficiency and reliability of electricity services in the 1990s and 2000s did not yield tangible progress due to, among others, entrenched governance issues and lack of public support. Over the past five years, successive governments undertook a wide consultation process involving diverse stakeholders to build consensus on a comprehensive set of reforms in the electricity sector. The process culminated in February 2021 with the signing of the Electricity Pact (*Pacto Eléctrico*) by representatives of several political parties, consumer groups, local and national government leaders, and business organizations. The Electricity Pact includes commitments to improve service quality, achieve cost-reflective tariffs, introduce private sector participation in electricity distribution, and increase renewable energy use, among others (see Box 3). Building on this innovative consensus building approach, the GoDR has adopted the Electricity Pact as its reform roadmap.

¹ 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. **Sector governance faces significant efficiency, accountability, and transparency challenges.** The legal framework is outdated, there is a fragmented institutional framework. The General Electricity Law of 2001 (Law No. 125-01) resulted in the establishment of several agencies, independent from the Ministry of Mines and Energy, with policy making responsibilities. The Dominican Corporation of State Electricity Companies (*Corporación Dominicana de Empresas Eléctricas Estatales*, CDEEE) was created as the overall coordinating body of all State-Owned Enterprises (SOEs) operating in the sector. Over time, it established *de facto* policies and was the recipient of all government subsidies while operating within an environment of weak government oversight and lack of transparency. Important efforts have recently been made to increase transparency, as the GoDR made the dissolution of the CDEEE a sector policy priority in 2020. Operational and financial efficiency in the distribution sector is low. Persistently high financial losses and low operational performance in the three Electricity Distribution Companies (*Empresas Distribuidoras de Electricidad*, EDEs) highlight continued challenges to improve the oversight and accountability of sector entities. For many years, electricity rationing was the answer to low operational performance and financial losses particularly in areas with high poverty rates, where distribution networks are often poorly maintained and are highly vulnerable to fraud. As a result, poor and vulnerable households are disproportionately affected by unreliable access to basic electricity services.

4. **The DR is highly exposed to climate change.** The 2021 ND-GAIN Index² ranks the DR 103rd out of 182 countries in terms of its vulnerability to climate change and other global challenges, as well as its ability to improve resilience. Between 1997 and 2016, natural disasters resulted in average annual economic losses of around 0.26 percent of GDP. Like other Caribbean countries, increased incidence of natural disasters because of climate change carries significant risk of human and economic losses, including to energy generation, transmission, and distribution infrastructure. At the same time, high reliance on imported fossil fuels for power generation results in high emission intensity and poses a threat to the achievement of the Green House Gas (GHG) emission reduction goals and improvement of local air quality. In 2020, fossil fuels accounted for 84 percent of total generation, of which 36 percent was from coal and 24 percent was from fuel oils.³ While the country has made strides to develop its hydropower resources, there is still potential to reduce consumption and diversify the energy mix by investing in energy efficiency and renewable energy.

5. **The power sector lacks financial viability.** Below-cost electricity tariffs and an untargeted support system for poor and vulnerable households result in a heavy burden for the state. The tariff revenue received by the EDEs still covers only about 60 percent of costs, and regulations requiring indexation of tariffs to fuel prices and exchange rates have not been implemented per existing tariff regulation. In November 2021, the electricity regulator (*Superintendencia de Electricidad*, SIE) implemented the first tariff increase in over a decade. This tariff revenue shortfall, together with high energy losses, mostly due to widespread energy theft, and high generation and operating costs have produced chronic financial deficits in the EDEs. As a result, the GoDR allocated substantial resources to the CDEEE to finance investment projects and cover the financial losses of public enterprises in the electricity sector. In

² The ND-GAIN Country Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. See: <https://gain.nd.edu/our-work/country-index/rankings/>.

³ CDEEE <https://cdeee.gob.do/transparencia/download/informedesempeno/2020/Informe-de-Desempeno-Diciembre-2020.pdf>



addition, the existing social transfer program, *BonoLuz*,⁴ provides untargeted electricity subsidies and the coverage is low due to administrative bottlenecks.

6. **The proposed operation is a key component of World Bank (WB) support to the Dominican Republic at a critical juncture of health, economic, and energy crises.** The proposed operation supports a strong and front-loaded program of policy and institutional reforms which target fundamental and decades-long challenges in the electricity sector. Underpinned by the solid consensus building process that led to the signing of the Electricity Pact, these reforms are expected to have a substantial positive impact in achieving a green, resilient, and inclusive economic recovery. Timing for the WB support is also crucial as this operation supports socially sensitive reforms amidst a challenging external environment consisting of high energy prices and disruption in the supply chain for imported fuels which has led to increased domestic electricity outages. Finally, the operation is a key element of coordinated support by the main development partners to one of the country's main reforms efforts. The Central American Bank for Economic Integration (CABEI) and the Interamerican Development Bank (IDB) are preparing parallel budget support operations based on policy matrices that are complementary with this proposed WB DPL.

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

7. **The COVID-19 crisis has had major economic and social impacts on the DR, but the economy strongly recovered in 2021.** GDP rebounded 12.3 percent in 2021, supported by a solid government response to COVID-19, which included fiscal, macroprudential, and supervisory reforms, along with monetary easing. Structural reforms to improve the investment climate in the electricity and water sectors are expected to support a convergence to the potential annual growth rate of 5 percent over the medium-term. Ample international reserves, the rebuilding of fiscal buffers and efforts to improve the disaster risks financing strategy are all appropriate mitigation strategies against downside risks, including additional waves of COVID-19 infections or unrelated economic shocks such as those related to natural disasters.

8. **Supported by domestic demand and favorable external conditions, the DR's economy expanded by 5.3 percent, on average, over 2000-19, driven primarily by capital accumulation and total factor productivity growth.** Foreign direct investments (FDI) of about 4 percent of GDP on average over the last two decades transformed the economy and fueled tourism, services, manufacturing, construction, and mining. Remittances grew steadily to about 8 percent of GDP in 2019, supporting private consumption. After a sharp increase to over 50 percent in 2002 due to a banking crisis, the poverty rate (using a threshold of US\$5.5/day) fell steadily to 21 percent in 2019.

9. **The country's external position is solid, but exports and links to global value chains are low.** External deficits, financed by FDI and remittances, fell from 7.5 to 1.3 percent of GDP over 2010-19 and reserves reached five months of imports in 2019. Total exports expanded significantly during the 1980s and 1990s, but nearly halved to 23 percent of GDP during 2004-19 for reasons including the end of the

⁴ *BonoLuz* is a subsidy program which provides monthly, variable, non-conditional cash transfers to households with a monthly electricity consumption of up to 100 kWh or around RD\$600.



Multifiber Agreement in 2005 that protected DR's textile exports to the United States. In 2019, services accounted for half of exports; other exports included machinery, agriculture products, and minerals (gold). The DR's participation in global value chains is low – adding 30 percent, on average, of value added to exports since 2000, a rate that puts it below Tunisia (57 percent), Costa Rica (37 percent), Ecuador (35 percent) and Honduras (34 percent) according to the ongoing Dominican Republic Country Private Sector Diagnostic.

10. **The government launched a robust fiscal and monetary policy response to the COVID-19 crisis, which lessened poverty impacts.** Lockdowns and travel restrictions led to a GDP contraction of 6.7 percent in 2020 and poverty is estimated to have increased from 21 percent in 2019 to 23.4 percent in 2020 (poverty could have reached 29 percent in the absence of mitigating measures according to WB/GoDR calculations). Nevertheless, growth bounced back by 12.3 percent in 2021 while employment rate reached its pre-pandemic level.⁵ As for health indicators, the GoDR increased the number of citizens covered by the public health system, steadily increased the supply of beds and secured vaccines, and fully vaccinated 66.1 percent of the population as of January 18, 2022. With 4,251 deaths attributed to COVID-19 as of January 2022 and a cumulative mortality rate of 40.22 deaths per 100,000 population, the DR's mortality rate is amongst the lowest in the Latin America and the Caribbean (LAC) region.⁶

11. **A timely fiscal and monetary policy response helped mitigate the impact of the crisis.** The overall fiscal deficit increased from about 2 to 8 percent of GDP between 2019 and 2020, driven mainly by sharp increases in health and social expenditures. COVID-19 related spending amounted to about 3 percent of 2020 GDP. It was designed to be temporary, initially through 2020 but was later extended through April 2021. By May 2021, the main cash transfer program (*Supérate*) was restructured to reduce benefits but also to broaden the number of poorest households targeted. In parallel, the Central Bank eased monetary policy, reducing the headline interest rates from 4.5 percent in February 2020 to 3 percent in August 2020. While the duration of the pandemic and associated economic shocks remains uncertain, the swift and coordinated policy action have accelerated the economic rebound.

12. **The banking system has on average maintained adequate capitalization, solvency, and provisioning levels it had before the COVID-19 pandemic.** Non-performing loans steadily decreased from 3 to 1.6 percent of total loans over 2010-19 and represented 1.3 percent of loans by November 2021. The average return on equity and the capital adequacy ratio were around 19 and 16 percent in 2019, respectively, and rose slightly to 23 and 17 percent by November 2021.

13. **Fiscal policy has been prudent overall, although spending allocation remains weak.** The overall fiscal deficit averaged 3 percent of GDP between 2010 and 2019, while the primary deficit has been 0.7 percent on average during the same period. Overall expenditure by the central government remained flat at 16 percent between 2010 and 2017, but social and investments outlays have been squeezed by growing interest and wage bills and untargeted subsidies for electricity, energy, and water. Interest payments have risen over time and absorbed one-fifth of tax revenues in 2019, crowding out public investments, which have steadily declined from 3.9 to 2.3 percent of GDP between 2010 and 2019.

⁵ <https://www.bancentral.gov.do/a/d/5278-economia-dominicana-cierra-el-ano-2021-con-un-crecimiento-de-123->

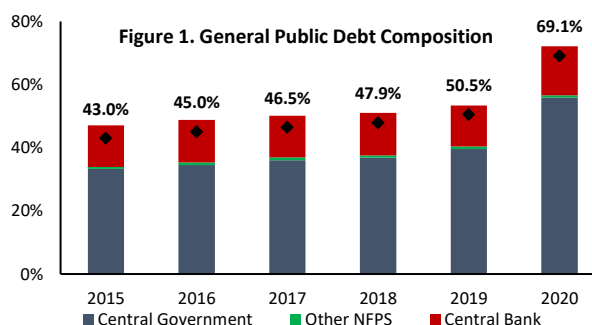
⁶ WHO COVID-19 Dashboard. Geneva: World Health Organization, 2020. Available online: <https://covid19.who.int/>
<https://covid19.who.int/table>



14. **Despite a fast pace of growth and relatively low primary deficit, public sector debt has been increasing.**

The debt of the consolidated public sector, including SOEs and the Central Bank, grew from 37 to 51 percent of GDP over 2010-19 and further to 69 percent by end-2020 (Figure 1). Debt is concentrated in the central government, which borrows to cover energy sector deficits and guarantees most of the sector's investments (i.e., the energy sector is a direct

fiscal liability and a contingency). Also, the Central Bank was not recapitalized after the 2002 banking sector crisis, and seigniorage has not covered these costs (a reform is now being designed with International Monetary Fund (IMF) support). The average interest rate of the public debt grew from 6.9 to 7.4 percent over the 2010-19 period (and from 3.8 to 5.9 percent for external debt only), which is likely to have been higher than growth. Markets priced the DR's risks associated with the banking crisis and successive energy shocks to the budget, although recent global financial market conditions allowed the country to lengthen maturities from 6.2 to 9.7 years over 2019-20. Credit ratings have been stable after an upgrade around 2015/6 but are still three notches below investment grade on account of low revenue mobilization and reform challenges in the financial, monetary, and energy spheres.



Source: Ministry of Finance. WB staff's calculations.

15. **Inflation reached 8.5 percent in December 2021, driven mostly by external prices.** Overall inflation is well outside the Central Bank's target range of 3 ± 1 percent, while the core inflation reached 6.9 percent. Price increases on food and transport are primarily explained by international supply-chain disruptions and increasing commodity prices. Although, the Central Bank expects inflation rates to converge towards the target band by mid-2022, it increased its policy rate twice between December 2021 and January 2022, for a total of 150 basis points (from 3.5 to 5.0 percent).

2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

16. **Following the fast expansion in 2021, growth is expected to converge to a 5 percent potential over the medium term, supported by structural reforms.** In the near-term, growth would be driven by the recovery in tourism, exports, and remittances-supported private consumption. Similarly, the investment rate is projected to continue supporting domestic demand. Convergence to the DR's growth potential requires, however, steady implementation of structural reforms, particularly in energy and public-private partnerships, coupled with efforts to increase the quality of the workforce and attract FDI toward higher-value-added industries. Structural reforms and innovation are also expected to promote green growth and inclusion. The current account deficit is expected to narrow given the envisaged increase in external demand and will remain fully financed by FDI.



Table 1: Key Macroeconomic Indicators

	2019	2020	2021(e)	2022(p)	2023(p)	2024(p)	2025(p)	2026(p)
annual % change unless otherwise indicated								
National Accounts (in real terms)								
Real GDP	5.1	-6.7	12.3	5.0	5.0	5.0	5.0	5.0
<i>Contributions</i>								
Consumption	3.7	-2.0	4.7	3.6	4.1	4.1	4.1	4.1
Investment	2.1	-3.3	6.0	1.3	0.9	1.1	1.2	1.1
Net exports(a)	-0.8	-1.5	1.5	0.2	0.0	-0.2	-0.2	-0.2
GDP per capita	4.1	-7.5	11.3	3.6	3.6	3.6	3.6	3.6
GNI per capita, ATLAS method (current US\$)	8,100	7,260	...	...	...	...	...	...
in percentage of GDP, unless otherwise indicated								
External sector								
Current account balance	-1.3	-2.0	-2.5	-1.8	-1.6	-1.8	-1.8	-1.9
Exports of goods and services	23.1	18.3	22.0	22.4	22.8	23.0	23.2	23.4
Tourism related	8.4	3.4	6.1	...	...	...	...	...
Free Economic Zones	7.0	7.5	...	...	...	...	...	...
Minerals (mainly gold)	2.3	2.5	...	...	...	...	...	...
Remittances inflows (gross)	8.0	10.4	11.2	10.5	10.1	9.5	9.5	9.5
Imports of goods and services	27.6	25.6	32.0	31.7	31.6	31.5	31.4	31.2
Of which energy imports	3.4	2.3	...	...	...	...	...	...
Foreign Direct Investment	3.4	3.2	2.8	3.2	3.2	3.2	3.2	3.2
Gross International Reserves (in bill. US\$)	8.8	10.7	13.0	15.1	17.2	19.3	21.5	23.4
In months of next year's imports	5.2	4.3	5.1	5.6	6.1	6.5	6.7	7.4
External public debt	26.6	39.3	36.3	36.0	36.4	36.8	37.2	37.4
Terms of Trade (% change)	4.1	4.4	-3.8	-0.8	0.5	0.5	0.5	0.5
Nominal exchange rate (average)	51.3	56.6	57.2	...	...	...	...	...
Employment and inflation								
CPI (year-average)	1.8	3.8	8.2	4.5	4.0	4.0	4.0	4.0
Unemployment Rate	5.9	7.4	7.1	...	...	...	...	...
Participation Rate	65.4	61.1	...	...	...	...	...	...
Of which female	53.2	48.5	...	...	...	...	...	...
Monetary and banking sector								
Base Money	10.3	14.2	15.7	...	...	...	...	...
Policy Interest Rate, %	5.1	3.0	4.5	...	...	...	...	...
Credit to the private sector	26.7	28.8	26.8	...	...	...	...	...
Of which in foreign currency	5.3	5.0	4.8	...	...	...	...	...
Return on equity (ROE), percentage	19.5	15.6	22.6	...	...	...	...	...
Nonperforming loans, % of total	1.6	1.9	...	...	...	...	...	...
net Assets/Liabilities, ratio	1.1	1.1	...	...	...	...	...	...
Central Government (C.G.) finances								



Revenues	14.4	14.2	15.8	14.8	14.8	14.7	14.7	14.6
Expenditures	16.6	22.1	18.5	17.6	17.3	17.2	17.1	16.9
C.G Government Balance	-2.2	-7.9	-2.7	-2.8	-2.5	-2.4	-2.4	-2.3
Consolidated Public Sector Debt	50.5	69.1	62.7	60.9	60.1	59.8	58.7	57.3
Memorandum items								
GDP nominal in Dominican pesos (bill.)	4,562	4,457	5,330	5,783	6,337	6,944	7,613	8,344

a/ including inventory changes; (e) estimate; (p) projection

Source: Dominican Republican authorities and World Bank Staff estimates.

17. **The fiscal deficit is expected to narrow from 2.7 to 2.3 percent of GDP during 2021-26 as expenditure composition is expected to improve.** A gradual phase-out of subsidies to SOEs in energy and water, together with improvements in tax administration, is expected to create some headroom to increase public investments and expand targeted transfers, such as *BonoLuz*- a scheme to subsidize the consumption of 100 kilowatt hour (kWh) of electricity for the poorest households. Similarly, other current expenditures are expected to decline, driven by better procurement of goods and services and the continued restructuring of the institutional architecture of the state aimed at reducing functional redundancies with the public sector.

18. **The implementation of energy reforms laid out in the Electricity Pact is expected to gradually generate fiscal savings.** Current and capital transfers to electricity companies amounted to 1 percent of GDP in 2020 and are expected to fall to 0.6 percent by 2027 (Box 1). The materialization of these savings crucially depends on external conditions (global oil price fluctuations) and internal decisions (the pace of reform implementation). Because of these external and internal uncertainties, the potential fiscal savings have not been incorporated into the macro-economic and fiscal framework.

Table 2: Key Fiscal Indicators. Central Government, as percentage of GDP

	2019	2020	2021(e)	2022(p)	2023(p)	2024(p)	2025(p)	2026(p)
Total Revenues (and grants)	14.4	14.2	15.8	14.8	14.8	14.7	14.7	14.6
Tax revenues	13.3	12.4	14.6	13.7	13.7	13.6	13.6	13.5
Direct taxes	4.4	4.4	5.2	4.8	4.8	4.7	4.7	4.6
Taxes on good and services	8.0	7.2	8.5	7.8	7.8	7.8	7.8	7.8
Taxes on international trade	0.9	0.7	0.9	1.1	1.1	1.1	1.1	1.1
Social contr., grants and other	1.1	1.8	1.2	1.1	1.1	1.1	1.1	1.1
Total expenditures	16.6	22.1	18.5	17.6	17.3	17.2	17.1	16.9
Compensation of employees	4.5	4.8	4.3	4.3	4.3	4.3	4.3	4.3
Use of goods and services	1.9	2.3	1.9	1.9	1.8	1.8	1.8	1.8
Capital expenditures	2.3	2.9	2.3	2.4	2.3	2.2	2.2	2.1
Of which electricity related	0.2	0.4	...	...	...	...	...	...
Interest payments	2.7	3.2	2.9	2.9	2.9	2.9	2.9	2.9
Current transfers	4.9	8.3	7.0	6.1	5.9	5.9	5.9	5.8



Of which electricity related	0.5	0.6	...	...	...	...	...	...
Other expense	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0
Fiscal balance								
Overall balance	-2.2	-7.9	-2.7	-2.8	-2.5	-2.4	-2.4	-2.3
Primary balance	0.6	-4.7	0.2	0.1	0.5	0.5	0.6	0.6
Financing sources								
External, net	2.1	9.3	2.6	1.8	1.5	1.4	1.4	1.3
Domestic, net	0.1	-1.4	0.1	1.0	1.0	1.0	1.0	1.0
Financing gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public debt, of which	50.5	69.1	62.7	60.9	60.1	59.8	58.7	57.3
Central government, net	36.8	52.9	47.5	...	...	...	...	...
Other NFPS	0.8	0.7	0.5	...	...	...	...	...
Central Bank	12.9	15.5	14.7	...	...	...	...	...
By creditor residence								
External	26.6	39.3	36.3	36.0	36.4	36.8	37.2	37.4
Domestic	23.9	29.8	26.4	24.9	23.7	23.0	21.5	19.9

(e) estimate; (p) projection

Note. Central government debt is net of intragovernmental debt

Box 1. Fiscal Impacts of the Electricity Reform under Alternative Scenarios

The electricity reform can potentially yield important fiscal savings that have not yet been fully incorporated into the fiscal framework (Table 2). The amount of savings will depend on external factors (an increase in global oil prices will widen the gap between tariffs and costs) and internal determinants (the pace of reform implementation).

The overall fiscal impact depends on four mutually reinforcing ongoing reforms supported by this DPL Series: (1) an increase of direct subsidies to the poorest households via the *BonoLuz* means-tested social program, which should cover about 900,000 million beneficiary households by 2026 (Prior Action #3); (2) a reduction in direct current transfers to SOEs as the gap between tariffs and costs narrows down to zero, which at current global oil prices requires an increase in average tariffs from 4.4 to 11 RD\$ per kWh by 2026 (Prior Action #7); (3) a reduction in technical and commercial losses of the distribution sector through performance-based concession contracts with the private sector (Prior Action #2); and (4) the stabilization of capital transfers for distribution at the level competitively established by the performance-based contracts and the full replacement of capital grants for guarantees or other financial enhancing instruments to reduce financial costs of investment in generation, particularly for renewable energy, and the transmission sector.

The World Bank's baseline scenario projects overall cumulative fiscal savings to reach 1.7 percent of GDP between 2022 and 2024, assuming global oil prices stay at current levels or fall and that the reforms are implemented on time. If any of these two assumptions do not hold, the negative overall fiscal impact would be higher by 2024. According to the simulations, the following cumulative effects between 2022 and 2024 are expected in three main categories:

- Direct subsidies to households (*BonoLuz*) would increase spending by approximately 0.6 percent of GDP.
- Full implementation of the tariff adjustment path set out by the SIE will reduce current transfers by 2

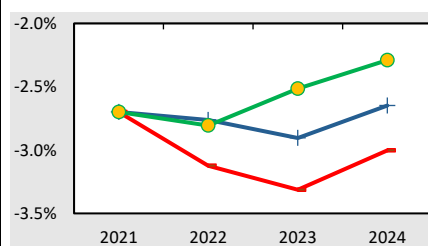


percent of GDP.

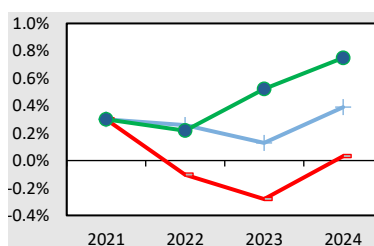
- The implementation of improved operational performance (loss reduction) through the introduction of private sector participation in the distribution segment will have a positive net fiscal impact of 0.3 percent of GDP.

Two scenarios are built around this baseline: (1) unfavorable external conditions scenario, in that global oil price increases fully offset domestic tariff increases; and (2) unfavorable internal conditions scenario, in that the pace of implementation of the reform falters (e.g., lower than expected tariff increases or delays in awarding the performance-based management contracts) or the expected yields of these reform do not fully materialize.

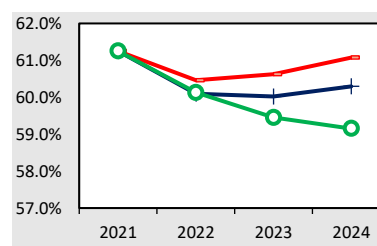
**Figure 1.1 Overall Balance
(in percent of GDP)**



**Figure 1.2 Primary Balance
(in percent of GDP)**



**Figure 1.3 Consolidated Debt
(in percent of GDP)**



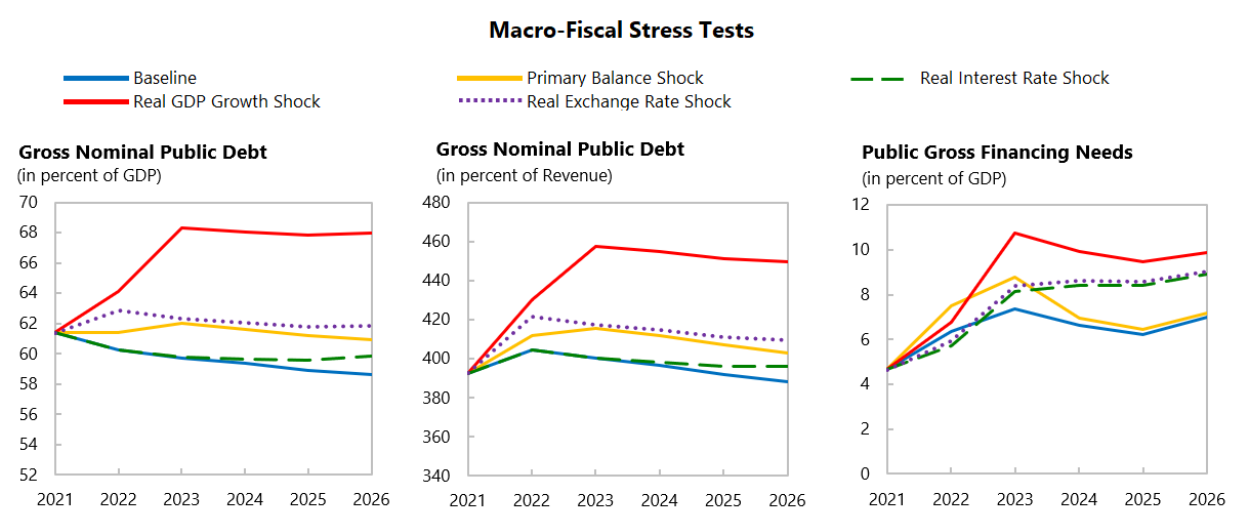
— Negative External Conditions — No Compliance with the Electricity Pact — Compliance with the Electricity Pact

Source: WB staff elaboration.

19. **The public-debt-to-GDP ratio is projected to stabilize below 60 percent over the medium term.** The baseline scenario assumes growth converges to potential growth (Table 1), and a slight primary surplus after 2023 (Table 2). Under these assumptions, the debt-to-GDP ratio is expected to stabilize at around 60 percent (Figure 2). However, a one-standard-deviation negative growth shock would increase debt to around 68 percent of GDP by 2023, and double gross financing needs from 6 to above 11 percent of GDP over 2022-23. A combined shock incorporates the largest effect of individual shocks (real GDP growth, inflation, primary balance, exchange rate, and interest rate). In this scenario, debt would increase to a maximum of 75.2 percent of GDP while gross financing needs would increase to a maximum of 12 percent of GDP.



Figure 2. Dominican Republic, Macro-fiscal Stress Test



Source: WB staff projections.

20. **The macroeconomic scenario faces both demand and supply risks.** Normalization of monetary policy in the United States (US) can lead to a tightening of financial conditions, but as long as this is fueled by stronger US demand, this is likely to be manageable since positive impacts via growth channels are likely to outweigh negative impacts of higher interest rates as long as inflation expectations remain anchored. An unexpected tightening of US monetary policy could, however, lead to an increase in risk aversion, a decline in the demand for riskier assets, and a further US\$ depreciation. In addition, the partial or incomplete implementation of the energy reform could pose risks for the fiscal consolidation in the medium-term. Likewise, climate change has intensified the exposure (both the frequency and severity) to natural disaster in countries like the DR, substantially increasing contingent fiscal liabilities given the low degree of financial protection against these types of risks. Finally, the surge of new COVID-19 variants such as Omicron could slow down growth, particularly if travel restrictions are reimposed.



Table 3: Balance of Payments financing requirements and sources (in US\$ millions)

	2019	2020	2021(e)	2022(p)	2023(p)	2024(p)	2025(p)	2026(p)
Financing requirements	3,638	851	9,946	5,443	3,226	7,237	6,422	7,143
Current account deficit	1,188	1,541	2,372	1,774	1,615	1,910	2,013	2,232
External debt amortization public sector	1,182	2,304	1,055	905	1,663	1,719	2,224	3,017
Private sector debt flows (net)	118	-4,957	4,237	711	-2,152	1,458	-13	-31
Gross reserve accumulation	1,150	1,963	2,282	2,053	2,100	2,149	2,198	1,925
Financing sources	3,638	851	9,946	4,501	2,926	7,237	6,422	7,143
FDI (net)	3,021	2,554	2,597	3,119	3,263	3,451	3,648	3,841
External debt disbursements public sector (net)	2,138	12,311	-1,580	1,183	-336	3,785	2,774	3,303
Other capital flows, private (net)	-1,521	-14,014	8,928	0	0	0	0	0
Financing gap	0	0	0	941	300	0	0	0
IMF	0	0	0	0	...	...	...	...
World Bank	0	0	0	400	...	...	...	...
IDB	0	0	0	191	...	...	...	...
To be identified	0	0	0	350	...	...	...	...

(e) estimate; (p) projection

21. The GoDR's macroeconomic policy framework is deemed adequate for the proposed operation.

The upfront fiscal consolidation in 2021 has stabilized the debt-to-GDP ratio. Fiscal reforms in support of a gradual consolidation, would enable the DR to start rebuilding fiscal buffers, which will be vital for the authorities to effectively respond to additional waves of COVID-19 infections or an unrelated economic shock, such as a hurricane, earthquake, or other natural disaster. A sound recovery has been supported by the successful implementation of a COVID-19 pandemic response package that included fiscal, macroprudential, and supervisory measures, along with monetary easing to sustain economic activity. Structural reforms in electricity, water, and the investment climate (including efforts to take advantage of near shoring opportunities) should produce a convergence to the DR's 5 percent annual potential growth. Ample international reserves, the rebuilding of fiscal buffers, and efforts to improve the disaster risks financing strategy are all appropriate mitigation strategies against downside risks.

22. Additional mitigation measures against macroeconomic shocks are under discussion to be put in place.

The authorities have designed and started to implement appropriate risk mitigation measures through disaster financing and transfer mechanisms, including a request for a potential DPL with a Catastrophe Deferred Drawdown Option (CAT-DDO) from the WB. In addition, the 2021 Dominican Republic Public Expenditure Review (PER)⁷ identifies the need for a growth- and equity-neutral fiscal reform to adequately address development needs and further mitigate risks after 2023. Such a reform could focus on spending efficiency (e.g., improving procurement processes, streamlining the state's institutional architecture, and reducing the duplication of social programs and agencies) and debt management measures in the short- to medium-term, building on already implemented measures to reduce agency duplications and generate fiscal savings.⁸ A tax reform would complement these efforts,

⁷ P173163. <https://openknowledge.worldbank.org/handle/10986/35856>

⁸ <https://presidencia.gob.do/noticias/gobierno-reduce-gastos-para-un-ahorro-de-rd8283-millones-utilizarse-en-servicios-de>



including phasing out income tax exemptions and improving property taxes. The mock introduction of fiscal rules, followed by formal enactment, can provide direction to these efforts.

2.3. IMF RELATIONS

23. **The DR's most recent IMF Article IV consultation endorsed an expected strong economic recovery for 2021, with risks broadly balanced.** On April 29, 2020, the IMF approved SDR 477.4 million (about US\$650 million, or 100 percent of quota) in emergency financial assistance under its Rapid Financing Instrument. While acknowledging that the pandemic has significantly weakened the country's macroeconomic outlook for 2020 and created financing needs that require additional support, the IMF determined that the GoDR is implementing an appropriate package of fiscal, macroprudential, and supervisory measures, along with monetary easing, to sustain economic activity during the crisis. The IMF Article IV consultation concluded on June 30, 2021, recognized significant improvements in the DR's economic management to date and encouraged continued progress. It noted that further reforms in the electricity sector will help to reduce debt sustainability risks while protecting investment and social spending. Although the DR does not currently have a standard IMF program, the organization is providing technical assistance to strengthen the country's revenue administration, improve fiscal transparency, and adopt prudential regulations in the banking sector. An IMF assessment letter is attached in Annex 2.

3. GOVERNMENT PROGRAM

24. **Securing reliable electricity supply in an environmentally and financially sustainable manner, reducing vulnerability through climate change mitigation and adaptation, and building a culture of gender equality and equity are cornerstones of the DR's National Development Strategy (NDS) 2030.** The NDS laid out specific actions that the GoDR would undertake to achieve these goals. In the energy sector, the GoDR committed to strengthening the regulatory framework of the sector, investing in power infrastructure, diversifying electricity generation, and developing a civic culture to enable energy savings and payments. To mitigate the impacts of climate change on the Dominican society and economy, the GoDR envisaged promotion of decarbonization of the economy by increasing the use of renewables and greater energy efficiency, while strengthening coordination between levels of government, broader stakeholder buy-in, and public awareness. In addition, the NDS outlined several concrete measures to promote gender equality, including strengthening compliance with national regulations and international best practices on women's rights to build a culture of equality and equity.

25. **In implementing this long-term development plan, the GoDR issued the Electricity Pact as a comprehensive reform program with a clear roadmap to address the systemic weaknesses and binding constraints in the energy sector.** The program is a result of several years of consultations and enjoys broad political support. Since its signing in February 2021, it has provided the framework for cascading policies and implementing regulations. Working expeditiously, the GoDR has commenced the process of amending existing laws in the energy sector (such as the General Electricity Law) and drafting new laws such as the Energy Efficiency Law to realize the vision of the NDS 2030, while navigating the macroeconomic shocks brought by the COVID-19 pandemic and preparing to respond quickly to the demand of the post-pandemic economic recovery. The Electricity Pact has underpinned a sustainable reform path on all key areas in the sector as detailed in Box 2.



Box 2. The Electricity Pact

The Electricity Pact was signed on February 25, 2021. Originally drafted in 2017, it is an accord entered into by all stakeholders in the electricity sector, including leaders of eight political parties, the president and ministers of the central government, local government leaders, business organizations, labor leaders, five committees of the National Congress, and the executives of 16 government institutions with responsibilities in the electricity sector. The signatories endorse a vision of an electricity sector where service is universal, high-quality, efficient, reliable, resilient (including to climate change impacts), and environmentally and financially sustainable. The parties commit to principles of transparency, accountability, equity, and compliance with law.

The Electricity Pact contains more than 60 concrete agreements and actions with specific timelines for completion. These actions are organized around five priorities:

- Redefine the roles of government institutions and the private sector in the electricity sector. Key actions under this pillar include: (i) consolidating policy-making responsibility with the Ministry of Energy and Mines (MEM); (ii) eliminating the role of CDEEE as an intermediary between generators and distribution companies; (iii) improving the operational, managerial, and budgetary independence of the electricity regulator; and (iv) creating conditions to facilitate private investment in the distribution companies. [Chapter 5 of the Electricity Pact]
- Strengthen the regulatory framework to assure free competition, promote efficiency, attract investment, protect consumer rights, and enhance transparency and accountability. Key actions included under this pillar include: (i) implementing quality of service standards and penalties for non-compliance; (ii) assuring integrity of the dispatch system; (iii) modernizing regulatory accounting; (iv) guaranteeing consumer rights to complain and receive compensation for poor service; (v) improving the coverage, quality and energy efficiency of public lighting; and (vi) requiring audited financial statements for State-Owned Enterprises (SOEs) and disclosure of all regulatory actions. [Chapter 6]
- Assure that the electricity sector is environmentally responsible and adapted for climate change resilience and mitigation. Key actions include: (i) assure compliance with Law 147-02 regarding management of climate and natural disaster risks; (ii) setting targets and prioritizing generation from clean and renewable sources including solar photovoltaics (PV), wind, and bioenergy to reduce emissions from the energy sector; (iv) increasing the share of generation from lower-carbon fuels such as natural gas; (v) enacting an energy efficiency law to provide a legal framework to incentivize energy conservation investments and actions; (vi) requiring electricity SOEs to implement risk management, accident prevention, and emergency response plans including for climate and natural disasters such as tropical storms, hurricanes, and cyclones; and (vii) conducting strict oversight of the construction and operation of the Punta Catalina coal-fired generation plant to meet environmental requirements. [Chapters 7 and 9]
- Improve the sector's financial sustainability. Key actions under this pillar include: (i) systematically applying a tariff regime that moves towards full cost recovery and reduces end-user subsidies; and (ii) setting specific targets for revenue collection rates and distribution loss reduction. [Chapter 8]



26. **The GoDR's program squarely addresses the factors that caused prior reform attempts to fail.** Previous reform programs in the 1990s and 2000s lacked the political will and stakeholder buy-in needed to enforce cost-of-service tariffs, quality of service standards, and enforcement of anti-theft measures. Several times, these factors thwarted the goals of the reforms and led to reversals of the privatization of distribution companies and chronic underinvestment in distribution and transmission infrastructure. The GoDR has now addressed these failures in several ways. First, the GoDR has made the reform of the electricity sector a top political priority and has enunciated a strong vision of operational, financial, and environmental sustainability for the sector. Second, the GoDR has secured broad stakeholder consensus for the reforms via the Electricity Pact. Third, the GoDR is focusing on establishing a credible track record of tariff enforcement and competitive procurement of generation as a pre-condition for expanding private investment in the electricity sector.

27. **To reduce the country's vulnerability and improve its resilience to climate change impacts, the GoDR has committed in the 2020 Nationally Determined Contribution (NDC) to reduce GHG emissions by 27 percent by 2030,**⁹ in continuation of its earlier pledge to the Paris Agreement. The 2020 NDC identified 46 mitigation actions and 37 adaptation measures in the key sectors, namely energy, transport, agriculture/forestry/land use (AFOLU), industry, and waste disposal. In the energy sector, the focus will be on energy-land-water intersectoral coordination to support deployment of renewables, greater climate resilience of the power infrastructure, and introduction of energy efficiency standards in equipment and buildings. The GoDR has designated the National Council on Climate Change and Clean Development Mechanism to facilitate the implementation of the national climate agenda in alignment with the country's achievement of the Sustainable Development Goal, while addressing gender inequality and ensuring engagement of whole-of-society to promote broad buy-in and shared leadership and responsibilities across the GoDR. In this process, the Climate Change Council has prepared an NDC Action Plan to formulate concrete actions within each specific sector and potential financing mechanisms.¹⁰ It has also commenced the preparation of a long-term strategy for economy-wide decarbonization, which is expected to track actions and contributions of specific sectors to the NDC. Both the Plan and the Strategy benefited from extensive technical assistance from the WB. It is noteworthy that the 2015 and 2020 NDCs recognize the role of women as agents of change and encourage their participation in the transformation of society towards a low-carbon and resilient development.

4. PROPOSED OPERATION

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

28. **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 self-sufficiency and operational performance of the electricity sector.**

⁹ See:

[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Dominican%20Republic%20First/Dominican%20Republic%20First%20NDC%20\(Updated%20Submission\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Dominican%20Republic%20First/Dominican%20Republic%20First%20NDC%20(Updated%20Submission).pdf)

¹⁰ See:

<http://www.cambioclimatico.gob.do/Documentos/publicaciones/Plan%20de%20Acci%C3%B3n%20de%20la%20NDC%20de%20RD.pdf>



29. 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 resilience and social and environmental sustainability: This pillar includes reforms aimed at increasing renewable energy generation, promoting the implementation of energy efficiency measures to reduce GHG emissions, and supporting measures to improve the resilience of the energy system to climate change. 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 as well as efforts to mainstream gender equality in the formulation of sector strategies and programs.
- Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector: This pillar includes tariff and fossil fuel subsidy reforms which will contribute to reduce energy consumption and GHG emissions, as well as other measures to improve the financial viability of the sector.

30. The proposed DPL directly supports key components of the Government's strategy, including in the development, climate and gender agendas. First, the DPL directly supports the implementation of the NDS 2030, driving reforms on all actions envisaged. Better performance of the distribution companies with private sector participation will help improve the reliability of electricity supply and reduce losses. The implementation of a sustainable tariff reform program bringing in additional revenues into the sector will enable new mitigation and adaptation investments in power infrastructure. Good design and implementation of a reformed subsidy program will ensure better targeting and incentivize bill payment and energy saving behaviors among consumers. Second, the DPL strengthens the GoDR's climate strategy by supporting regulatory actions on renewable energy and energy efficiency that will contribute to the reduction of GHG emissions in the energy sector and beyond. The DPL is expected to result in an additional 500 MW of power generation from renewable energy sources to be contracted, which represents approximately 10 percent of the existing installed capacity. Third, the DPL is expected to lead to at least one energy or mining policy document, plan, or program that will include targeted actions to improve gender equality, contributing to meeting the GoDR's commitment in this area.

31. Several measures supported by this operation contribute to the structural reforms in areas where the WB has been actively engaged with the GoDR. Actions under Pillar 3 build on the close engagement with a broad range of stakeholders and support under an existing WB project, the Distribution Grid Modernization and Loss Reduction Project (P147277), approved on December 15, 2015. The Project finances the rehabilitation of selected distribution circuits, upgrading of metering systems, improved environmental management, and commercial and citizen engagement processes. Technical assistance on key issues such as electricity tariffs and loss reduction options were also financed by the project and provided key analytical underpinnings to the GoDR's reform program. Policy reforms under Pillars 1 and 3 have been informed by various WB PER reports which provided in-depth analysis of the performance of the electricity sector and recommended policies aimed at improving sector efficiency and governance, moving tariffs to cost-recovery levels, improving sector governance, and reforming the



system for making budgetary transfers to the EDEs.¹¹ Additionally, a 2020 WB diagnostic report on Maximizing Private Finance to Bridge Infrastructure in Electricity and Water sectors identified weak infrastructure governance and lagging service delivery as the principal factors hindering private sector participation. In the electricity sector, the report recommended that reforms should start with improving the performance and accountability of the EDEs.¹² Moreover, actions under Pillar 2 build on an existing WB engagement with the Climate Change Council and the MEM under the Decarbonization Pathways for the Dominican Republic: Assessment and Development of the Current NDC Advisory Services and Analytics project (P173083).

32. Lessons learned in the implementation of WB-financed operations have been reflected in the design of this operation. Experiences from ongoing and previous operations, including the Support to the National Education Pact Project (P146831), the Distribution Grid Modernization and Loss Reduction Project (147277), and DPLs including the Disaster Risk Management DPL with a CAT-DDO (P159351) suggest the following: (i) in order for reforms to last, there would need to be a coherent framework and path addressing each of the key issues in the sector as well as extensive citizen engagement to break the vicious cycles of lack of payment and inefficient service delivery; and (ii) reforms and investments should be complemented by analytical work and technical assistance that can help strengthen the content of policy actions and help monitor their impact during implementation. These lessons are reflected in the proposed operation, which: (i) has been designed based on a comprehensive set of analytical work on various aspects of electricity and climate change; and (ii) supports the Electricity Pact which was extensively consulted with a wide range of stakeholder groups and across the political spectrum to achieve broad support, while ensuring the incorporation of good practices on citizen engagement from the Distribution Grid Modernization and Loss Reduction Project (P147277) in the implementation of the subsidy reform program, thereby ensuring the social sustainability of the operation.

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

Pillar 1: Strengthening sector governance

33. This pillar aims to strengthen the energy sector's governance as a foundation for sustainable growth, inclusive economic recovery, and reduction of the carbon intensity of the sector and the economy more broadly. It supports the clarification of roles and responsibilities of key stakeholders, a path of tariff reform to enable efficient pricing of electricity while minimizing impacts on the most vulnerable households, policies to facilitate uptake of energy efficiency and renewable energy deployment, and identification of a framework for private sector participation. This would enable the implementation of a reform program to achieve a socially, environmentally, and financially viable electricity sector.

Prior Action #1. *The Borrower has identified the responsible institutions in the energy sector and mandated them to execute specific electricity sector reforms within a specified period of time, as evidenced by Presidential Decree No. 655-21, dated October 15, 2021, and published in the Official Gazette on October 22, 2021.*

¹¹ World Bank (2019): Dominican Republic Public Expenditure Review, 2012-18; World Bank (2021): Dominican Republic Public Expenditure Review.

¹² World Bank (2020): Maximizing Private Finance to Bridge the Infrastructure Service Gap in Electricity and Water Supply and Sanitation in the Dominican Republic



34. **Rationale.** One year after the signing of the Electricity Pact, substantive progress has been achieved on the implementation of the overall reform program in the electricity sector. The GoDR took decisive actions to modernize the institutional framework and maintain high-level ownership and oversight of the reform process. Key actions include the approval of the Presidential Decree No. 498-20 dated September 23, 2020, establishing the Electricity Sector Cabinet (*Gabinete del Sector Eléctrico*) composed of Minister-level members and headed by the Minister of the Presidency. The Electricity Sector Cabinet meets regularly to decide and coordinate the implementation of all reforms. To improve sector governance, the Presidential Decree No. 342-20 dated August 16, 2020 transferred policy-making functions to the MEM and put in place a special commission to liquidate the vertically integrated CDEE. Despite these strides, important reforms laid out in the Electricity Pact were not yet implemented by October 2021. Key gaps included: (i) weak enforcement of regulations, particularly with respect to tariff-setting and overlapping policymaking functions among sector entities; (ii) high reliance on high-carbon content fuels for power generation and lack of penetration of renewable energy sources; and (iii) complex and non-transparent arrangements for the allocation and transfer of risks from natural disasters and climate change. Against this backdrop, there was a need to reaffirm the GoDR's commitment to the reform program by putting in place a legal and regulatory framework that would provide a clear mandate to sector entities to implement the provisions in the Electricity Pact.

35. **Substance of the Prior Action.** The Regulatory Decree of the Electricity Pact (Presidential Decree No. 655-21, *Decreto Reglamentario del Pacto Eléctrico*) maintains a high level of political commitment to the reform program in the electricity sector by assigning institutional responsibilities, defining clear actions with time-bound targets, and ensuring that adequate financial resources are made available. The Decree lays out a clear path of intermediate actions and an adequate sequence of reforms that has enabled government entities to move forward with the implementation of socially sensitive and critical reforms. Key contents of the Decree include the following: (i) support to the reduction of fossil fuel subsidies in electricity pricing by mandating the electricity regulator, SIE, to set the cost of efficient service provision (cost-recovery), implement gradual tariff adjustments to reach cost-recovery levels, and reduce cross-subsidies among the different categories of end-consumers; (ii) support to increase the use of renewable energy and energy efficiency by mandating the issuance of regulations to promote renewable energy applications in residential, commercial, and industrial sectors and by coordinating the development of a national energy efficiency program; (iii) improving sector transparency and operational performance of sector entities by mandating the adoption of loss reduction programs by distribution companies and making publicly available on a regular basis reports to track their financial and operational performance; and (iv) enhancing the resilience of key electricity infrastructure to climate change by recognizing the significant impact of natural disasters and climate change-related events in the provision of reliable electricity services and by mandating the implementation of risk management tools, such as the use of insurance products against natural and climate related disasters and creation of an early warning system in the electricity sector, compatible with the national emergency and security system.

36. **Expected Results.** The issuance of this Decree is expected to pave the way for the implementation of a comprehensive program of reform that would set the electricity sector on the path to social, environmental, and financial viability. The decree is expected to have direct climate mitigation benefits by supporting the implementation of renewable energy and energy efficiency investments and by introducing an efficient electricity pricing system that will provide direct incentives to decrease electricity



consumption and therefore the need for fossil fuel generation.¹³ The new institutional framework set out in the Decree would help isolate strategy and policy formulation from the political economy and ingrained culture within the SOEs. This, in turn, is expected to foster evidence-based decision-making and more transparent balancing of competing priorities. An important indicator of success in strengthening governance, accountability, and transparency within government institutions is the establishment of separate electricity companies with adequate corporate oversight, as demonstrated by regular monitoring of key performance indicators of such companies.

37. **Indicative Trigger #1.** The Borrower has taken measures to increase transparency and improve the performance of electricity sector entities, by approving amendments to the Electricity Law (125-01) which would: (i) liquidate the state-owned *Corporación Dominicana de Empresas Eléctricas Estatales*; and (ii) ensure a separation of policymaking, planning, and regulation functions of governmental institutions in the energy sector. The indicative trigger is one of the key measures identified in the Regulatory Decree of the Electricity Pact to enable the legal dissolution of the CDEEE and ensure that the legal framework governing the electricity sector is fully consistent with the Electricity Pact and will enable the implementation of the reform program.

Prior Action #2. *The DGAPP has taken steps to improve the governance and performance of electricity distribution companies and the reduction of distribution losses by initiating the process to transfer the management and operation of the EDEs to private operators through the public decision to receive a proposal for such transfers, as evidenced by the DGAPP Resolution No. 89/2021, dated November 29, 2021, and published on DGAPP's website.*

38. **Rationale.** Weak operational, financial, and environmental performance of the three public distribution companies is at the core of the power sector's distress. Over the past ten years, low reliability of electricity services, high distribution losses (unmetered electricity, power theft, and technical losses) leading to high GHG emissions, and corruption plagued the sector despite numerous attempts to address these issues. In the early 2000s, the three distribution companies were privatized, and this led to a tangible reduction in electricity losses: from 49 percent in 1999 to a low of 23 percent in 2002. However, the lack of end-user tariffs adjustments and a clear regulatory framework led to a failed privatization process; the State took back the ownership and operation of all three companies between 2003 and 2009. Since then, several attempts to improve the performance of distribution companies under GoDR management were introduced. However, they did not yield the expected results. Proposed changes in the corporate structure, culture, and practices encountered internal resistance, and political interference could not be avoided. Against this backdrop, the introduction of private sector participation through a concession regime has been identified as an adequate means to improve the operational performance and sustainability of the distribution sector, including reducing the GHG emissions, in a much shorter time than would have been possible via alternative approaches. At the same time, a 'classic concession' is not appropriate given the present situation and the multiple risks that exist in the sector: the electricity distribution companies are financially bankrupt; electricity tariffs are currently well below their estimated

¹³ Efficient end-user pricing of electricity such as subsidy rationalization has been identified as an activity eligible from classification as climate mitigation finance (category 9.1) according to the 2020 Joint Multilateral Development Bank (MDB) report on climate finance. See: <https://thedocs.worldbank.org/en/doc/9234bfc633439d0172f6a6eb8df1b881-0020012021/original/2020-Joint-MDB-report-on-climate-finance-Report-final-web.pdf>



cost-recovery levels (by about 40 percent); a regulatory track record of timely adjustment of tariffs is lacking; investment costs to improve quality of service indicators are high (around US\$300 million per year over the next six years); and there are no incentives nor a credible regulatory framework to promote loss reduction and improved quality of service. This situation calls for the design of an alternative regime which provides a balanced attribution of risks and responsibilities between the State and the private operators.

39. **Substance of the Prior Action:** The Public-Private Partnerships Directorate (*Dirección General de Alianzas Público-Privadas*, DGAPP) has taken the first step to improve the governance and performance of electricity distribution companies through the introduction of private sector participation. On November 29, 2021 the DGAPP publicly accepted for detailed evaluation an application submitted by the Board of the EDEs (*Consejo Unificado de las Empresas Distribuidoras de Electricidad*) for a Public Private Partnership (PPP) covering the three state-owned distribution companies. The DGAPP Resolution No. 89/2021 follows the process in the PPP Law (Law No. 47-20), whereby any public or private entity wishing to propose a PPP must submit a formal proposal and justification to the DGAPP. In essence, the PPP would consist of a concession regime whereby the management and operation of the three distribution companies would be transferred to a private agent over a period of 30 years under a competitive selection process. Recognizing the situation of the sector and risks discussed above, the PPP is to be implemented using a two-phase approach. In the first phase, of approximately five to six years, it is expected that the private operator will assume full responsibility for the management of the distribution network and retail operations and would have to meet contractually binding loss reduction targets, which will reduce the carbon footprint of power supply, and other quality of service improvement targets (key performance indicators). Options are being evaluated to reduce the electricity tariff adjustment risks and energy purchase risks for concessionaires during the first phase. In the second phase, it is expected that the concession will be implemented under a classic long-term regime in which the private operator would assume the full responsibility for operating costs, capital costs, and energy purchases. The detailed characteristics of a PPP approach are being defined together with the preparation of the bidding documents that will be used in the selection process of the concessionaires.

40. **Expected results:** The reform is expected to result in the introduction of private participation in at least one of the distribution companies. This in turn would improve governance, transparency, and accountability in the distribution sector, contributing to a sustainable recovery of the overall electricity sector. The reduction of losses would reduce the need for fossil fuel generation, limit GHG emissions, and reduce electricity system costs. In the medium term, the provision of reliable and more affordable electricity services is expected to improve firm competitiveness and support a sustainable economic recovery.

41. **Indicative Trigger # 2.** The DGAPP has taken measures to improve the governance and the performance in electricity distribution by declaring the PPP proposal from the *Consejo Unificado de las Empresas Distribuidoras de Electricidad* to be in the public interest in principle and selecting a private company to assume the management and operation of at least one of the EDEs. The immediate step in the PPP process following the acceptance of the PPP proposal supported under Prior Action #1 is DGAPP's evaluation of the proposal in the following areas: (i) socioeconomic analysis; (ii) risk analysis; (iii) value-for-money analysis; (iv) fiscal impact analysis; and (v) other analysis as needed. If deemed acceptable, the DGAPP would issue a Declaration of Public Interest which would in turn authorize the initiation of the bidding/selection process for the concessionaire. The DGAPP expects to finalize its evaluation and issue, if accepted, the Declaration of Public Interest in the first half of 2022 and initiate the bidding process



shortly after.

Pillar 2: Enhancing climate resilience and social and environmental sustainability

42. **This pillar aims to help reduce the carbon intensity and improve the climate resilience of the energy sector by improving the contractual framework to enable private-led investments in renewable energy.** At the same time, measures supported under this pillar support the decarbonization of the economy by incentivizing measures and investments in energy efficiency in a broad range of sectors. This pillar also supports the implementation of a critical electricity subsidy reform that would ensure the affordability of electricity services to the poorest households despite periodic tariff increases.

Prior Action #3. *The Borrower has taken measures to improve the social sustainability of the electricity sector by: (a) reforming the social protection system for vulnerable consumers through the integration of the BonoLuz subsidy program into the national social protection program SUPERATE; and (b) creating a gender unit to mainstream gender equality in the formulation, design, implementation and monitoring of policies in the energy and mining sectors, as evidenced, respectively, by: (i) Article 5(d)(ii) of Presidential Decree No. 377-21, dated June 14, 2021, and published in the Official Gazette on June 17, 2021; and (ii) the Ministry of Energy and Mines Resolution No. R-MEM-ADM-004-2021, dated May 18, 2021, and published in the Ministry of Energy and Mines' website.*

43. **Rationale.** Subsidies to households to ensure affordability of electricity services are provided through below-cost electricity tariffs and through a direct transfer program, *BonoLuz*¹⁴, which is not well targeted. According to WB analysis, only around 48 percent of current *BonoLuz* beneficiaries are poor or extreme poor households as measured by the Unified System of Beneficiary Identification (*Sistema Unico de Beneficiarios*, SIUBEN) Life Quality Index (*Indice de Calidad de Vida*, ICV)¹⁵ (see Annex 5 for a detailed analysis). In addition, the coverage of poor households is inadequate to ensure affordability of basic electricity services; country-wide, it is estimated that only 26 percent of the total number of poor and extremely poor households are beneficiaries of the program. The program provides electricity free-of-charge to consumers who have a monthly consumption of less than 100 kWh, regardless of their poverty and vulnerability status. By the end of 2021, 330,000 households were considered active and making transactions with their *BonoLuz* cards. In June 2021, the GoDR implemented a substantial reform of its social protection system through the creation of the *Supérate* program. *Supérate* consolidates several social protection programs to provide a comprehensive system of capacity development, productive inclusion, and economic empowerment to vulnerable households and groups. Beneficiaries are registered in SIUBEN which classifies households based on a means-tested ICV¹⁶, ensuring adequate targeting and

¹⁴ *BonoLuz* is a monthly, variable, non-conditional cash transfer program delivered to poor and extremely poor households through an electronic card that can be used in different grocery shops (*colmados*) in exchange for food or prioritized household goods from a network of approved providers. The benefit size depends on the monthly energy consumption of the household, covering a maximum of 100 kWh or around RD\$600. The beneficiary has to sign a contract with electricity providers and avoid outstanding monthly balances to cash-out the benefits. New households that could be eligible for the support are not incorporated systematically in the program. Beneficiaries are removed from the program if they do not use their benefits, change address, or are discovered to be un-metered/stealing electricity.

¹⁵ SIUBEN classifies households as ICV1: extreme poor, ICV2: poor, ICV3: vulnerable, and ICV4: non-poor based on four dimensions of poverty: household infrastructure conditions, household demographics, access to education services, and access to public services, ensuring adequate targeting and coverage of beneficiaries.

¹⁶ The 2018 SIUBEN census covered around 2.1 million of households or 6.4 million inhabitants, representing around 61 percent of the total population of the country. The next census is planned for 2022-2023.



coverage of beneficiaries.

44. **In the DR, women face multiple forms of inequality, discrimination, and social exclusion.** With a Gender Inequality Index¹⁷ of 0.455 in 2020, the country ranked 112th out of 162 countries. Inequalities are reflected in the different domains such as human endowments, economic opportunity, and voice and agency. Women are significantly underrepresented in the Dominican labor market despite high literacy and primary education enrollment levels: (i) the rate of female labor force participation (ages 15-64) reached 58.5 percent in 2019, compared to 83.7 percent for men; (ii) about 18 percent of women aged 15 and above (who are not studying) do not have an income of their own, versus 11 percent of men; (iii) women spend on average over 31 hours per week on unpaid work (over three times more than men), and 19 hours per week on paid work (about half of the time spent by men); and (iv) the unemployment rate is higher for women than for men. The incidence of poverty is also greater among women: for every 100 men living in poor households in the region there were 135 women in a similar situation. Violence against women (VAW) is prevalent in the DR: (i) the percentage of women aged 15-49 who have experienced physical violence since the age of 15 was 26 percent in 2013; and (ii) the country has one of the highest rates of women's deaths at the hands of their partner in Latin America. Yet, despite these considerable gender gaps, policies and programs in the energy sector do not take into consideration gender aspects in their design, implementation, or monitoring.

45. **Substance of the Prior Action.** The *BonoLuz* reform aims at improving the targeting of the program to mitigate the impact of the removal of end-user tariff subsidies and support improvements in the payment discipline by households. In consequence, the social protection system will be reformed by integrating the *BonoLuz* program into the national social protection program *Supérate*. Targeting will be improved by allowing the identification of beneficiary consumers based on their poverty and vulnerability status, as opposed to the current practice of identifying consumers by the level of their electricity consumption. The reform is aligned with international best practice since electricity consumption is not always a good indication of poverty or vulnerability. The integration of *BonoLuz* with *Supérate* would enable increased coverage of targeted groups and would rely on *Supérate*'s strong system of local offices which regularly liaise with local communities in need. Likewise, the reform will improve the payment culture through promotion and educational activities carried out by *Supérate*'s field promoters. An inter-sectorial group including *Supérate*, SIUBEN, SIE, and the EDEs is working to coordinate the implementation of this reform. The operationalization of integration of the *BonoLuz* program into *Supérate* requires joint and coordinated action from all these stakeholders.

46. The Prior Action will also support reforms to address the gender gaps in female labor force participation and VAW. To further advance in improving the social sustainability in the sector, the MEM has improved its institutional set-up to advance on gender equality. The Ministry Resolution No. R-MEM-ADM-004-2021 created a dedicated gender unit within the Ministry with the mandate to mainstream gender considerations in the formulation, design, implementation, and monitoring of energy policies. The gender unit benefits from technical assistance and cooperation by the Ministries of Public Administration, the Ministry of Women, and the National Institute of Public Administration. The unit will design and implement specific actions to promote gender equality, particularly, within the areas of female labor force participation and VAW. The unit has been assigned its own budget¹⁸ and will be responsible for tracking

¹⁷ <https://data.worldbank.org/indicator/IQ.CPA.GNDR.XQ>

¹⁸ Around RD\$890,000 in 2022.



progress in closing identified gender gaps in the areas mentioned above. The unit will collect sex-disaggregated data for monitoring and evaluation, and a series of gender assessments will be conducted to devise appropriate actions to be implemented within the energy sector. These may include gender equality training and information campaigns, targeting staff and project beneficiaries, gender-sensitive human resources policies to improve attraction, recruitment, retention and advancement of women, and establishment of codes of conduct for employees and contractors, among others.

47. **Expected Results.** The implementation of the *BonoLuz* reform is expected to become the main tool to mitigate the impact of planned electricity tariff increases (see discussion on Prior Action #7 below) and can become an important instrument to strengthen payment discipline and support the reduction of electricity theft. According to GoDR estimates, there are about 900,000 households classified as extreme poor or poor that could be eligible to receive the *BonoLuz* support. This compares with only 330,000 active beneficiaries today, of which only 231,340 households are poor and extreme poor. To ensure sustainability in the long run, the reform will also support the implementation of a promotion and educational strategy to improve the payment culture of current and new beneficiaries. Institutional reforms supported under the Prior Action will also strengthen the capacity of the MEM to design energy policies and programs that promote gender equality. It is expected that, going forward, relevant energy or mining policy documents, plans, or programs, issued by MEM and which are legally binding, will include targeted actions to improve gender equality, particularly in terms of employment and/or VAW, and will include specific indicators to track progress toward predetermined targets.

48. **Indicative Trigger #3.** The Borrower has taken measures to mitigate the impact from the reduction of electricity subsidies for vulnerable consumers by reviewing the beneficiary criteria to improve the targeting and coverage of *BonoLuz*. The trigger supports critical next steps in the operationalization of the reform which includes the definition of the thresholds that would serve as criteria to determine beneficiary households and the amount of the subsidy. International experience shows that operationalization of these reforms is quite challenging since it requires a concerted effort between entities managing the social protection program and electricity distribution utilities on day-to-day operational matters such as the identification of beneficiaries and prioritization of groups and/or service areas. Finally, the payment mechanisms for *BonoLuz* will be reviewed to ensure that payments are received by distribution companies in a timely manner and that the payment culture is improved.

Prior Action #4. *The Borrower has taken measures to facilitate the reduction of the carbon intensity of the electricity sector in support of its NDC implementation by: (a) setting time-bound targets to increase the share of renewable energy and reduce CO₂ emissions in the power sector and mandate the adoption of the necessary policies and energy planning instruments needed to meet these targets; and (b) creating a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector, as evidenced, respectively, by: (i) the Ministry of Energy and Mines Resolution R-MEM-REG-029-2021 dated November 19, 2021, and published in the Ministry of Energy and Mines' website; and (ii) Presidential Decree No. 541-20 dated October 9, 2020, and published in the Official Gazette on October 16, 2020.*



49. **Rationale:** In December 2020, the GoDR issued an updated NDC¹⁹ which pledged to reduce GHG emissions by 27 percent compared to the business-as-usual scenario by 2030. The power sector is among the largest contributors to GHG emissions (around 60 percent of total GHG emissions in 2019²⁰) and transitioning to a lower carbon mix is critical to meet the country's climate change commitments. The 2020 NDC report presented 46 mitigation measures, 27 of which are related to actions in the energy sector. These measures focus on decreasing the carbon intensity in electricity generation through increased use of renewable energy and substitution to lower-carbon fuels, improving energy efficiency, and reducing fuel consumption from road transportation. However, many of the challenges previously identified to achieve the NDC commitments are still valid: lack of designation of specific actions and accountability by the involved stakeholders; lack of institutionalization of sector-specific contributions, including from the energy sector; and lack of a system allowing the identification, tracking, and reporting on how projects will contribute to reducing GHG emissions.

50. **Substance of the Prior Action.** The Ministry of Energy and Mines Resolution issued in November 2021 sets a commitment to reach 30 percent of renewable energy penetration in the electricity mix by 2030 and a target to reduce emissions to 12,895 GgCO₂eq by 2030. This represents a substantial commitment to diversify the country's power mix and reduce the carbon intensity of electricity generation, particularly considering the growing electricity demand and limited options to increase electricity supply due to land availability constraints, low hydropower endowment, and lack of options to import low-carbon electricity. To achieve this objective, the resolution identifies measures to enable implementation of mitigation actions from thermal generation and the promotion of energy efficiency in the public and private sectors. Furthermore, the Prior Action supports the creation of a measuring, reporting, and verification (MRV) system for GHG emissions, including for the energy sector, which will assist in the monitoring and verification of the CO₂ emission goal set by the MEM. The MRV system also identifies key entities responsible for facilitating the sector-specific inputs and ensures inter-sectoral coordination to operationalize and harmonize reporting standards, improve data transparency, communicate progress biannually, and bring accountability to the process.

51. **Expected Results.** This policy measure is expected to directly inform the choices and priorities in the implementation of mitigation measures in the energy sector and in investments for future electricity generation technologies. The implementation of the MRV system is expected to enable an adequate monitoring of the implementation of the GHG reduction goals and allow timely policy interventions to ensure that the target is achieved. At the same time, enhancing the MRV system will facilitate future energy and climate change policy commitments.

52. **Indicative Trigger #4.** The Borrower has taken measures to improve electricity planning by issuing a resolution defining the objectives and process to carry out systematic indicative least-cost generation planning in accordance with targets for increasing renewable energy deployment and reducing carbon emissions. To meaningfully incorporate CO₂ emission and renewable energy targets set out in the Resolution supported in Prior Action #4, it is necessary to define a sound approach and process for least-

¹⁹ See:

[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Dominican%20Republic%20First/Dominican%20Republic%20First%20NDC%20\(Updated%20Submission\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Dominican%20Republic%20First/Dominican%20Republic%20First%20NDC%20(Updated%20Submission).pdf)

²⁰ Comisión Económica para América Latina y el Caribe (CEPAL), 2020. Transición energética de la República Dominicana ¿Cómo las estrategias de descarbonización del sector eléctrico aceleran la participación del sector privado en la contribución determinada a nivel nacional CDN?



cost generation expansion planning. The institutionalization of this approach provides a mechanism for assessing the impact of policy choices such as the introduction of renewable energy, GHG emissions limits, and fuel diversification. The implementation of the trigger would also support the institutional strengthening of the policy and planning functions assigned to MEM in the Electricity Pact.

Prior Action #5. *The Borrower has taken measures to increase the share of renewable energy in the electricity mix and meet its NDC commitments by removing legal barriers for distribution companies to contract renewable energy generation, as evidenced by Presidential Decree No. 608-21, dated September 27, 2021, and published in the Official Gazette on September 30, 2021.*

53. **Rationale.** The updated 2020 NDC identified increased use of renewable energy resources as a key mitigation measure. The country has largely developed its hydropower resources, but other renewable energy resources such as solar PV, wind energy, and bioenergy have not been fully exploited. Over the past few years, there has been considerable investor interest in developing renewable energy generation in the country. By the end of 2020, installed capacity of solar PV and wind plants reached 590 MW, and definitive concessions were awarded by the National Energy Commission (*Comisión Nacional de Energía*, CNE) for the development of an additional 1,000 MW of solar, wind, solid-waste, and biomass generation. However, to increase the use of renewable energy and take advantage of the substantial private sector interest in developing these projects, there is a need to remove legal and institutional hurdles. Presently, the electricity distribution companies are unable to sign power purchase agreements (PPAs) with renewable energy generators. These contracts were previously negotiated directly between generators and CDEEE without competitive procedures, which has kept renewable energy costs relatively high compared to prices observed in auctions in the region,²¹ thereby making renewables less attractive as a generation source. In contrast, there is ample international and regional experience showing that implementation of competitive processes for the procurement of renewable energy is likely to attract significant interest and yield very competitive contracted prices, in some cases to the extent that variable renewable energy has become the least-cost generation option, even compared to coal.²² On the other hand, with the forthcoming dissolution of CDEEE and the inability of the EDEs to contract renewable generation directly, renewable developers do not have an off-taker with which to sign a contract and are therefore unable to secure financing, thereby causing a critical bottleneck to further renewable generation development.

54. **Substance of the Prior Action.** The reform improves the enabling environment to support the development of private-led renewable energy investments, thereby supporting one of the main climate mitigation measures in the country's NDC and related policy commitments. The Presidential Decree No. 608-21 removes CDEEE from the power purchase contracting process and enables the distribution companies to contract directly with renewable energy generators, eliminating one of the main legal barriers to further increase the penetration of renewable energy in the electricity mix. Other key provisions in the Decree include preferential purchase (at equivalent price levels) and preferential dispatch of electricity generated from non-conventional renewable energy resources. To lower the purchase cost of renewable energy, the Decree establishes reference prices determined by the SIE and

²¹ In Chile, competitive auctioning has been a key measure to achieve a significant reduction of the price of solar power, which is now the cheapest generation option.

²² Worldwide, the average cost of solar power has decreased from 12 US\$/kWh in 2015 to around 4 US\$/kWh in 2021 through use of competitive auctioning making solar cheaper than any fossil fuel alternative. Source: IRENA Renewable Cost Database <https://www.irena.org/Statistics/View-Data-by-Topic/Costs/Global-LCOE-and-Auction-values>



CNE. These reference prices have been established for the different renewable energy technologies and at different locations to better reflect energy availability factors. Reference prices are to be considered as ceiling prices in the PPAs. Finally, the Decree mandates MEM to submit to the GoDR a proposal to amend the legal framework governing the development of renewable energy with the main objective of updating the incentive framework and establish competitive procurement processes.

55. **Expected Results.** This measure, along with Prior Action #4 which introduces time-bound targets for renewable energy in the generation mix, is expected to enable 500 MW of new privately financed renewable energy capacity to be contracted by distribution companies by 2024. As of November 2021, just two months after the approval of the Decree, the EDEs already assigned PPAs for 77 MW of solar PV capacity to be developed in the country. According to publicly available information, the purchase prices are about 40 percent below the average cost of supply for the EDEs,²³ which illustrates the impact that this change will have on the attractiveness of renewable energy as it becomes the least-cost source of power, thereby adding a strong financial argument to the decarbonization plans.

56. **Indicative Trigger #5.** The Borrower has taken measures to enable the development of low-cost renewable energy generation by updating the legal framework to mandate the competitive procurement of renewable energy projects and clarify the roles and responsibilities of sector entities in its implementation. The update of the legal framework for renewable energy is also expected to incorporate new technologies to support the integration of variable renewable energy in the electricity system such as battery storage.

Prior Action #6. *The Borrower has taken measures to promote energy efficiency by submitting to the National Assembly an energy efficiency bill which: (a) establishes energy efficiency policies and norms; (b) promotes the development of a market for energy efficient goods and services; (c) incentivizes non-fossil fuels use; and (d) establishes fiscal incentives for the implementation of energy efficiency measures, as evidenced by the bill submitted on January 13, 2022 to the Senate as initiative No. 01286-2022-PLO-SE, resubmitting initiative No. 00811-2021-PLO-SE from June 23, 2021, and published in the Senate's website.*

57. **Rationale.** Efforts to increase energy efficiency and promote rational energy use in the country were initiated in 2010 with the launch of the National Energy Plan 2010-2025, which had the following strategic objectives in the field of energy efficiency: (i) promote the passing of energy efficiency legislation; (ii) implement energy efficiency programs in GoDR institutions; and (iii) sensitize the public at large on rational energy use through awareness-raising campaigns. The updated 2020 NDC also identifies energy efficiency actions to meet the country's GHG mitigation targets. Despite efforts to implement awareness-raising campaigns, results towards reducing waste in energy transformation and use have been very limited. The main issues are a lack of energy efficiency incentives or mandates, lack of enforcement of minimum energy performance standards for appliances, absence of building energy codes, and deficiencies in drivers of energy efficient transport.

58. **Substance of the Prior Action.** The proposed bill seeks to promote rational use of energy by putting in place a comprehensive framework that will contribute to changing attitudes and habits in the broader population through dissemination and outreach activities, and by addressing excessive use of energy in water utilities and in the transport sector. It introduces a national energy efficiency program with incentives for use of efficient equipment and creates an institutional framework that provides clear

²³ See: <https://presidencia.gob.do/noticias/consejo-unificado-de-las-edes-suscribe-tres-acuerdos-sobre-energias-renovables>



guidelines and responsibilities. The proposed bill sets a timeline for preparing an energy efficiency strategy and a plan for efficient transport. It mandates SIE to elaborate rules and tariffs for e-charging stations. It sets a framework for energy efficient building codes for new and renovated buildings. In the public sector, it introduces Energy Managers and Energy Committees that are tasked with preparing action plans for improving energy efficiency. The law will also set a timeline for preparing guidelines for energy efficiency in public procurement including the need to consider lifecycle cost in bid evaluations. The proposed bill will also mandate energy efficiency labelling for high-energy use equipment (lighting, cooling, pumping) and electric vehicles and will create financial incentives by tax reductions. Finally, the proposed bill will incentivize and provide the framework for financial intermediation that can provide soft-loans and other financial incentives to public institutions (without being a burden to the state since these are expected to be paid back from the energy efficiency savings).

59. **Expected Results.** The bill would drive the implementation of projects and programs that minimize or reduce energy use, contributing to the reduction of the country's GHG emissions in line with its NDC commitments. It is expected that at least one national energy efficiency program will be implemented. The GoDR is working on the design of a street lighting project which would be facilitated by the incentives laid out in the proposed bill. This would focus on the replacement of street lighting equipment to reduce public energy expenditures, improve energy consumption, and reduce GHG emissions.

60. **Indicative Trigger #6.** The Borrower has taken measures to incentivize energy efficiency by the approval by the National Assembly of the energy efficiency bill and the approval of its Regulatory Decree. The Regulatory Decree would set out the main regulatory provisions for the implementation of the policies set out in the energy efficiency bill, thereby enabling their implementation.

Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector

61. **This pillar supports the achievement of sector financial viability that is fundamental to ensuring the provision of reliable electricity services in the context of vulnerability to climate-induced natural disasters, a greener energy mix, and economic and affordable electricity prices for all Dominicans.** It supports a comprehensive electricity tariff reform which consists of the gradual removal of fossil fuel subsidies to reach cost-reflective levels.

Prior Action #7. *The SIE has taken measures to improve the financial self-sufficiency of the sector and reduce fossil fuel subsidies through: (a) the definition of an adjustment path for end-user tariffs to reach cost-recovery levels; and (b) the approval of the first end-user tariff increase, in accordance with the adjustment path, as evidenced, respectively, by: (i) Resolution No. SIE-075-2021-TF dated September 3, 2021, as amended by Resolution No. SIE-087-TF 2021 dated September 29, 2021; and (ii) Resolution No. SIE-093-2021-TF dated October 27, 2021, as amended by Resolution No. SIE-103-2021-TF dated November 30, 2021, all published in the SIE's website.*

62. **Rationale.** Over the last four decades, the GoDR spent annually between 1 and 2 percent of GDP to subsidize fossil fuel use through below-cost electricity tariffs for end-consumers. In the period 2016-2020, direct transfers to the EDEs to cover financial losses and capital investment requirements have averaged more than US\$600 million per year, making support to the electricity sector one of the central government's largest current expenditure items. Electricity subsidies consist of below-cost pricing and cross-subsidies between consumer classes. Currently, it is estimated that electricity tariffs only cover



about sixty percent of the cost of service. Tariffs have not been adjusted for over ten years despite substantial changes in fuel prices, exchange rates and inflation. The cross-subsidies are from commercial and industrial consumers to residential consumers and between residential consumers with high levels of monthly electricity consumption to those with the lowest levels of electricity consumption. These price distortions result in poor incentives to implement energy conservation measures, higher levels of GHG emissions, and the need for large transfers to state-owned companies to cover electricity supply, operational, and investments costs.

63. **Substance of the Prior Action.** Electricity pricing reform is a cornerstone for improving the financial viability of the power sector. This Prior Action supports progressive tariff adjustments of electricity tariffs to reach cost-reflective levels and the removal of cross-subsidies among consumer classes. In addition, it supports the separation of functions and institutionalization of the role of the independent electricity regulator, SIE, on matters related to electricity tariff setting. On September 3, 2021, SIE issued a regulation to guide these gradual tariff adjustments which will be implemented over a period of one bimester (November – December 2021) and 20 additional quarters (until end-2026). For each adjustment period, the SIE will publish the estimated cost-recovery tariff (*tarifa de referencia*) and the applied tariff, increasing the transparency of the subsidy reform. It is expected that by the end of 2026, subsidies will be removed, and tariffs will reflect the cost of efficient service provision. On October 27, 2021, SIE implemented the first tariff increase in accordance with the adjustment formula. This was the first tariff increase for end-consumers in a decade and was implemented with the support of a public communications campaign. Increasing electricity tariffs will create much stronger incentives for consumers to implement energy efficiency measures, which will lead directly to lower requirements of high-cost fossil fuel power generation and to GHG emissions reductions, given that the power mix is predominantly based on high-carbon content fuels as described above.²⁴ The implementation of the tariff reform will result in higher electricity costs for all households, including the poor and vulnerable. Recognizing the need to protect these groups, the GoDR is implementing a reform of the social protection program *BonoLuz* to improve its targeting and increase the coverage (see discussion of Prior Action #3).

64. **Expected Results.** The implementation of the tariff adjustment path reaffirms the commitments embodied in the Electricity Pact and is expected to put the sector on a sustainable path for financial recovery, incentivize energy efficiency, and result in GHG emission reductions. As the reform is rolled out, the cost-recovery level of end-use electricity tariffs are expected to increase from 60 percent by end 2020 to 80 percent by end 2024. While it is difficult to forecast the evolution of fossil fuel supply costs, the GoDR estimated that it could save up to US\$3.3 billion over the transition period 2023-2026, largely based on reduced needs for costly fossil fuel generation.

65. **Indicative Trigger #7.** The SIE has taken measures to improve the level of certainty and consistency in the determination of electricity tariffs by approving subsequent tariff increases in accordance with the adjustment path defined in SIE Resolution No. SIE-075-2021 as amended by SIE Resolution No. 087-2021-TF. The SIE would continue the implementation of tariff adjustments as evidenced by quarterly Resolutions, which is considered critical to create a regulatory track record. For the second DPL in this programmatic series (DPL2), the SIE Resolutions that would be taken into

²⁴ Efficient end-user pricing of electricity such as subsidy rationalization has been identified as an activity eligible from classification as climate mitigation finance (category 9.1) according to the 2020 Joint MDB report on climate finance. See: <https://thedocs.worldbank.org/en/doc/9234bfc633439d0172f6a6eb8df1b881-0020012021/original/2020-Joint-MDB-report-on-climate-finance-Report-final-web.pdf>



consideration are those issued before the date of the presentation of the project to the World Bank's Regional Operations Committee.

66. **Indicative Trigger #8.** The SIE approved a regulatory framework to enable distribution companies to recover the full cost of efficient service delivered and introduced incentives to reduce distribution losses, by issuing a Resolution with a detailed methodology for setting and periodically adjusting the distribution companies' annual revenue requirement. It is expected that this methodology will be implemented to determine and inform the evolution of the cost-recovery tariff described in Prior Action #7 above.

67. **Indicative Trigger #9.** The SIE has taken measures to improve the quality of service and optimize the cost-of-service delivery by issuing a Resolution to update the technical standards for the architecture of distribution systems (network code).

Table 4: DPL Prior Actions and Analytical Underpinnings

Prior Actions	Analytical Underpinnings
Pillar 1: Strengthening sector governance	
Prior Action #1. The Borrower has identified the responsible institutions in the energy sector and mandated them to execute specific electricity sector reforms within a specified period of time.	<ul style="list-style-type: none"> World Bank (2019): Dominican Republic Public Expenditure Review, 2012-18 World Bank (2021): Dominican Republic Public Expenditure Review World Bank (2018) Dominican Republic Systematic Country Diagnosis (SCD) <p>Key findings from the 2019 PER support the conclusion that the legal and regulatory framework for the electricity sector is incomplete. Key findings from the 2021 PER support the conclusion that institutional fragmentation reduces the effectiveness and efficiency of service delivery. A key conclusion of the SCD was that improvement in governance, accountability and transparency is important to the achievement of the DR's development goals.</p>
Prior Action #2. The DGAPP has taken steps to improve the governance and performance of electricity distribution companies and the reduction of distribution losses by initiating the process to transfer the management and operation of the EDEs to private operators through the public decision to receive a proposal for such transfers.	<ul style="list-style-type: none"> World Bank (2021): Dominican Republic Public Expenditure Review World Bank (2020): Maximizing Private Finance to Bridge the Infrastructure Service Gap in Electricity and Water Supply and Sanitation in the Dominican Republic CDEEE (2021): <i>Plan Integral de Reduccion de Perdidas en las EDEs 2022-2028</i> <p>Key findings in these studies support the conclusions that: (i) SOEs are an important contributor to debt and contingent liabilities; and (ii) enforcement of a transparent regulatory regime is a prerequisite to attracting private investment in the electricity sector.</p>



Prior Actions	Analytical Underpinnings
Pillar 2: Enhancing climate resilience and social and environmental sustainability	
<p>Prior Action #3. The Borrower has taken measures to improve the social sustainability of the electricity sector by: (a) reforming the social protection system for vulnerable consumers through the integration of the <i>BonoLuz</i> subsidy program into the national social protection program <i>SUPERATE</i>; and (b) creating a gender unit to mainstream gender equality in the formulation, design, implementation and monitoring of policies in the energy and mining sectors.</p>	<ul style="list-style-type: none"> World Bank (2019): Dominican Republic Public Expenditure Review, 2012-18 SIE (2019): <i>Estudio Tarifario Complementario al de Determinación de la Tarifa Técnica para las Empresas Distribuidoras</i> World Bank (2020): Addressing the COVID-19 Emergency and Preparing for Recovery in the Dominican Republic: Energy Sector Impact and Policy Response <p>These studies identify the issues to be considered in restructuring tariffs and subsidies to reduce the fiscal impact of the electricity sector and improve targeting of subsidies.</p>
<p>Prior Action #4. The Borrower has taken measures to facilitate the reduction of the carbon intensity of the electricity sector in support of its NDC implementation by: (a) setting time-bound targets to increase the share of renewable energy and reduce CO₂ emissions in the power sector and mandate the adoption of the necessary policies and energy planning instruments needed to meet these targets; and (b) creating a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector.</p>	<ul style="list-style-type: none"> World Bank (2020): <i>Curvas De Costo Marginal De Abatimiento En Los Subsectores Generación Eléctrica, Eficiencia Energética Y Transporte Carretero R.D.</i> <p>The energy Marginal Abatement Cost Curve (MACC) points out that the generation mix in the Dominican Republic is dominated by fossil fuel sources that emit high levels of GHGs and expose the DR to volatility in global oil prices.</p>
<p>Prior Action #5. The Borrower has taken measures to increase the share of renewable energy in the electricity mix and meet its NDC commitments by removing legal barriers for distribution companies to contract renewable energy generation.</p>	<ul style="list-style-type: none"> World Bank (2019): Dominican Republic Public Expenditure Review (PER) World Bank (2020): <i>Curvas De Costo Marginal De Abatimiento En Los Subsectores Generación Eléctrica, Eficiencia Energética Y Transporte Carretero</i> <p>The PER study also shows selection of generation projects has not benefitted from effective competitive processes. This study provides the quantitative and policy foundations for translating the DR's updated NDCs into specific goals and mitigation strategies for the electricity sector.</p> <p>The MACC recommends wind, solar PV and natural gas, biomass and some hydro as mitigation options to achieve 2020 NDC.</p>
<p>Prior Action #6. The Borrower has taken measures to promote energy efficiency by submitting to the National Assembly an energy efficiency bill which: (a) establishes energy efficiency policies and norms; (b) promotes the</p>	<ul style="list-style-type: none"> World Bank (2020): <i>Curvas De Costo Marginal De Abatimiento En Los Subsectores Generación Eléctrica, Eficiencia Energética Y Transporte Carretero R.D.</i> <p>The Energy MACC highlights the important role that EE</p>

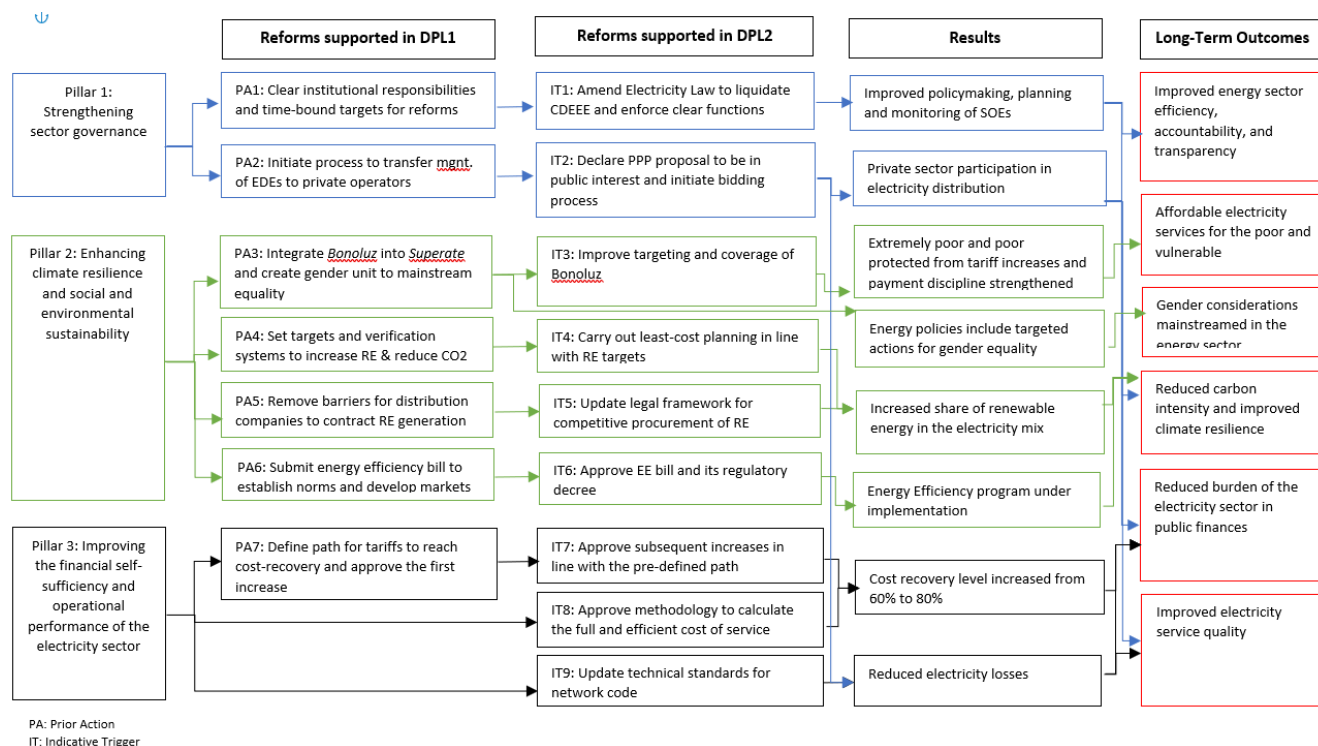


Prior Actions	Analytical Underpinnings
development of a market for energy efficient goods and services; (c) incentivizes non-fossil fuels use; and (d) establishes fiscal incentives for the implementation of energy efficiency measures.	measures have in contributing to the achievement of the 2020 NDC and points out that upgrading air conditioning and residential cooling are the two most impactful measures that will avoid the most GHG emissions.
Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector	
<p>Prior Action #7. The SIE has taken measures to improve the financial self-sufficiency of the sector and reduce fossil fuel subsidies through: (a) the definition of an adjustment path for end-user tariffs to reach cost-recovery levels; and (b) the approval of the first end-user tariff increase, in accordance with the adjustment path.</p>	<ul style="list-style-type: none"> • SIE (2019): <i>Estudio Tarifario Complementario al de Determinación de la Tarifa Técnica para las Empresas Distribuidoras</i> • World Bank (2019): Dominican Republic Public Expenditure Review, 2012-18 • World Bank (2021): Tariff and Subsidy work performed in 2021-2022 under ESMAP grant. • CDEEE (2022): <i>Determinación de la metodología de cálculo y ajuste periódico de los ingresos anuales permitidos (IAP) para las empresas distribuidoras de electricidad (EDE) a nivel nacional</i> (Activity underway, funded by WB Distribution Project) <p>These studies outline recommendations for implementation of a new methodology to determine the Technical Tariff, based upon the Annual Revenue Requirement, and highlight the importance of reducing financial deficits in the EDEs.</p>

68. The expected results and outcomes of the reforms supported under the DPL program are presented in Figure 3 below.



Figure 3. Results chain of the DPL program



Source: WB staff elaboration.

4.3. LINK TO CPF, OTHER BANK OPERATIONS AND THE WBG STRATEGY

69. The proposed operation is fully aligned with the objectives of the World Bank Group's (WBG) Dominican Republic Country Partnership Strategy (CPS) for FY15-18 endorsed by the WB Board of Executive Directors on September 25, 2014 and revised in the Performance and Learning Review (PLR) of the CPS for the period FY15-18 considered by the same Board on January 11, 2018, which extended the CPS period to FY19. The proposed DPL is aligned with results area 2 (improving access to efficient and reliable electrical distribution networks) as well as the cross-cutting theme of mainstreaming gender and governance and contributes to two CPS outcomes: i) improved efficiency and reliability of the electricity sector, and ii) energy diversification. It remains aligned with the restated objectives in the PLR under the focus area of "strengthening conditions for inclusive and equitable growth." The operation is also fully aligned with the new Country Partnership Framework (CPF) for FY22-26 scheduled for consideration by the World Bank's Board of Executive Directors on March 31, 2022 along with this DPL, and supports two of the CPF objectives under the first High Level Outcome 'Improved access to quality public service delivery.' The DPL 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.

70. The DPL is aligned with the three dimensions set forth in the World Bank Development



Committee paper “From COVID-19 Crisis Response to Resilient Recovery - Saving Lives and Livelihoods while Supporting Green, Resilient and Inclusive Development (GRID)” (2021): (i) Green, to promote environmental sustainability by supporting policies aimed at diversifying the energy mix and lowering the carbon intensity in the electricity sector and beyond; (ii) Resilient, investing in planning capacity and improving the sector’s financial viability and the resilience of key energy infrastructure to be able to weather shocks like COVID-19 and other natural disasters that would be exacerbated by climate change; and (iii) Inclusive, to ensure that the social protection system is adapted to protect the poorest and most vulnerable households in the roll-out of an ambitious electricity tariff reform program while improving the targeting to ensure fiscal efficiency.

71. The proposed DPL will contribute to the achievement of the twin goals of eliminating extreme poverty and boosting shared prosperity in a sustainable manner. The twin goals are at the core of all measures supported by this DPL, which promotes policies to enable reliable electricity service, thereby driving economic recovery and growth, while ensuring affordable electricity prices to the poorest and most vulnerable. The proposed operation is aligned with the WBG’s Maximizing Finance for Development (MFD) approach and includes support for private sector participation in power distribution as well as mobilization of private capital in renewable energy generation investments and energy efficiency measures. The DPL is in line with the World Bank’s 2021-2025 Climate Change Action Plan by supporting policies that will enable greater use of renewable energy and energy efficiency investments. It also contributes to the implementation of the WBG Gender Strategy (FY16-23) by facilitating the integration of gender considerations and mainstreaming gender equality in energy and mining sector policies.

72. The proposed operation builds on recently completed, ongoing, and planned WB analytical work that complements the operation. In addition to the PER series and WB-financed lending operations described in section 4.1 above, the proposed DPL builds on the WB’s long-term partnership with the GoDR on the preparation and implementation of the 2020 NDC. Policies on energy and climate change supported by this DPL and their outcomes and results will directly inform the preparation and update of the NDC Action Plan to track and report on progress of the achievement of the 2020 NDC in the energy sector and the economy at large. In addition, the operation tackles central issues identified in the 2018 Systemic Country Diagnostic, which identifies: (i) reducing subsidies to the energy sector as key to developing a conducive fiscal environment that supports the provision of high-quality public services, and (ii) improving the quality of public services, especially electricity, as an important measure to help lower the costs of firms and boost their competitiveness.

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

73. The formulation of the reform program supported by the DPL is the result of a strong consultation and engagement process with key stakeholders in the context of the Electricity Pact. Key reforms supported by the DPL are key elements of the GoDR’s reform program embedded in the Electricity Pact. Though signed in 2021, the Electricity Pact was initially drafted in 2017, building on an accord by all stakeholders in the sector, as described in Box 3. To gather broad feedback, and aiming for an inclusive participation process, the initial consultations were carried out by the Economic and Social Council (*Consejo Económico y Social*, CES) in 2013-15. Consultations were carried out with the private sector, labor



representatives, civil society organizations, universities as well as independent sector experts.²⁵ Feedback from the consultation process was integrated in the design of policy and institutional reforms in the Electricity Pact. In addition, consultations were undertaken with affected stakeholders per regular government processes. Specifically, as provided by Article 31 of the Law 107-03 on the Rights of Persons in their Relations with the Administration and Administrative Procedure, administrative regulations, plans, and programs, such as those supported by this DPL, are subject to the following principles and criteria: (a) hearing of citizens directly affected in their rights and interests; (b) public participation; (c) adequate timing of the hearing, participation, and interinstitutional collaboration; (d) consideration and motivation; and (e) publication.

74. **This operation is part of a broader coordinated response by the DR's development partners and builds on a deep and longstanding partnership with the WB Group.** The IFC has been involved and consulted on the design of the operation and is considering complementary support for private-led renewable energy investments in the country. In addition, the Central American Bank for Economic Integration (CABEI) and the Interamerican Development Bank (IDB) are preparing budget support operations based on policy matrices that are parallel to and coordinated with the policy matrix for the proposed WB DPL. At the same time, the WB is financing the Distribution Grid Modernization and Loss Reduction Project (P147277), a component of a broader National Loss Reduction Program including projects financed by the IDB, the European Investment Bank, the OPEC Fund for International Development, and the Development Bank of Latin America (CAF). Additionally, the WB is supporting the electricity sector through an extensive technical assistance package, in coordination with the German Agency for International Cooperation (GIZ) and the Japan International Cooperation Agency (JICA), which maintain active technical assistance programs in the electricity sector.

75. **Development Partners have also engaged on climate change.** The WB recently engaged with the GoDR to support efforts to update its NDC. The National Council for Climate Change has played a key coordinating role among partners, notably the French Agency for International Development, the NDC Partnership, IDB, GIZ and WB. The National Council organizes periodic meetings with all partners to provide progress reviews, identify gaps and opportunities, and avoid duplication of efforts.

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1. POVERTY AND SOCIAL IMPACT

76. **Prior Actions supported by this operation are expected to have positive impacts on distributional outcomes over the short to medium term, and potential negative impacts are expected to be mitigated with the implementation of reforms also supported under this operation.** The analysis indicates a negligible impact on poverty and equity from the implementation electricity tariff adjustments supported in this operation (Prior Action #7). Negative impacts on poor and vulnerable population are expected to be fully mitigated by the implementation of reforms to *BonoLuz* under the social protection program *Supérate* (Prior Action #3) which is also supported under the program. Other reforms are

²⁵ The list of consultations carried out by the CES is available online:
<https://www.ces.org.do/images/2017/CESPACTOEL%C3%89CTRICOListadodeReunionesHorasEstimadasdeTrabajo18-08-2017.pdf>



expected to have indirect positive impacts on poverty and other social indicators over the short to medium-term. Annex 4 presents a summary table of environmental and social impacts of the operation. Annex 5 reviews the Poverty and Social Impact Analysis (PSIA) of the policy and institutional reforms supported by this DPL.

77. **Policies supported under Pillar 1 are expected to have heterogenous impacts on social and poverty outcomes.** Policy reforms aimed at strengthening energy sector governance, operational performance of sector entities, and promoting renewable energy and enhanced resilience against climate change (Prior Action #1) are expected to have indirect positive impacts in the short to medium-term. Policy reforms in the electricity distribution segment (Prior Action #2) are expected to result in higher collections and decrease unmetered electricity use by households. The analysis shows an indirect negative but not large impact on poverty or inequality since lack of payment discipline is not concentrated only in poor and vulnerable households. Potential negative impacts can be mitigated with the implementation of the *BonoLuz* reform.

78. **Prior actions supported under Pillar 2 are expected to have a positive impact on social and poverty outcomes in the country and mitigate the negative impacts presented under Pillars 1 and 3.** The integration of *BonoLuz* into the *Supérate* program (Prior Action #3) is expected to mitigate the impact of tariff adjustments and payment collection increases. Moreover, the expanded coverage and improved targeting of *BonoLuz* are expected to decrease poverty and slightly improve inequality. The effectiveness of this mitigation measure would depend the pace and accurate implementation of the reform; specifically, on how fast the program increases the coverage of poor and vulnerable households. Other reforms supported under this pillar which aim at supporting climate mitigation measures in the power sector (Prior Actions #4, 5, and 6) are expected to have indirect positive impacts on social and poverty outcomes once investments in renewable energy and energy efficiency are implemented. Recent WB analysis²⁶ shows that vulnerable groups are disproportionally and negatively affected by climate change impacts.

79. **Pillar 3 measures are expected to produce limited negative distributional impacts which can be mitigated.** In the absence of mitigation measures and if electricity tariffs increase according to the path approved by SIE, the reform (Prior Action #7) might lead to a slight increase in the national poverty rate (around 0.4 percent points by 2024). Inequality, measured by the Gini coefficient, would remain unaltered. When analyzing the joint impact of electricity tariff reform (Prior Action #7) and improved operational improvement in the EDEs (Prior Action #2), leading to better electricity bill collections, no significant impacts are expected on extreme poverty or poverty gaps (see Annex 5 for more details). This finding is explained by a relatively low share of electricity expenditures across all levels of income. Households currently spend between 3 percent (lowest quintile) and 3.4 percent (highest quintile) of their total income on electricity. The implementation of quarterly tariff increases by 2024 would increase the latter share to around 5.5 percent of total income (with similar values across income quintiles).

5.2. ENVIRONMENTAL, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

80. **A general environmental analysis was carried out to assess whether the proposed DPL is likely to cause significant adverse or positive effects on the environment, forest, and natural resources.** The

²⁶ Ishizawa, O. Strobl, E. Parra, J., Gomez, C., Munoz, J., Cruz, A. 2018. *Impactos de inundaciones y vientos huracanados en Republica Dominicana*.



assessment was based on a secondary data review of the program, including the description of each prior action, evidence from the literature, and legal evidence. Annex 4 presents a summary table of environmental impacts of the operation.

81. **Prior Actions supported under Pillars 1, 2, and 3 are expected to result in positive direct and indirect effects on the country's environment, forests, or natural resources.** Prior Action #1 will support policy and institutional reforms to increase the use of renewable energy, reduce fossil fuel subsidies and increase the preparedness of electricity companies to respond to natural disasters. Prior Action #2 will improve oversight and accountability in the overall electricity sector, increasing the sector's performance and reducing electricity losses, thereby decreasing the need for generation from fossil fuels and limiting GHG emissions. Prior Action #4 will promote climate change mitigation by reducing GHG emissions and transitioning to a lower carbon mix, in line with national efforts for low carbon development and the updated NDC commitments. It will also contribute to the adoption of climate change mitigation actions by promoting the effective measurement, reporting, and verification of GHG emissions and emissions reductions. In addition, Prior Action #7 will contribute to the gradual removal of cross fossil fuel subsidies, resulting in environmental gains from the reduction of adverse environmental and health impacts derived from the use of fossil fuels, as well as the reduction of GHG emissions. No environmental effects are expected from the implementation of measures supported under Prior Action #3.

82. **Prior Actions #5 and #6 include measures with both positive and potential negative environmental effects which can be mitigated.** Policy measures under these Prior Actions promote and incentivize the development of renewable energy in the electricity mix, contributing to climate change mitigation by reducing fossil fuels consumption. This DPL promotes the development of wind, solar, and biomass energy projects which are expected to result in significant positive environmental and health benefits, including a decrease in GHG emissions, black carbon, and other particulate matter (nitrogen oxides, and sulfur oxides, among other primary and secondary pollutants), which will, in turn, reduce the costs associated with urban and rural air pollution. Potential negative effects in the environment related to renewable projects include (i) Wind Power: potential land use change, with associated reduction, fragmentation or degradation of habitats for wildlife, including changes of bird migration routes and collision threats of birds with spinning turbines; (ii) Solar Power: potential land use change, habitat loss, and increased water use; (iii) Biomass: potential land-use change and habitat loss due to deforestation to accommodate the increased demand for feedstock, potential pollution of natural resources (soil, groundwater, and runoff water) from pesticides and other agrochemicals, potential soil erosion and soil sterilization due to monocultures, increased demand for freshwater for crops growth, and air emissions of harmful toxins that could be released during combustion, affecting the human health. These negative environmental impacts are expected to be mitigated through the country's environmental regulatory framework.

83. **The country has a comprehensive environmental regulatory and planning framework on environmental management to address adverse effects in the energy sector.** The General Law of Environment and Natural Resources (Law 64-00) enacted in 2000 is the legal framework that mandates the preservation and protection of the environment and natural resources and grants the right to sustainable use of the environment and natural resources. This Law establishes the basic principles of environmental protection, management and use of natural resources, and the civil and criminal liabilities and penalties. According to the Regulation of the Environmental Assessment Process approved through Resolution No. 13/2021, works, projects, and activities are categorized according to their environmental



risk profile, which determines the type of environmental assessment needed to obtain the respective environmental license or permit. Resolution 0011/2016 establishes the system for environmental permits and licenses and includes the following key instruments needed: (i) environmental license; (ii) environmental permit; (iii) environmental constancy; and (iv) minimum impact registration certificate. For Category A (high risk) projects, an Environmental Impact Assessment is required to obtain the environmental license, while for Category B (moderate risk) projects, a Declaration of Environmental Impact is required to obtain the environmental permit.

84. **The Ministry of the Environment and Natural Resources (MENR) is the only institution capable of issuing environmental licenses and permits and imposing administrative penalties for law infringements.** Any project, installation, and works carried out by the GoDR or private sector is subject to the environmental impact evaluations mandated by law and the requirements imposed by the MENR. Environmental licenses and permits are required prior to the implementation of the works and shall be maintained throughout the life of the project. MENR has the authority to audit, supervise and investigate any activity performed by an individual or company, which must, in turn, provide access and information to the environmental authority. MENR's institutional capacity regarding its environmental management processes, including licensing and monitoring of environmental impacts, is deemed adequate. The Vice-Minister for Environmental Management within the MENR oversees the environmental licensing systems, as well as for monitoring project implementation and environmental compliance. For the energy sector and besides the MENR, the National Energy Commission (CNE) established through the General Electricity Law of 2001 (Law No. 125-01) has a key role during project design and preparation of renewable energy projects. As per article 14 of this Law, new renewable projects need to receive the endorsement of the CNE as a first step and prior to any due diligence required to carry out the necessary environmental assessment and obtain its respective environmental license or permit.

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

85. **The Public Expenditure and Financial Accountability (PEFA) Assessment completed in 2016 indicates that, in general, the Public Financial Management (PFM) system in the DR performs satisfactorily.** The major strengths are included in pillar I-Budget Reliability and pillar-II Transparency of Public Finances of the PEFA Methodology,²⁷ which show in both cases good alignment with international good practices. The remaining pillars have mixed results.

86. **The implementation of the PFM management system, the Financial Management Information System (*Sistema de Información de la Gestión Financiera*, SIGEF) and the integration of a Treasury Single Account System are key underpinnings of the DR's effective budgetary controls** over non-salary expenditures, including an adequate segregation of duties, effective commitment controls, and compliance with norms and procedures for payments. Annual financial reports on the central government budget are presented for external audit within three months after the end of the fiscal year. Central government financial reports are audited annually and were presented to the legislature within two

²⁷ Public Expenditure and Financial Accountability (PEFA) is a methodology for assessing public financial management performance. It identifies 94 characteristics (dimensions) across 31 key components of public financial management (indicators) in 7 broad areas of activity (pillars). Since 2001 PEFA has become the acknowledged standard for PFM assessments.



months for 2018 and within four months for 2019.²⁸ The DR annual budget and its execution are made public as was the case with the Budget Law for FY 2021.²⁹

87. **However, the 2016 PEFA Report and the Methodology for Assessing Procurement Systems (MAPS) Assessment conducted in February 2016 highlighted existing challenges in the national procurement system.** These include limited transparency, competition, and value for money in procurement processes implemented with national funds. Key areas of improvement are contract management and timeliness of payments. The 2016 PEFA assessment report concluded that only 66 percent of public procurement conducted in 2015 was implemented through competitive methods. Although procurement planning is mandatory and most GoDR agencies advertise their Annual Procurement Plans in the national procurement portal, the 2016 MAPS assessment found that there is no integration between procurement planning and budget formulation. More recently, according to a report published by the Procurement Directorate (*Dirección General de Contrataciones Publicas, DGCP*), several cases were identified of public officials acting as GoDR providers, prompting investigations and cancellations of these officials from the GoDR's providers list (*Registro de Proveedores del Estado, RPE*). Despite current efforts to fight corruption, the risks related to public procurement are considerable.

88. **The GoDR is committed to PFM reforms.** The GoDR, with support from the European Union (EU), has prepared its PFM Strengthening Action Plan 2020-2022³⁰ with the objectives of enhancing the link between medium-term budgeting and planning; strengthening PFM systems integration; increasing accountability and reinforcing controls over management of goods, assets, and public services; and improving PFM governance.

89. **Foreign exchange (FOREX) controls.**³¹ The published audited financial statements of the DR Central Bank for 2019 and 2020³² were reviewed by the Bank in the context of the DR COVID-19 Crisis Response Support Project (P174145) approved on June 26, 2020. DR Central Bank financial statements are prepared following specific reporting standards (DR Central Bank internal accounting regulation), audited by international auditing firms (PWC in 2019 and KPMG in 2020), and the audits were carried out in accordance with International Standards on Auditing (ISA). Unmodified opinions from the external auditors did not reveal any significant issues related to the internal control environment. On this basis, it can be concluded that controls over FOREX do not pose substantial risks to the achievement of project's DO.

90. **The proposed operation will follow the disbursement procedures of the WB for a Development Policy Loan.** Upon approval of the operation, effectiveness of the Loan Agreement, and compliance with the withdrawal release conditions, the GoDR will submit a signed withdrawal application, after which the proceeds of the loan will be disbursed into the foreign currency designated Treasury Single Account (TSA) (*Cuenta Unica del Tesoro*), which will form part of the country's Foreign Exchange Reserves. The GoDR will then ensure that, upon deposit in said account, an equivalent amount in local currency is promptly credited in to the GoDR's budget management system, in an account used to finance budgeted expenditures. The GoDR shall, within thirty (30) days after the withdrawal of the DPL proceeds, report to

²⁸ <https://www.transparenciafiscal.gob.do/es/web/guest/informes-c%C3%A1mara-de-cuentas-al-congreso-nacional>

²⁹ <https://www.digepres.gob.do/presupuesto/gobierno-general-nacional/ley-de-presupuesto-2021/>

³⁰ *Plan de Acción de Fortalecimiento de la Gestión de las Finanzas Públicas en la República Dominicana 2020-2022.*

³¹ IMF Safeguard Assessment carried out in 2021 was not made available for FMS's review.

³² <https://www.bancentral.gov.do/a/d/2565-estados-financieros> DR Central Bank audited financial statements for 2017 and 2018.



the Bank: (i) the exact sum received into the account; (ii) the details of the account to which the local currency equivalent of the loan proceeds was credited; and (iii) a confirmation that an equivalent amount has been accounted for in the Borrower's budget management systems. This confirmation will include the applied rate of exchange and the date of transfer. The WB would reserve the right to request an audit of the FOREX account where loan funds are deposited. The financial support provided under this operation is not intended to finance goods or services on the list of "Excluded Expenditures".³³ If any portion of the loan is used for ineligible purposes as so defined in the Loan Agreement, the WB shall require the borrower to refund the amount. Amounts refunded to the WB upon such request shall be cancelled from the loan.

5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

91. **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 MEM, SIE, DGAPP and *Supérate*. The WB will work with the Ministry of Finance to confirm the results framework through ongoing policy dialogue and technical assistance projects.

92. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

6. SUMMARY OF RISKS AND MITIGATION

93. **The overall risk of the operation after considering mitigation measures is rated as Substantial.** The most relevant risks are related to sector strategies and policies, political and governance, fiduciary, and stakeholder risks.

94. **Sector Strategies and Policies risk is considered Substantial.** To meet the project's DO, the GoDR must implement several socially sensitive reforms that need to be carefully sequenced. For example, increases in end-user prices need to go hand in hand with increases in the targeting and coverage of the social protection program *BonoLuz*. Similarly, the introduction of private sector participation would be facilitated by an updated legal and institutional framework and strengthened regulatory enforcement. To mitigate this risk, the GoDR has established the Electricity Sector Cabinet, including members at the highest decision-making levels of government, to coordinate the timing and implementation of the overall

³³ See the General Conditions for DPL.



reform program. In addition, to mitigate the impact on poor households, the implementation of the tariff adjustment is extended in regular quarterly increments until end-2026 to allow adequate time to increase the coverage and targeting of *BonoLuz*. Moreover, substantial technical assistance is being provided by the WB and other development partners to inform the design of the reforms.

95. **Political and Governance risk is rated Substantial.** 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. Mitigating factors are embedded in the design of the reform program by removing the public sector from the management and day-to-day operation of distribution companies. The participation of the private sector in the distribution companies is designed in a two-stage process which would better allocate risks and responsibilities in the initial, more uncertain, stage of the concession, thereby securing stronger private sector interest. Finally, improvements in the reliability and sufficiency of electricity supply are at the center of the GoDR's program, further mitigating the risk of declining political support for the reform program over time.

96. **Fiduciary risk is rated Substantial.** Limited transparency, competition, and value for money in procurement processes implemented with national funds result in substantial fiduciary risks. To mitigate this risk, the DGCP is working on the design of a public procurement reform to improve transparency and accountability. The GoDR is working on the following areas: (i) the review of the draft Procurement Law, (ii) the implementation of Framework Agreements, and (iii) expanding data usage to improve transparency and accountability, all with the Bank's technical assistance support. Finally, the DGCP is undertaking an analysis of the purchasing practices of the GoDR with the objective of making recommendations for quick wins (Quick Gains Analysis).

97. **Stakeholders' risk is considered Substantial.** The broad-based reform program will impact several stakeholders including electricity consumers, employees of SOEs, and private sector investors, among others. Impacts for different groups of stakeholders will vary among them and across time. For example, consumers will perceive a negative impact from electricity price increases before they see a substantive improvement in the reliability and quality of electricity services they receive. There is also a risk that the introduction of private sector participation in distribution will be criticized, given the negative privatization experience in the 2000s. 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. The GoDR is also implementing communications and awareness campaigns in support of electricity pricing reforms and the introduction of private sector participation in electricity distribution.



Table 5: Summary Risk Ratings

Risk Categories	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Substantial
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Moderate
6. Fiduciary	● Substantial
7. Environment and Social	● Moderate
8. Stakeholders	● Substantial
9. Other	● Low
Overall	● Substantial



ANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions and Triggers		Results		
Prior Actions for DPL 1	Policy Triggers for DPL 2	Indicator Name	Baseline (end 2020)	Target (end 2024)
Pillar 1: Strengthening sector governance				
Prior Action #1. The Borrower has identified the responsible institutions in the energy sector and mandated them to execute specific electricity sector reforms within a specified period of time, as evidenced by Presidential Decree No. 655-21, dated October 15, 2021, and published in the Official Gazette on October 22, 2021.	Indicative Trigger #1. The Borrower has taken measures to increase transparency and improve the performance of electricity sector entities, by approving amendments to the Electricity Law (125-01) which would: (i) liquidate the state-owned <i>Corporacion Dominicana de Empresas Eléctricas Estatales</i> ; and (ii) ensure a separation of policymaking, planning, and regulation functions of governmental institutions in the energy sector.	Indicator #1. Separate state-owned generation, transmission, and distribution companies regularly report and disclose information on key financial and operational performance indicators (binary)	No	Yes
Prior Action #2. The DGAPP has taken steps to improve the governance and performance of electricity distribution companies and the reduction of distribution losses by initiating the process to transfer the management and operation of the EDEs to private operators through the public decision to receive a proposal for such transfers, as evidenced by the DGAPP Resolution No. 89/2021, dated November 29, 2021, and published on DGAPP's website.	Indicative Trigger # 2. The DGAPP has taken measures to improve the governance and the performance in electricity distribution by declaring the PPP proposal from the Consejo Unificado de la Empresas Distribuidoras de Electricidad to be in the public interest in principle and selecting a private company to assume the management and operation of at least one of the EDEs.	Indicator #2. Electricity Distribution Companies operating under a public private partnership arrangement (number)	0	1



Prior Actions and Triggers		Results		
Prior Actions for DPL 1	Policy Triggers for DPL 2	Indicator Name	Baseline (end 2020)	Target (end 2024)
Pillar 2: Enhancing climate resilience and social and environmental sustainability				
Prior Action #3. The Borrower has taken measures to improve the social sustainability of the electricity sector by: (a) reforming the social protection system for vulnerable consumers through the integration of the BonoLuz subsidy program into the national social protection program SUPERATE; and (b) creating a gender unit to mainstream gender equality in the formulation, design, implementation and monitoring of policies in the energy and mining sectors, as evidenced, respectively, by: (i) Article 5(d)(ii) of Presidential Decree No. 377-21, dated June 14, 2021, and published in the Official Gazette on June 17, 2021; and (ii) the Ministry of Energy and Mines Resolution No. R-MEM-ADM-004-2021, dated May 18, 2021, and published in the Ministry of Energy and Mines' website.	Indicative Trigger #3. The Borrower has taken measures to mitigate the impact from the reduction of electricity subsidies for vulnerable consumers by reviewing the beneficiary criteria to improve the targeting and coverage of <i>BonoLuz</i> .	Indicator #3. Extremely poor and poor households* benefiting from BonoLuz (number) Indicator #4: Relevant energy or mining policy documents, plans, or programs approved by the Ministry of Energy and Mines in calendar year 2022 include targeted actions to improve gender equality in terms of employment and/or violence against women (binary)	330,000 No	900,000 Yes
Prior Action #4. The Borrower has taken measures to facilitate the reduction of the carbon intensity of the electricity sector in support of its NDC implementation by: (a) setting time-bound targets to increase the share of renewable energy and reduce CO2 emissions in the power sector and mandate the adoption of the necessary policies and energy planning instruments needed to meet these targets; and (b) creating a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector, as evidenced, respectively, by: (i) the Ministry of Energy and Mines Resolution R-MEM-REG-029-2021 dated November 19, 2021, and published in the Ministry of Energy and Mines' website; and (ii) Presidential Decree No. 541-20 dated October 9, 2020,	Indicative Trigger #4. The Borrower has taken measures to improve electricity planning by issuing a resolution defining the objectives and process to carry out systematic indicative least-cost generation planning in accordance with targets for increasing renewable energy deployment and reducing carbon emissions.	Indicator #5. New renewable energy capacity contracted by distribution companies (megawatt)	0	500 MW



Prior Actions and Triggers		Results		
Prior Actions for DPL 1	Policy Triggers for DPL 2	Indicator Name	Baseline (end 2020)	Target (end 2024)
and published in the Official Gazette on October 16, 2020.				
Prior Action #5. The Borrower has taken measures to increase the share of renewable energy in the electricity mix and meet its NDC commitments by removing legal barriers for distribution companies to contract renewable energy generation, as evidenced by Presidential Decree No. 608-21, dated September 27, 2021, and published in the Official Gazette on September 30, 2021.	Indicative Trigger #5. The Borrower has taken measures to enable the development of low-cost renewable energy generation by updating the legal framework to mandate the competitive procurement of renewable energy projects and clarify the roles and responsibilities of sector entities in its implementation.			
Prior Action #6. The Borrower has taken measures to promote energy efficiency by submitting to the National Assembly an energy efficiency bill which: (a) establishes energy efficiency policies and norms; (b) promotes the development of a market for energy efficient goods and services; (c) incentivizes non-fossil fuels use; and (d) establishes fiscal incentives for the implementation of energy efficiency measures, as evidenced by the bill submitted on January 13, 2022 to the Senate as initiative No. 01286-2022-PLO-SE, resubmitting initiative No. 00811-2021-PLO-SE from June 23, 2021, and published in the Senate's website.	Indicative Trigger #6. The Borrower has taken measures to incentivize energy efficiency by the approval by the National Assembly of the energy efficiency bill and the approval of its Regulatory Decree.	Indicator #6. National Energy Efficiency programs under implementation (number)	0	1
Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector				
Prior Action #7. The SIE has taken measures to improve the financial self-sufficiency of the sector and reduce fossil fuel subsidies through: (a) the definition of an adjustment path for end-user tariffs to reach cost-recovery levels; and (b) the approval of the first end-user tariff increase, in accordance with the adjustment path, as evidenced, respectively, by: (i)	Indicative Trigger #7. The SIE has taken measures to improve the level of certainty and consistency in the determination of electricity tariffs by approving subsequent tariff increases in accordance with the adjustment path defined in SIE Resolution	Indicator #7. Share of the cost of efficient service provision recovered by end-use electricity tariffs (percentage)	60	80



Prior Actions and Triggers		Results		
Prior Actions for DPL 1	Policy Triggers for DPL 2	Indicator Name	Baseline (end 2020)	Target (end 2024)
Resolution No. SIE-075-2021-TF dated September 3, 2021, as amended by Resolution No. SIE-087-TF 2021 dated September 29, 2021; and (ii) Resolution No. SIE-093-2021-TF dated October 27, 2021, as amended by Resolution No. SIE-103-2021-TF dated November 30, 2021, all published in the SIE's website.	No. SIE-075-2021 as amended by SIE Resolution No. 087-2021-TF.			
	<p>Indicative Trigger #8. The SIE approved a regulatory framework to enable distribution companies to recover the full cost of efficient service delivered and introduced incentives to reduce distribution losses, by issuing a Resolution with a detailed methodology for setting and periodically adjusting the distribution companies' annual revenue requirement.</p> <p>Indicative Trigger #9. The SIE has taken measures to improve the quality of service and optimize the cost-of-service delivery by issuing a Resolution to update the technical standards for the architecture of distribution systems (network code).</p>	Indicator #8. Electricity distribution losses (electricity invoiced/ electricity injected in the distribution network) (percent)	33.5%	21.1%**

* Families classified under ICV1 and ICV2 criteria in the SIUBEN system.

** Target set in the Regulatory Decree of the Electricity Pact. The target will be finetuned based on successive analysis by DGAPP and SIE in 2022 in the context of the discussions for the PPP in electricity distribution.



ANNEX 2: FUND RELATIONS ANNEX

Dominican Republic—Assessment Letter for the World Bank

January 21, 2022

The Dominican Republic is rebounding strongly from the COVID shock, supported by sound macroeconomic policies and management of the health crisis. Policies remain in line with the assessment and recommendations of the 2021 Article IV Consultation amid significantly higher growth and a stronger fiscal position than envisaged in the spring.¹ Staff assesses that current policies are consistent with maintaining macroeconomic stability and available and projected fiscal financing would cover needs. The authorities remain committed to important structural reforms, including plans to further improve the fiscal framework, aided by Fund technical assistance. The next Article IV is planned for the spring of 2022.

1. Economic activity rebounded strongly in 2021; growth is expected to converge to trend over the medium term. Staff has revised up the 2021 growth forecast to 12 percent (from 5.5 percent at the time of the Article IV), supported by sound policies—such as monetary policy support, well-phased transfers to vulnerable households and employment support—and stronger than expected global spillovers—in particular, a faster recovery of tourism and stronger remittances. While initially led by export-oriented manufacturing and construction, services have increasingly driven growth in the second half of 2021—the recovery in tourism has been swifter than expected, with arrivals exceeding pre-pandemic levels since September. Formal employment fully recovered by October and credit growth has been buoyant. A well-planned vaccination campaign has helped keep COVID cases and mortality rates low—more than 66 percent of the population has received one dose and 55 percent is fully vaccinated. Growth in 2022 is expected to be driven by the continued recovery in services—including tourism—and resilient exports and consumption, supported by FDI and remittances. Staff expect growth to return to trend—5 percent—over the medium term. These projections are conservative given trends, though they assume that the impact from Omicron is not severe—while cases have increased, limited increases in hospitalization have not created strains in the health system and the government has announced that it will not re-introduce mobility restrictions. Inflation—at 8.5 percent last December—is above target (4 ± 1 percent), driven largely by external factors. However, longer-term inflation expectations remain well-anchored, and staff expects inflation to return to the target range by end-2022.

2. Risks to the outlook remain linked to global developments and inflation. The impact on activity from Omicron may be stronger than expected if the situation calls for mobility restrictions while a faster-than-expected monetary policy normalization in the United States can have an impact on capital inflows and financial conditions. In terms of inflation, a de-anchoring of inflation expectations may require faster-than-expected tightening in monetary policy.

3. The external position remains in line with fundamentals and the financial sector well positioned to support growth. While strong domestic demand and higher energy prices have increased the trade deficit, this has been largely offset by stronger remittances. FDI continues to more than fully cover the current account deficit, which is expected to remain at around 2 percent of GDP over the medium term. Reserves are trending up and are healthy by traditional metrics. The authorities have opted to maintain the SDR allocation at the central bank to increase international reserves. The financial sector remains stable and well positioned to support growth

¹ See Press Release issued July 1, 2021 and Country Report 21/169 issued on July 28, 2021 both posted on the IMF country page (<https://www.imf.org/en/Countries/DOM>).



while prudential flexibility measures are being phased out in line with the announced schedule. Though significant credit restructuring—mainly in the tourism sector—has yet to be fully absorbed by banks' balance sheets, liquidity and capital buffers, profitability, and provisioning are reportedly appropriate.

4. The policy mix includes a prudent fiscal consolidation and accommodative monetary policy, though the central bank has started a gradual normalization. In 2021, the fiscal deficit will narrow by almost 5 percent of GDP—bringing the primary to balance—supported by strong tax revenue and a gradual withdrawal of income and employment support. Aided by faster growth and a stronger fiscal position than the one envisaged at the time of the Article IV consultation, public debt is expected to fall by 10 percentage points of GDP in 2021 and converge to pre-pandemic levels by 2026, in part aided by electricity sector reforms (see next paragraph).² The 2022 budget depicts further fiscal consolidation, with the primary balance strengthening the downward trajectory in public debt. Gross financing needs are moderate, and the country maintains good access to international capital markets. In response to the stronger-than-expected recovery and the slower convergence of inflation to the target, the central bank started to mop-up liquidity provided during the pandemic in August and has raised the monetary policy rate, increasing it by a cumulative 150 bps to 4½ percent by December. Staff views monetary policy normalization as appropriate given the strength of the recovery and inflation trends. Going forward, the pace of normalization should be data dependent, based on inflation persistence, the anchoring of inflation expectations, and trends in energy prices.

5. A wide-ranging reform agenda in the electricity sector can set the stage for improved electricity provision and a gradual elimination of treasury transfers to distribution companies. Following the signing of the electricity pact—a broad social agreement on the road map to reform the sector—the government is: (i) enhancing governance by clearly defining policy and planning mandates and by strengthening independence of the regulator; (ii) establishing a transfer scheme to avoid (expensive) incurrence of arrears to generators; and (iii) reforming tariff and subsidy policies that are not well-targeted to the vulnerable segments of the population. The latter involve quarterly tariffs adjustments to reach cost recovery—the initial tariff increase took place in November (the first adjustment in 10 years). Reforms intend to remove regressive subsidies and reallocate transfers through a social program. They have the potential to eliminate treasury transfers to the sector—around 1 percent of GDP on average over the last decade—over the next five years.

6. The authorities continue to focus on effective expenditure and transparency; substantial reforms to the fiscal framework—including fiscal responsibility legislation—are underway. As noted in the 2021 Article IV, the government has strengthened public financial management (PFM) through tighter controls, internal audits of spending, reporting on fiscal risks, and progress in multi-year budgeting. The authorities are committed to further enhancing expenditure rationalization and transparency, which they see as critical to convey their vision of effective public institutions. In line with this, they aim at further enhancing PFM effectiveness and strengthening decision making through a medium-term fiscal framework—including a fiscal responsibility law—for which they have requested Fund technical assistance. The authorities noted that supply shocks affecting the economy and the toll of electricity tariffs adjustments have prompted the decision to delay a broad tax reform, which requires further consensus building that

² S&P and Fitch have upgraded the Dominican Republic outlook to stable last December.



should be aided by reforms to the fiscal framework. Fiscal projections do not assume that a tax reform is undertaken.

7. Progress is also being made on financial sector reforms to bring frameworks in line with international standards. The Superintendency of Banks is receiving Fund assistance to define a roadmap to bring prudential regulation in line with Basel III standards. The 2021 Article IV also recommended further strengthen the banking resolution and financial safety net, macroprudential tool kit, and stress testing capacity. Staff continue the dialogue with authorities on an agenda in these areas.

8. Fund relations. In 2020, the Dominican Republic received assistance under the Rapid Financing Instrument (RFI). The country has adequate capacity to repay the Fund. The authorities remain closely engaged with the Fund, in particular through technical assistance on fiscal, monetary, and financial areas. The next Article IV is planned for the spring of 2022.



Table 1. Dominican Republic: Selected Economic and Social Indicators, 2017–27

	2017	2018	2019	2020	2021	Projection					
						2022	2023	2024	2025	2026	2027
Output											
Real GDP	4.7	7.0	5.1	-6.7	12.0	5.5	5.0	5.0	5.0	5.0	5.0
Contributions to growth											
Consumption	3.1	4.1	3.7	-1.9	5.9	3.4	3.8	3.7	3.8	3.8	3.8
Investment	-1.4	4.6	1.1	-4.4	7.5	1.9	1.6	1.4	1.4	1.4	1.4
Net exports	2.2	-0.9	-1.4	-3.2	0.5	1.8	0.5	0.4	0.3	0.1	0.1
Nominal GDP (RD\$ billion)	3,803	4,236	4,562	4,457	5,391	6,013	6,580	7,183	7,844	8,566	9,354
Nominal GDP (US\$ billion)	80.1	85.6	89.0	78.9	94.3	...	...	...	...	...	...
Output gap (in percent of potential output)	0.5	2.8	3.7	-7.0	-0.1	0.4	0.3	0.1	0.0	0.0	0.0
Prices											
Consumer price inflation (end of period)	4.2	1.2	3.7	5.6	8.5	4.5	4.0	4.0	4.0	4.0	4.0
Exchange rate											
Exchange rate (RD\$/US\$ - period average) 1/	47.5	49.5	51.2	56.5	57.1	...	...	...	...	...	...
Exchange rate (RD\$/US\$ - eop) 1/	48.2	50.2	52.9	58.2	57.3	...	...	...	...	...	...
Real effective exchange rate (eop, - depreciation) 1/	-4.8	-1.9	-3.4	-8.2	5.5	...	...	...	...	...	...
Government finances											
						(in percent of GDP)					
Consolidated public sector debt 2/	48.5	50.1	53.2	71.1	60.9	58.9	57.8	56.8	55.6	54.4	53.2
Consolidated public sector overall balance 2/	-4.0	-3.4	-3.3	-9.0	-4.1	-3.9	-3.6	-3.5	-3.2	-3.1	-3.1
Consolidated public sector primary balance	0.1	0.6	0.9	-4.3	0.1	0.1	0.5	0.6	0.9	1.1	1.1
Central government balance	-3.1	-2.2	-2.2	-7.9	-2.8	-3.0	-2.8	-2.7	-2.4	-2.3	-2.3
Revenues and grants	14.0	14.2	14.4	14.2	15.5	14.7	14.4	14.3	14.3	14.3	14.3
Primary spending	14.5	13.8	13.8	18.9	15.3	15.0	14.4	14.3	13.9	13.7	13.7
Interest expenditure	2.5	2.6	2.7	3.2	3.0	2.8	2.8	2.8	2.9	2.9	2.9
Rest of NFPS	0.3	-0.1	-0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial sector											
						(Annual percentage change, unless otherwise stated)					
Broad money (M3)	11.2	7.0	11.7	20.8	13.1	11.9	9.9	9.7	9.7	9.5	9.5
Credit to the private sector	10.1	11.1	11.8	5.3	11.3	10.4	9.4	9.2	9.2	9.2	9.2
Net domestic assets of the banking system	8.0	5.5	8.6	2.5	21.3	10.2	8.5	8.3	8.0	6.0	6.0
Policy interest rate 1/	5.3	5.5	4.5	3.0	4.5	...	...	...	...	...	...
Average deposit rate (1-year, in percent) 1/	5.0	7.4	6.7	3.1	2.6	...	...	...	...	...	...
Average lending rate (1-year, in percent) 1/	11.2	12.1	12.4	9.9	10.0	...	...	...	...	...	...
Balance of payments											
						(in percent of GDP)					
Current account	-0.2	-1.5	-1.3	-2.0	-2.1	-1.8	-1.9	-1.9	-2.0	-2.0	-2.0
Goods, net	-9.5	-11.2	-10.2	-8.6	-12.0	-11.0	-11.2	-11.4	-11.3	-11.4	-11.3
Services, net	6.9	6.4	5.7	1.3	3.8	4.7	5.2	5.5	5.7	5.7	5.8
Income, net	2.4	3.2	3.2	5.3	6.0	4.5	4.2	3.9	3.7	3.7	3.6
Capital account	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account 3/	2.6	3.6	3.6	4.8	4.2	2.9	2.8	2.9	2.9	3.0	2.9
Foreign direct investment, net	4.5	3.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Portfolio investment, net	2.2	3.1	2.4	7.2	2.6	1.9	2.4	1.9	1.4	1.9	2.1
Financial derivatives, net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment, net	-4.0	-2.5	-2.3	-5.8	-1.7	-2.4	-2.9	-2.4	-1.9	-2.3	-2.5
Change in reserves (-increase)	-0.9	-1.0	-1.3	-2.5	-2.1	-1.2	-1.0	-1.0	-1.0	-1.0	-1.0
NIR (in millions of U.S. dollars)	6,780	7,627	8,781	10,752	12,692	13,902	15,019	16,187	17,451	18,814	20,282
Total external debt (in percent of GDP)	41.9	40.2	41.9	56.4	49.8	46.8	45.6	43.9	41.6	40.3	39.8
of which: Public sector	24.2	25.8	27.3	40.3	34.4	33.2	32.5	31.9	31.2	30.4	29.6

Sources: National authorities; World Bank; and IMF staff calculations.

1/ Latest available.

2/ The consolidated public sector includes the central government, some decentralized entities, the electricity holding company, and the central bank.

3/ Excluding reserves.



ANNEX 3: LETTER OF DEVELOPMENT POLICY



MH-2022-003965

21 de febrero de 2022

Señor
DAVID R. MALPASS
Presidente
Banco Mundial
Washington D.C., USA

Asunto: Carta de Políticas de Desarrollo - Préstamo en Apoyo a la Reforma del Sector Eléctrico para un Crecimiento Sostenible en República Dominicana.

Estimado Sr. Presidente,

Cortésmente, nos dirigimos a usted en representación de la República Dominicana, para reiterarle el compromiso del Gobierno Dominicano en continuar la renovación e incrementar la eficiencia del sector eléctrico, a través de la implementación de medidas y acciones acordadas en el Pacto Eléctrico, que contribuyen al fortalecimiento de políticas públicas para la reforma de dicho sector. Esto con la finalidad principal de fortalecer la gobernanza del sector y mantener un crecimiento sostenible del mismo. Por esta razón, durante las últimas semanas y acompañados por el Banco Mundial y demás Organismos Multilaterales, hemos preparado el *Préstamo para Políticas de Desarrollo en Apoyo a la Reforma del Sector Eléctrico para un Crecimiento Sostenible en República Dominicana*, en el que se acuerdan acciones y objetivos concretos con los cuales el Gobierno está altamente comprometido.

A continuación, se describe la situación macro-fiscal de la República Dominicana bajo el escenario actual, y se resaltan las medidas priorizadas por parte del Gobierno al igual que el programa de acciones y resultados que se promueven en el marco de esta operación con el Banco Mundial.

Situación Macro Fiscal

Contexto económico nacional

En el año 2021, a pesar de los efectos cíclicos de la pandemia en el País, se proyecta un crecimiento de la economía de 12.3% del PIB, influenciado en gran medida por la dinamización de la demanda interna a raíz de la relajación de las medidas restrictivas de la movilidad a nivel nacional durante la mayor parte del año, los notables avances en el exitoso proceso de vacunación de la población y la oportuna coordinación entre la política monetaria y fiscal.

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Durante los primeros 11 meses del 2021, los sectores que han exhibido un mayor crecimiento interanual -hoteles, bares y restaurantes (38.3%), construcción (25.1%) y manufactura de zonas francas (21.2%) - han sido aquellos que fueron más duramente impactados durante los momentos más críticos de la pandemia, evidenciando la recuperación y la resiliencia de la economía dominicana. Se destaca que el proceso de reactivación ha sido heterogéneo entre sectores, con algunos registrando un comportamiento por encima del prepandémico mientras que otros se encuentran convergiendo paulatinamente al mismo.

Entre estos se destaca la recuperación de la actividad turística, evidenciado por el incremento de los visitantes no residentes hasta alcanzar cifras superiores a las vistas en la época prepandemia. De igual manera, las remesas han demostrado un extraordinario dinamismo a la fecha, cerrando el año en niveles históricamente altos. Estos dos factores han contribuido al influjo de divisas y a su vez a la relativa estabilidad registrada en el mercado cambiario durante el transcurso del año.

Finanzas públicas

Al cierre del año 2021, los Ingresos Fiscales del Gobierno Central ascendieron a RD\$ 830,007.2 millones de manera preliminar, equivalente a 15.8% del PIB, superando en RD\$83,693.4 millones o 0.4 puntos porcentuales (pp.) del PIB las proyecciones contenidas previamente en el Presupuesto General del Estado de ese año.

A modo preliminar se estima que los gastos del Gobierno Central para el período enero – diciembre del 2021 totalizaron RD\$986,021.3 millones o 18.5 % del PIB, equivalente a un aumento de 1.8 pp. del PIB respecto del presupuesto originalmente aprobado para 2021.

El incremento en las erogaciones fue posible dada la expansión de los topes presupuestarios para acomodar la creciente demanda de recursos asociados a apoyar la dinamización y el fortalecimiento del tejido productivo, los programas sociales necesarios para apoyar a la población más vulnerable, contrarrestar el alza en los productos de consumo masivo y la puesta en ejecución del Plan Nacional de Vacunación, que al cierre de año había logrado inocular con la primera dosis a más del 77% de la población adulta y alrededor del 64% con la segunda dosis.

Se destaca que el incremento total de gastos fue mitigado por un proceso de priorización y aumento en la eficiencia en la calidad del gasto, caracterizado por la eliminación de gastos superfluos en partidas no prioritarias dado el contexto de la pandemia.

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Al considerar las cifras preliminares para los ingresos y gastos, se evidencia que el resultado de la Administración Central cerró con un déficit ascendente a RD\$144,778 millones, equivalente a 2.7% del PIB, situándose RD\$15,067.4 millones o 0.3 pp. del PIB por debajo del estimado en el presupuesto reformulado presentado en noviembre. Este resultado representa una disminución de 5.2 pp. del PIB respecto al déficit registrado al cierre del 2020, evidenciando el inicio de un proceso de consolidación en las cuentas fiscales.

El programa de políticas para apoyo a la reforma del sector eléctrico

Durante las últimas semanas el Gobierno ha trabajado con el apoyo del Banco Mundial y otros organismos Multilaterales tales como el Banco Interamericano de Desarrollo (BID) y el Banco Centroamericano de Integración Económica (BCIE), para estructurar un programa con el objetivo de fortalecer la eficiencia y la eficacia del sector eléctrico mediante la promoción de reformas de políticas públicas integrales. Este programa está basado en tres pilares estratégicos y complementarios: (i) Fortalecimiento de la gobernanza sectorial (ii) Mejora de la resiliencia climática y la sostenibilidad social y ambiental, y (iii) Mejora de la sostenibilidad financiera y desempeño operacional del sector eléctrico.

Con el propósito de alcanzar el cumplimiento de las acciones establecidas en los tres pilares plasmados en la matriz, se estarán desarrollando los distintos planes de acción representados a través de los indicadores propuestos:

Fortalecimiento de la gobernanza del sector

El primer pilar de la matriz hace referencia a la aprobación del reglamento del Pacto Eléctrico, promulgado mediante decreto 655-21 con el fin de impulsar los compromisos acordados en el marco del pacto para la reforma del sector, creando las condiciones jurídicas para la implementación de las acciones de políticas y la reafirmación de las responsabilidades de cada institución competente, establecidas en dicho documento.

Adicionalmente, la Dirección General de Alianzas Público Privadas (DGAPP) actuando conforme los lineamientos del Pacto, y bajo las atribuciones otorgadas mediante la ley 47-20, acogió en virtud de la resolución 89-2021, la iniciativa pública remitida por el Consejo Unificado de las Empresas Distribuidoras de Electricidad (CUED) para la introducción de participación privada, como parte de la gestión integral de las empresas distribuidoras de electricidad.

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El objetivo de este pilar es lograr dar seguimiento a indicadores que sustenten una transición sostenible de las medidas ya implementadas por el gobierno dominicano en términos de gobernanza

Mejora de la resiliencia climática y la sostenibilidad social y ambiental

Con el objetivo de continuar fomentando la resiliencia climática y la sostenibilidad social y ambiental del sector no se está actualmente contemplando el desarrollo de centrales térmicas de carbón. En este sentido, se han priorizado cinco acciones bajo el marco de este pilar, resaltando los esfuerzos que ha hecho hasta ahora el gobierno dominicano en:

- Reformar el Programa de asistencia social BonoLuz, el cual se integrará con el programa Supérate, permitiendo de esta forma, un mayor alcance y cobertura de este subsidio a los hogares con mayor vulnerabilidad.
- Impulsar la equidad de género mediante la creación de un marco institucional para estos fines, dentro del Ministerio de Energía y Minas (MEM).
- Impulsar la utilización de la energía renovable en el sector eléctrico, a través del establecimiento de metas acotadas en el tiempo, como la creación de un sistema de medida, monitoreo y verificación de gases de efecto invernadero.
- Definir las bases legales aplicables para permitir que las empresas distribuidoras de energía puedan contratar la generación de energía renovable.
- Y, por último, promover la eficiencia energética (EE) mediante la presentación de un proyecto de Ley de Eficiencia Energética que establece las principales políticas, normas e incentivos para la implementación de medidas de EE.

Mejora de la sostenibilidad financiera y desempeño operacional del sector eléctrico.

Conscientes del gran reto que amerita la sostenibilidad financiera del sector, el gobierno a través de la Superintendencia de Electricidad (SIE), ha definido el ajuste en las tarifas aplicables al usuario final, conforme el plan de acción estipulado por dicha entidad en las resoluciones SIE-075-2021-TF del 3 de septiembre de 2021 enmendada por la resolución SIE-087-TF 2021 del 29 de septiembre de 2021, y en la resolución SIE-093-2021-TF del 27 de octubre de 2021 enmendada por la resolución SIE-103-2021-TF de fecha 30 de noviembre 2021.

Adicionalmente, la SIE ha estado trabajando en la preparación de un marco regulatorio que permita a las empresas de distribución recuperar el costo total del servicio entregado mediante la elaboración de una metodología para establecer y ajustar periódicamente su requerimiento de ingresos anuales. Actualmente este marco está en proceso de preparación, y consenso por parte de la entidad.

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21 de febrero de 2022

Conclusión

Como se puede observar basado en lo anteriormente descrito, el Gobierno Dominicano viene realizando importantes acciones y desea reiterar su compromiso para fortalecer la gestión y servicio del sector eléctrico. A pesar de estos progresos y los destacados avances macroeconómicos y fiscales mencionados anteriormente, el Gobierno Dominicano es consciente de que el país todavía tiene retos importantes por enfrentar y reducir brechas en el sector eléctrico. En ese contexto, resulta muy importante contar con mecanismos e instrumentos que, en el marco de una política de gestión de la eficiencia y crecimiento sostenible, permitan ampliar la capacidad del Gobierno para concretizar las medidas acordadas en el Pacto Eléctrico.

En virtud de lo manifestado, por medio de la presente el Gobierno Dominicano reitera su solicitud de aprobación del Préstamo de Apoyo Presupuestario para Políticas de Desarrollo de Reforma al Sector Eléctrico para un Crecimiento Sostenible por un monto de US\$ 400 millones de dólares estadounidenses.

Luego de agradecer el continuo apoyo brindado por el Banco Mundial, se despide con sentimiento de alta consideración y estima personal.

Atentamente,


JOSÉ MANUEL VICENTE
Ministro de Hacienda



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Unofficial translation of the LDP



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21 February, 2022

DAVID R. MALPASS
President
World Bank
Washington, D. C., USA

Subject: Letter of Development Policies – Electricity Reform for Sustainable Growth
Development Policy Financing to the Dominican Republic

Dear Mr. President,

We kindly address you, in representation of the Dominican Republic, to reiterate the commitment of the Dominican government to continue renewing and improving the efficiency of the electricity sector through implementing measures and actions agreed in the Electricity Pact that contribute to strengthening public policies towards reforming the sector, mainly aimed at enhancing the governance of the sector and maintaining its sustainable growth. Thus, for the last few weeks, together with the World Bank and other multilateral agencies, we have prepared the *Dominican Republic Electricity Reform for Sustainable Growth Development Policy Financing* in which the Government highly commits to the concrete actions and objectives therein agreed to.

The following describes the macro-fiscal situation of the Dominican Republic under the current scenario and highlights the Government's priority measures and the program of actions and outcomes included in the framework of this operation with the World Bank.

Macro-Fiscal Situation

National Economic Context

In 2021, despite the cyclic effects of the pandemic in the country, a GDP increase of 12.3% was projected, greatly influenced by a revitalized internal demand due to the easing of the measures that restricted movement at the national level for most of the year; the significant progress of the successful vaccination process and the timely coordination between the monetary and fiscal policies.

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During the first 11 months of 2021, the sectors that have exhibited greater inter-annual growth: hotels, bars & restaurants (38.3%), construction (25.1%), and free trade zone manufacturing (21.2%) have been those that suffered the harshest impacts during the most critical moments of the pandemic, thus proving the recovery and resilience of Dominican economy. It should be noted that the reactivation process has been heterogeneous among sectors, with some sectors recording performance above pre-pandemic times, while others are gradually converging towards the same.

Highlighted among such sectors is the recovery of tourism activity, demonstrated by the increase in non-resident visitor numbers to achieve figures higher than those seen before the pandemic. Further, remittances have shown extraordinary dynamism to date, the year closing at historically high levels. These two factors have contributed to the influx of foreign currency and, in turn, to the relative stability registered in the exchange market throughout the year.

Public Finances

At the close of 2021, the Fiscal Income of the Central Government preliminarily amounted to DOP 830,007.2 million, equivalent to 15.8% of the GDP, exceeding by DOP 83,693.4 million or 0.4 percentage points (pp) the GDP projections previously included in the General State Budget for that year.

Initially, it is estimated that Central Government expenditures for the January – December 2021 period totaled DOP 986,021.3 million or 18.5% of the GDP, equivalent to a 1.8 percentage point increase, relative to the budget originally approved for 2021.

The disbursement increases were possible due to the expansion of budgetary ceilings to accommodate the growing demands of resources associated with supporting the revitalization and strengthening of the productive fabric, the social programs necessary to support the most vulnerable population, capping price rises of mass consumption products and implementing the National Vaccination Plan, which at the close of the year had managed to inoculate first doses to more than 77% of the adult population and approximately 64% with the second dose.

Emphasis is placed on the fact that the total expenditure increase was mitigated by a process of prioritization and enhanced efficiency in the quality of expenditures, marked by the elimination of superfluous expenses on non-priority items given the pandemic context.

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In considering the preliminary income and expenditure figures, it is evident that the Central Administration closed with a deficit amounting to DOP 144,778 million, equivalent to 2.7% of the GDP, that is, DOP 15,067.4 million or 0.3 pp of the GDP below the recast budget estimate submitted in November. This outcome represents a drop of 5.2 pp of the GDP as opposed to the deficit registered at the close of 2020, evidencing the beginning of a consolidation process in fiscal accounts.

The Electricity Sector Reform Policy Program

Over the last few weeks, the Government has worked with the support of the World Bank and other multilateral agencies such as the Inter-American Development Bank (IDB) and the Central American Bank for Economic Integration (CABEI) to structure a program aimed at strengthening the efficiency and effectiveness of the electricity sector by promoting comprehensive public policy reforms. This program is based on three strategic and complementary pillars: (i) Strengthening of sector governance, (ii) improvement of climate resilience and social and environmental sustainability, and enhancement of the financial sustainability and operational performance of the electricity sector.

Aimed at complying with the actions set out in the three pillars outlined in the matrix, the different action plans being developed are represented through proposed indicators:

Strengthening Energy Sector Governance

The first pillar of the matrix refers to the approval of the Electricity Pact regulation, enacted by decree 655-21 to advance the commitments agreed to in the framework of the sector reform pact, creating the legal conditions to implement policy actions and reaffirm the responsibilities of each competent institution as provided for in such document.

Further to this, the Private-Public Partnerships Directorate General (DGAPP, per its acronym in Spanish), acting in accordance with the Pact guidelines and the powers granted under Law 47-20, accepted -by resolution 89-2021- the public initiative submitted by the Unified Council of Electricity Distribution Companies (CUED, per its acronym in Spanish) to introduce private participation as part of the integral management of the electricity distribution companies.

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The objective of this pillar is to monitor the indicators that support a sustainable transition of the measures already implemented by the Dominican Government in terms of governance.

Enhancing Climate Resilience and Social and Environmental Sustainability

Aimed at further enhancing the sector's climatic resilience and social and environmental sustainability, developing coal-fired thermal power stations is not currently contemplated. Accordingly, five actions have been prioritized under the framework of this pillar, highlighting the efforts the Dominican government has made up to now in:

- reforming the *BonoLuz* social assistance program, which will be merged with the *Supérate* program, thus allowing further expansion and coverage of this subsidy targeting homes with the highest vulnerability.
- fostering gender equity through creating an institutional framework within the Ministry of Energy and Mines (MEM).
- driving the utilization of renewable energy in the power sector by establishing goals and creating a GHG measuring, monitoring, and verification system.
- defining the legal grounds applicable towards enabling energy distribution companies to contract renewable energy generation.
- finally promoting energy efficiency (EE) by submitting an Energy Efficiency draft legislation establishing the principal policies, standards, and innovations to implement EE measures.

Enhancing the Financial Sustainability and Operational Performance of the Electricity Sector.

Aware of the great challenge posed by the sector's financial sustainability, the government, through the Electricity Superintendence (SIE, per its acronym in Spanish), has defined the tariff adjustments applicable to final users, according to the plan stipulated by the entity in its resolution SIE-075-2021-TF of September 3, 2021; amended by resolution SIE-087-TF 2021 of 29 September 2021, and in resolution SIE-093-TF 2021 of 27 October 2021; amended by resolution SIE-103-2021-TF of 30 November 2021.

The SIE has also worked in preparing a regulatory framework allowing the distribution companies to recover the total cost of the service delivered by developing a methodology to establish and regularly adjust its annual income requirement. Currently, this framework is in the process of preparation and consensus by the entity.



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Conclusion

As observed, and based on the foregoing, the Dominican Government has been performing important actions and wishes to reiterate its commitment to strengthening the management and service provision of the electricity sector. Despite these advances and the notable macroeconomic and fiscal progress previously mentioned, the Dominican government is aware that the country still has major challenges to address and reduce gaps in the electricity sector. In this context, it is very important to rely on mechanisms and instruments which, in a sustainable growth and efficiency management policy framework allow to expand the Government's capacity to put into practice the measures agreed to in the Electricity Pact.

In view of the above, the Dominican government hereby reiterates its request for approval of the Electricity Sector Reform for Sustainable Growth Development Policy Financing for US\$ 400 million.

Thanking the World Bank for its ongoing support, we convey the assurances of our highest consideration and esteem.

Sincerely,

JOSÉ MANUEL VICENTE
Ministry of Finance



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ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior Actions	Significant environmental effects positive or negative	Significant poverty, social or distributional effects positive or negative
Pillar 1: Strengthening sector governance		
Prior Action #1. The Borrower has identified the responsible institutions in the energy sector and mandated them to execute specific electricity sector reforms within a specified period of time.	Positive indirect environmental effects expected. No adverse effects on the environment are expected.	Positive poverty, distributional and social impacts expected. Potential negative impacts can be mitigated.
Prior Action #2. The DGAPP has taken steps to improve the governance and performance of electricity distribution companies and the reduction of distribution losses by initiating the process to transfer the management and operation of the EDEs to private operators through the public decision to receive a proposal for such transfers.	Positive indirect environmental effects expected. No environmental effects are expected, either positive or negative.	Potential negative distributional and social impacts can be mitigated.
Pillar 2: Enhancing climate resilience and social and environmental sustainability		
Prior Action #3. The Borrower has taken measures to improve the social sustainability of the electricity sector by: (a) reforming the social protection system for vulnerable consumers through the integration of the <i>BonoLuz</i> subsidy program into the national social protection program <i>SUPERATE</i> ; and (b) creating a gender unit to mainstream gender equality in the formulation, design, implementation and monitoring of policies in the energy and mining sectors.	No environmental effects expected, either positive or negative.	Positive poverty, distributional and social impacts expected.
Prior Action #4. The Borrower has taken measures to facilitate the reduction of the carbon intensity of the electricity sector in support of its NDC implementation by: (a) setting time-bound targets to increase the share of renewable energy and reduce CO ₂ emissions in the power sector and mandate the adoption of the necessary policies and energy planning instruments needed to meet these targets; and (b) creating a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector.	Positive indirect environmental effects expected.	Indirect positive poverty, distributional and social impacts expected.
Prior Action #5. The Borrower has taken measures to increase the share of renewable energy in the electricity mix and meet its NDC commitments by removing legal barriers for distribution companies to contract renewable energy generation.	Positive environmental effects expected. Potential negative environmental impacts can be mitigated.	Indirect positive poverty, distributional and social impacts expected.



Prior Action #6. The Borrower has taken measures to promote energy efficiency by submitting to the National Assembly an energy efficiency bill which: (a) establishes energy efficiency policies and norms; (b) promotes the development of a market for energy efficient goods and services; (c) incentivizes non-fossil fuels use; and (d) establishes fiscal incentives for the implementation of energy efficiency measures	Positive environmental effects expected. Potential negative environmental impacts can be mitigated.	Indirect positive poverty, distributional and social impacts expected.
Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector		
Prior Action #7. The SIE has taken measures to improve the financial self-sufficiency of the sector and reduce fossil fuel subsidies through: (a) the definition of an adjustment path for end-user tariffs to reach cost-recovery levels; and (b) the approval of the first end-user tariff increase, in accordance with the adjustment path	Positive indirect environmental effects expected.	Negative poverty, distributional and social impacts can be mitigated.



ANNEX 5: DETAILED POVERTY AND SOCIAL IMPACT ANALYSIS

1. A Poverty and Social Impact Analysis (PSIA) was conducted to assess the poverty and social impacts of the policies and institutional reforms supported by this DPL.

Prior Action #1. *The Borrower has identified the responsible institutions in the energy sector and mandated them to execute specific electricity sector reforms within a specified period of time.*

2. **This action is expected to produce positive poverty, distributional and social impacts.** Potential negative poverty, distributional and social impacts would be fully mitigated with the planned social transfer reform that is part of Prior Action #3. Four elements of this Prior Action (see Section 4.1) were assessed:

3. **Issue 1: Supporting the reduction of fossil fuel subsidies sets out the framework to initiate a gradual tariff adjustment for end-consumers of electricity.** In the absence of mitigation measures, the tariff increase might lead to a rise of the national poverty headcount ratio of around 0.4 percent in 2024 (Figure 5.1). The impact is determined by the effect on household disposable income. Inequality as measured by the Gini coefficient would remain unaltered, and no significant impacts are expected on extreme poverty or poverty gaps.

Figure 5.1. Simulated poverty headcount (%) resulting from tariff increase

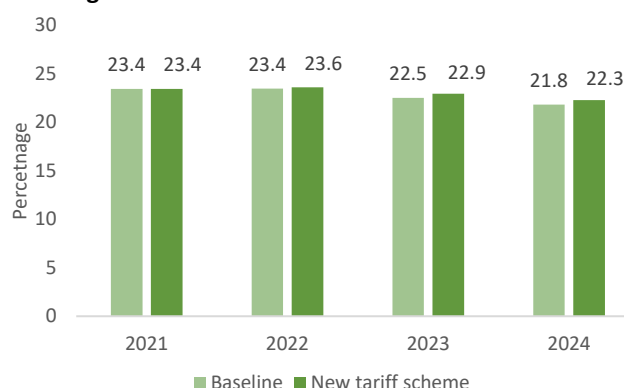
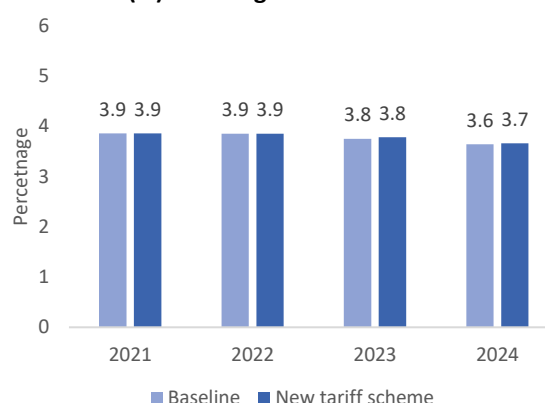


Figure 5.2. Simulated extreme poverty headcount (%) resulting from tariff increase



Source: WB staff, calculations based on the National Household Income and Expenditure Survey (Encuesta Nacional de Gastos e Ingresos de los Hogares, ENIGH) 2018

4. **Households currently spend between 3.0 percent (lowest quintile) and 3.4 percent (highest quintile) of their total income on electricity.** The implementation of quarterly tariff increases by 2024 would increase the latter share to around 5.5 percent (with similar values across income quintiles). The gradual tariff increase would progressively impact the poverty rates, starting with 0.1 percent by 2022, followed by 0.4 percent from 2023 onwards.

5. **Issue 2: Improve sector governance and operational performance.** The legal framework includes operational improvement to increase billing and payment collection. An assessment of the likely impact



on family income of those households that do not pay for electricity bills or who engage in electricity theft was conducted.

6. **Access to electricity is high in the DR.** By 2020, 99.7 percent of households reported having an electric connection to a public or private provider. The average household expenditure for electricity services represents around 3 percent of household income, a share that is similar across income groups.

7. **In the absence of official figures, an indirect estimation of non-payers' households³⁴, shows that presumably around 2.7 percent of dwellings do not pay for electricity services even when they report electric consumption.** There is a higher incidence of non-payers among disadvantaged households: 5.7 percent of poor households and 6.9 percent of those classified as ICV1 do not pay for their electricity consumption (Figure 5.3). A sizable proportion of non-payers come from the ranks of the non-poor as evidenced in Figure 5.4. Two thirds of the non-payer households are categorized as ICV3 to ICV4 (proxy of multidimensional non-poor) and three quarters are categorized as monetary non-poor.

Figure 5.3. Incidence of non-payment for electricity consumption by socioeconomic status in DR

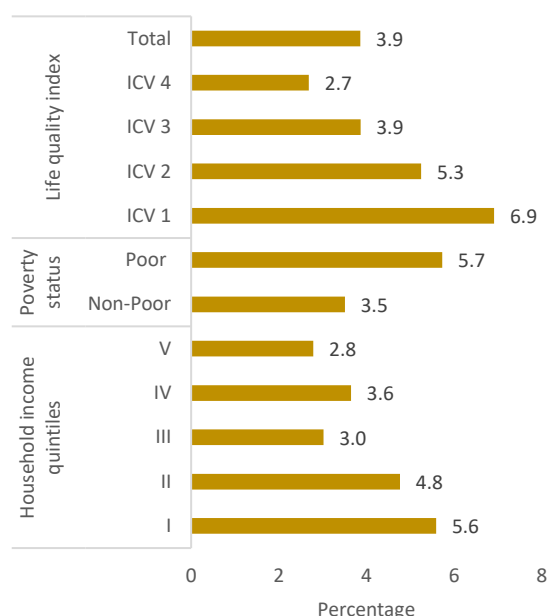


Figure 5.4. Share of households not paying for electricity consumption by socioeconomic status in DR



Source: WB staff, calculations based on ENIGH-2018

³⁴ The definition of non-payer household uses an indirect approach based on the ENIGH-18 (National Household Income and Expenditure Survey/ Encuesta Nacional de Gastos e Ingresos de los Hogares – 2018). Non-payers are defined as those households that reported zero expenditure on electricity services but report a connection and have electric appliances in use within the household.



8. As a result, if electricity payments were enforced (i.e., simulating that all Dominican households pay for electricity), poverty or inequality would not increase beyond the changes introduced by the tariff adjustment (Figure 5.5 and 5.6).³⁵

Figure 5.5. Simulated poverty headcount (%) (Tariff increase + payment enforcement)

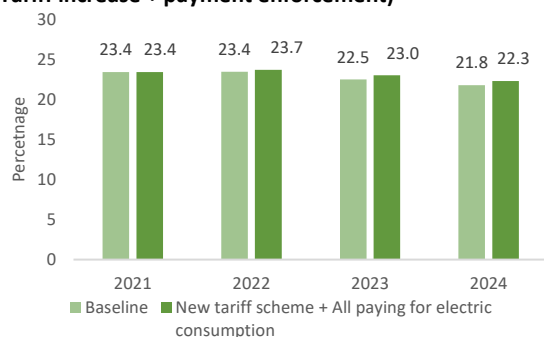
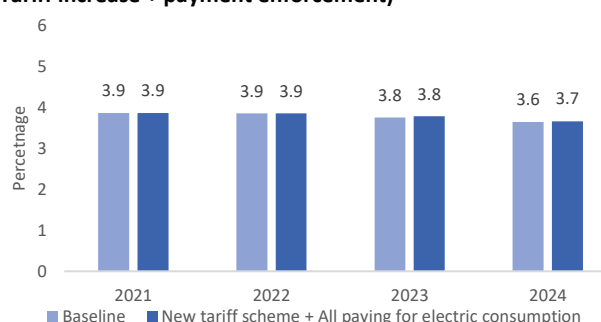


Figure 5.6. Simulated extreme poverty headcount (%) (Tariff increase + payment enforcement)



Source: WB staff, calculations based on ENIGH-2018

9. **Issue 3: Improve the affordability of essential services for vulnerable population.** Substantial evidence supports that access to reliable electricity drives development and is essential for job creation, income generation, women's empowerment, education outcomes, and combating poverty.³⁶

10. According to the Oxford Poverty and Human Development Initiative (2021), electricity is the most interlinked indicator in the Multi-dimensional Poverty Index (MPI) and was found to lower severe multidimensional poverty and generate positive spill-over effects on other MPI indicators. Nevertheless, some evidence (Lee K. et al, 2016) indicates that energy access should generate indirect positive impacts provided that a comprehensive approach is taken to ensure that electricity is not only affordable, but is also reliable, useable, and available to the whole community. Considering these elements, indirect positive impacts should be expected for this prior action.

11. **Issue 4: Enhance resilience against climate change.** The DR is highly exposed to a wide range of hydrometeorological hazards (e.g., hurricanes, tropical storms, flooding, and drought) and is ranked 32 out of 181 countries in the 2021 World Risk Index. This high level of exposure and vulnerability also materializes in significant economic impacts.³⁷

12. **Disasters can hinder poverty reduction efforts and threaten advances in shared prosperity both through the triggered economic losses and direct impacts.** For the DR, a WB study found a correlation between the intensity of a hurricane affecting the country and the ensuing increase in the national poverty

³⁵ In the absence of definitive projections the rate of gradual improvement in billing and payment collection for electricity services, this simulation assumes the impact of a universal payment of electricity tariffs.

³⁶ Torero (2015); Gertler et al. (2016); Jimenez R, 2017).

³⁷ According to the World Bank 2018 Country Disaster Risk Profile (CDRP) for the DR, Annual Average Losses (AAL) from earthquakes and hurricane-related disasters amounts to US\$642 million.



rate.³⁸ When Tropical Cyclone Noel hit the country in 2007, 90 percent of the directly affected persons were below the national poverty line.³⁹

13. The enhancement of resilience against climate change is a key element of the DR's development and is expected to have positive impacts on poverty in the medium and long term.

***Prior Action #2.** The DGAPP has taken steps to improve the governance and performance of electricity distribution companies and the reduction of distribution losses by initiating the process to transfer the management and operation of the EDEs to private operators through the public decision to receive a proposal for such transfers.*

14. No direct poverty, distributional or social impacts are expected, either positive or negative. Potential indirect negative impacts from increasing billing and collections for households that currently use electricity but do not pay for it are discussed above.

***Prior Action #3 (a).** The Borrower has taken measures to improve the social sustainability of the electricity sector by reforming the social protection system for vulnerable consumers through the integration of the BonoLuz subsidy program into the national social protection program SUPERATE.*

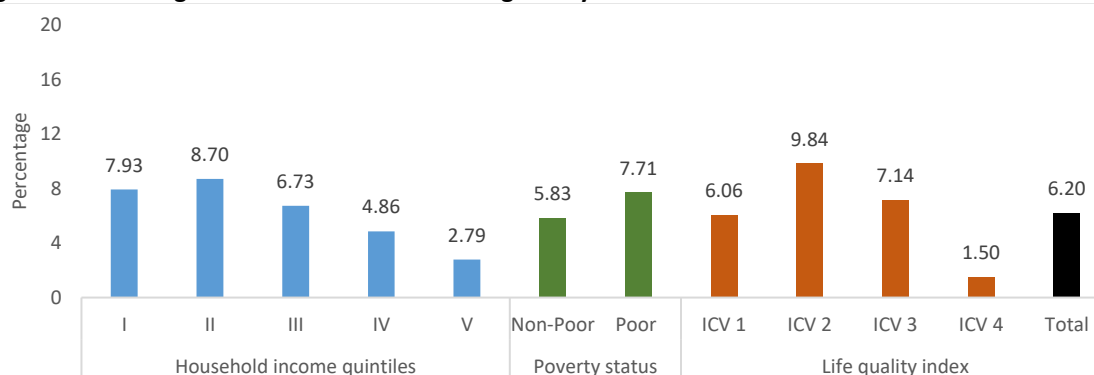
15. Positive poverty, distributional and social impacts are expected. The Prior Action aims to improve the focalization of Conditional Cash Transfers (CCTs) by integrating *BonoLuz* to the *Supérate* program. This would expand and improve the targeting of the current *Bonoluz* program and advance in the social sustainability of the electricity sector. *Bonoluz* benefited around 400 thousand households in 2018 (6 percent of total households). These households receive a subsidy that covers the consumption of the first 100 kWh of their electricity bill. The subsidy amounts to RD\$444, which represent on average 2 percent of monthly income of the households living under the poverty line. The *Bonoluz* program as implemented in 2020 has room to improve its coverage and targeting of the most vulnerable households. Although *Bonoluz* beneficiaries consume less electricity than other households across the country, the program is not particularly focused on the poorest population. For example, households categorized as ICV3 have higher coverage under the program compared to households in ICV1. There are not significant differences in coverage between monetary poor and non-poor households (Figure 5.7)

³⁸ Ishizawa, Strobl et al., 2018.

³⁹ CEPAL. 2008. "República Dominicana: Evolución de los impactos socioeconómicos de la tormenta Noel", CEPAL México.



Figure 5.7. Coverage of the Current *Bonoluz* Program by Socioeconomic Status



Source: WB staff, calculations based on ENIGH-2018

16. An assessment of the distributional impacts of the reform of *BonoLuz* has been made based on the following parameters:

- Transition from the current program to the GoDR's social protection scheme (integration into *Supérate*).
- Re-targeting of support from a consumption-based program (households with consumption of up to 100kWh) to a program that identifies beneficiaries under ICV1 and ICV2 based on the SIUBEN database
- Increase in the coverage from currently 300 thousand to about 1 million households, which is the estimated number of households in ICV1 and ICV2.

17. According to microsimulation estimates (see Box 5.1 for a detailed description of the methodology), the integration of *Bonoluz* into the *Supérate* program would mitigate the impact of tariff and payment collection increases. Moreover, the gains in coverage and targeting would contribute to a decrease of the national poverty and extreme poverty rates of around 0.5 percent and 0.3 percent, respectively, by 2024 (Figures 5.8 and 5.9). On the inequality side, small positive progress is expected. The power and speed of mitigation of poverty impacts would depend on how the program progressively reaches its planned coverage.⁴⁰

⁴⁰ Based on information provided by the WB energy team, the microsimulation assumes that 60 percent of the targeted households will be reached by 2022, 80 percent by 2023, and 100 percent by 2024.



Figure 5.8. Simulated poverty headcount (%) (Tariff increase + payment enforcement + Bonoluz redesign)

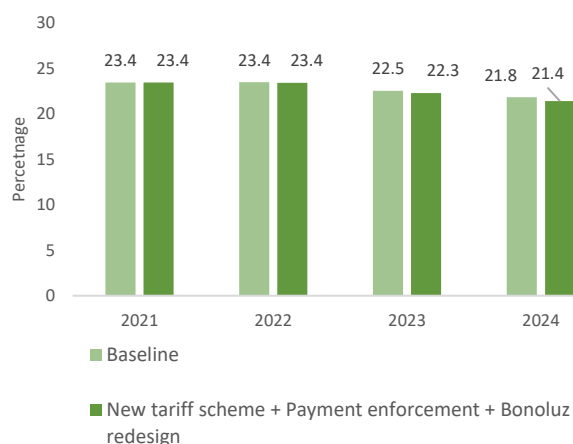
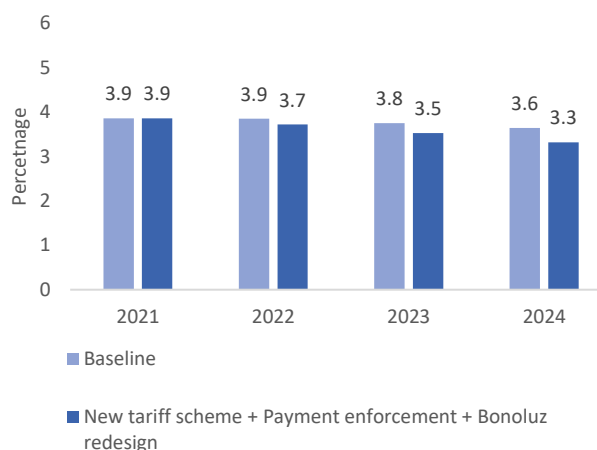


Figure 5.9. Simulated extreme poverty headcount (%) (Tariff increase + payment enforcement + Bonoluz redesign)



Source: WB staff, calculations based on ENIGH-2018

18. In addition, re-targeting the economic support from a consumption-based approach to one based on the SIUBEN beneficiary database would include a multidimensional approach to target vulnerable population. In this sense, positive impacts beyond the monetary dimension of poverty are also expected, including contributions to overcome energy poverty.⁴¹

19. Finally, a robust body of evidence supports the benefits of CCTs in reducing poverty and malnutrition, increasing school enrollment, and other non-direct benefits, such as improving local economies. In this case, the integration of *Bonoluz* into the *Supérate* program would: (i) improve the well-being of households negatively affected by very low consumption of energy, use of dirty or polluting fuels, and excessive time spent collecting fuel to meet basic needs and (ii) improve the allocation efficiency of resources, helping to prevent inclusion and exclusion errors. In sum, more efficient and better targeted CCTs directly contribute to the reduction of poverty and inequality in the DR.

Prior Action #3 (b). *The Borrower has taken measures to improve the social sustainability of the electricity sector by creating a gender unit to mainstream gender equality in the formulation, design, implementation and monitoring of policies in the energy and mining sectors.*

20. **Positive poverty, distributional and social impacts are expected.** Closing gender gaps increases access to economic opportunities and earnings. Greater gender equality enhances productivity and improves other development outcomes, including prospects for the next generation and for the quality of societal policies and institutions (World Bank, 2012). The promotion of gender equality is expected to

⁴¹ Energy poverty can be defined as the absence of sufficient choice in accessing adequate, affordable, reliable, high-quality, safe, and environmentally benign energy services to support economic and human development (Reddy, 2000).



have positive direct impacts on women and households which would be affected or benefit from the implementation of policies and programs in the energy sector that would absorb targeted actions aimed at improving gender equality.

Prior Action #4. *The Borrower has taken measures to facilitate the reduction of the carbon intensity of the electricity sector in support of its NDC implementation by: (a) setting time-bound targets to increase the share of renewable energy and reduce CO₂ emissions in the power sector and mandate the adoption of the necessary policies and energy planning instruments needed to meet these targets; and (b) creating a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector.*

21. **No direct poverty, distributional or social impacts are expected, either positive or negative.** The Prior Action contributes to mitigating climate change by promoting the reduction of emissions of harmful gases (such as nitrogen oxides, sulfur dioxide, and carbon dioxide) from power generation. Considering that fuel emissions are an important cause of several pulmonary and systemic diseases (Kopel, J. et al. 2019), this Prior Action is expected to have indirect positive impacts in the medium to long term by improving the health condition of the population and generate efficiencies in the health system (Dimanchev E. et al, 2019).

Prior Action #5. *The Borrower has taken measures to increase the share of renewable energy in the electricity mix and meet its NDC commitments by removing legal barriers for distribution companies to contract renewable energy generation.*

22. **No direct poverty, distributional and social impacts are expected, either positive or negative.** This Prior Action would contribute to enhancing national energy security. The transition to renewable sources would likely have positive impacts in the medium to long term from reduced pollution and GHG emissions. Nevertheless, the shift to renewal energy can bring some challenges in the short term. First, some studies suggest the possibility of job losses, due to lack of skills and barriers of entry to the new technologies (Jairaj, B., 2017). In the case of the DR however, it is expected that these effects would be small. In addition, the shift to renewable energy may impact energy prices and potentially affect household expenditures. The establishment of ceiling prices, as noted in Prior Action #5, could serve as a mitigation measure. In this case, a more detailed empirical distributional analysis could shed light on the effects on poverty and inequality.

Prior Action #6. *The Borrower has taken measures to promote energy efficiency by submitting to the National Assembly an energy efficiency bill which: (a) establishes energy efficiency policies and norms; (b) promotes the development of a market for energy efficient goods and services; (c) incentivizes non-fossil fuels use; and (d) establishes fiscal incentives for the implementation of energy efficiency measures.*

23. **If successfully implemented, positive indirect impacts are expected in the medium and long term linked with the effects of Prior Action #4.**

Prior Action #7. *The SIE has taken measures to improve the financial self-sufficiency of the sector and reduce fossil fuel subsidies through: (a) the definition of an adjustment path for end-user tariffs to reach*



cost-recovery levels; and (b) the approval of the first end-user tariff increase, in accordance with the adjustment path.

24. **Negative poverty, distributional and social impacts can be mitigated.** The Prior Action supports progressive tariff adjustments of end-user electricity prices to reach cost recovery levels by 2026. The Prior Action also supports the first tariff increase. The distributional impact of the reform has been analyzed above (Prior Action #1), showing that no significant impacts are expected for extreme poverty or poverty gaps and that potential impacts would be mitigated by the implementation of the *BonoLuz* reform described above (Prior Action #3).

Box 5.1 Microsimulation Methodology to assess the impact of tariff increase and social transfer reform

The National Household Income and Expenditure Survey (*Encuesta Nacional de Gastos e Ingresos de los Hogares*) 2018 (ENGIH-18) is the main source for the microsimulation work presented on this PSIA. This survey is the most recent source of information on household electricity consumption that allows comparison with household characteristics, expenditures, and poverty status.

Base line

The calculation of income poverty uses the income information collected by the ENGIH-18 and reproduces the exact official income aggregate methodology as produced with the national LFS (*Encuesta Continua Nacional de Fuerza de Trabajo* - ECNFT) but excluding social transfers from government.

To obtain poverty figures for 2021, official poverty results (without social transfers) of the ECNFT-20 were used as a benchmark. Income distribution of the ENGIH-18 was adjusted to 2020 levels following two steps: (i) weighting factors were recalibrated to match to the population projections for 2020 using the cross-entropy approach (Wittenberg, 2010) and (ii) adjustment of the employment level obtained after the re-weighting to the real observed in 2020 with the ECNFT. Controlling for sectoral information (agriculture, industry, and services) and informality status, the projected excess of employment was randomly discounted and the labor income of the simulated employment drop was zeroed. Poverty results after this twostep procedure were comparable with those observed in the official figures in 2020. Finally, disposable income was calculated as the sum of the produced income aggregate plus a set of direct government transfers operational during 2021. The direct transfers included were *Bono Luz*, *Bono Gas Hogar*, *Bono Gas Chofer*, and *Alimentate*. Coverage and monthly transfers were adjusted using government open data information.⁴²

The baseline poverty projection 2021-2024 was obtained by applying to the adjusted household income aggregate (2020) the projected growth of household per capita consumption and adjusting the poverty line with the projected CPI growth. Beyond the *Bonoluz* reform, no changes are assumed in the social protection structure from 2021 onwards.

Important note: The poverty estimates presented for the baseline do not represent an official WB poverty projection for the DR. Their purpose is to serve as reasonable updated benchmark to assess the impacts of tariffs and subsidies presented below.

Tariff increase

Scheduled tariff – First, the estimation of the tariff structure scenario in 2021 was based on the tariffs applicable during October 2021, and the tariff schedule included in the SIE-088 resolution. To calculate the tariffs from October 2021 to December 2026, the following was assumed:

Fixed charge is reduced gradually until complete elimination in December 2026.

All rates will converge to RD\$13.16 per kWh in 20 quarterly steps to the final value in the third quarter of 2026.

$$Tariff_t^j = Tariff_0^j + \frac{Tariff_0^j - 13.16}{20} * t$$

Where,

⁴² <https://www.datos.gob.do/ro/organization/superate>



$Tariff_0^j$ is the tariff applicable in October 2021 for slab “j” (e.g., 0-200 kWh, 201-300 kWh, etc.)

“t” is the quarter starting from 1 in January – March 2022, to 20 in October-December 2026

20 are the number of quarters from October 2021 to October - December 2026

RD\$13.16 is the final tariff in October-December 2026

Electricity costs - Constant costs are assumed so that each year and due to exchange rate depreciation, the cost would be equivalent to RD\$13.16 per kWh in December 2026. Thus, the cost or reference tariff will be the same as the applicable tariff in the last quarter of the year 2026.

Subsidy - Two types of subsidies were considered: tariff subsidy and subsidy for non-payers’ households. For the first group, using the household expenditure reported in the ENGIH-18 and the tariff schedule⁴³ applicable in the year 2018, an estimate of kWh consumed per household was obtained. Using the estimated costs explained in the previous paragraph and the simulated tariff, the tariff subsidy was calculated as the difference between the cost and price per kWh by the units consumed. The second subsidy was for those reporting receiving electricity service from the EDEs, reporting zero payments, and having electrical appliances in the household. For this group, the subsidy was the cost per kWh by the units consumed, i.e., the average kWh units consumed per disposable income decile.

The simulation only includes projections up to 2024 since GDP, private consumption, exchange rate and CPI projections for the DR are not available beyond this point.

Subsidy reform

A simulated transfer was applied to households belonging to the life quality index ICV1 (extremely poor) and ICV2 (moderately poor). The transfer amount was the cost of purchasing 100 kWh according to the estimated tariffs by the end of each year. The coverage for the year 2026 is expected to be 1.3 million households, with 60 percent of the range to be reached by 2022, 80 percent by 2023, and 100 percent in 2026.

Increasing payment collection

To simulate the payment for electric services for those defined as non-payers’ households, the average consumption of income decile to which they belonged was imputed, then the tariff and subsidies that applied for them were simulated.

⁴³ ENGIH 2018 survey did not capture the kWh consumed by households.