



The World Bank

Second Electricity Reform for Sustainable Growth Development Policy Loan (P178570)

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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

SECOND ELECTRICITY REFORM FOR SUSTAINABLE GROWTH
DEVELOPMENT POLICY LOAN

May 2, 2023

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 April 26, 2023)

Currency Unit = Dominican Pesos (RD\$)

RD\$54.50 = US\$1.00

ABBREVIATIONS AND ACRONYMS

AFOLU	Agriculture/Forestry/Land Use	DR	Dominican Republic
AM	Accountability Mechanism	EDEs	Electricity Distribution Companies (<i>Empresas Distribuidoras de Electricidad</i>)
CABEI	Central American Bank for Economic Integration	EE	Energy Efficiency
CAD	Current Account Deficit	EIB	European Investment Bank
CAF	Development Bank of Latin America	ESMAP	Energy Sector Management Assistance Program
CAT-DDO	Catastrophe Deferred Drawdown Option	FDI	Foreign Direct Investment
CDEEE	Dominican Corporation of State Electricity Companies (<i>Corporación Dominicana de Empresas Eléctricas Estatales</i>)	FONPER	Equity Fund of the Reformed Companies (<i>Fondo Patrimonial de las Empresas Reformadas</i>)
CES	Economic and Social Council (<i>Consejo Económico y Social</i>)	FOREX	Foreign Exchange
CNE	National Energy Commission (<i>Comisión Nacional de Energía</i>)	FY	Fiscal Year
CO ₂	Carbon Dioxide	GCRF	Global Crisis Response Framework
CPF	Country Partnership Framework	GDP	Gross Domestic Product
CPI	Consumer Price Index	GHG	Greenhouse Gas
CTNEE	National Technical Council for Energy Efficiency (<i>Consejo Técnico Nacional para Eficiencia Energética</i>)	GIZ	German Agency for International Cooperation
CUED	Unified Council for the Distribution Companies (<i>Consejo Unificado de las Empresas Distribuidoras</i>)	GoDR	Government of the Dominican Republic
DGAPP	Public-Private Partnerships Directorate (<i>Dirección General de Alianzas Público-Privadas</i>)	GRID	Green, Resilient and Inclusive Development
DGCP	General Public Procurement Directorate (<i>Dirección General Contrataciones Públicas</i>)	GRS	Grievance Redress Service
DPL	Development Policy Loan	HAP	Household Air Pollution
IBRD	International Bank for Reconstruction and	PER	Public Expenditure Review

ICV	Development Life Quality Index (Índice de Calidad de Vida)	PFM	Public Financial Management
IDB	Interamerican Development Bank	PPA	Power Purchase Agreement
IMAE	Monthly Index of Economic Activity (<i>Indicador Mensual de Actividad Económica</i>)	PPP	Public Private Partnership
IMF	International Monetary Fund	PSIA	Poverty and Social Impact Analysis
INTRANT	National Institute of Traffic and Land Transportation (<i>Instituto Nacional de Tránsito y Transporte Terrestre</i>)	PV	Photovoltaic
ISA	International Standards on Auditing	RD\$	Dominican Pesos
IT	Indicative Triggers	RE	Renewable Energy
JICA	Japan International Cooperation Agency	RETs	Renewable Energy Technologies
KPIs	Key Performance Indicators	RPE	Registry of State Providers (<i>Registro de Proveedores del Estado</i>)
kWh	Kilowatt-hour	SAI	Supreme Audit Institution
LAC	Latin America and Caribbean	SAIDI	System Average Interruption Duration Index
MACC	Marginal Abatement Cost Curve	SAIFI	System Average Interruption Frequency Index
MAPS	Methodology for Assessing Procurement Systems	SCD	Systematic Country Diagnostic
MEM	Ministry of Energy and Mines (<i>Ministerio de Energía y Minas</i>)	SENI	National Interconnected Electric System (<i>Sistema Eléctrico Nacional Interconectado</i>)
MMARN	Ministry of the Environment and Natural Resources (<i>Ministerio de Medio Ambiente y Recursos Naturales</i>)	SIE	Superintendence of Electricity (<i>Superintendencia de Electricidad</i>)
MFD	Maximizing Finance for Development	SIGEF	Financial Management Information System (<i>Sistema de información de la Gestión Financiera</i>)
MW	Megawatt	SIUBEN	Unified System of Beneficiary Identification (<i>Sistema Único de Beneficiarios</i>)
M/M	Month-on-month	SOEs	State-Owned Enterprises
NDC	Nationally Determined Contributions	TA	Technical Assistance
NDS	National Development Strategy	TSA	Treasury Single Account (<i>Cuenta Única del Tesoro</i>)
NEP	National Energy Plan	TE	Total Expenditure
NPLs	Non-Performing Loans	U.S.	United States
OECD	Organization for Economic Cooperation and Development	WB	World Bank
PA	Prior Action	WBG	World Bank Group
PDO	Program Development Objective	WTI	West Texas Index
PEFA	Public Expenditure and Financial Accountability	Y/Y	Year on Year

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DOMINICAN REPUBLIC

SECOND 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
P178570	Yes	2nd 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 mitigation and social and environmental sustainability, and (iii) improving the financial sustainability 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

Moderate



Results

Indicator Name	Baseline	Target (end 2024)
Pillar 1: Strengthening sector governance		
Indicator #1. New renewable energy capacity consistent with least-cost planning and contracted through competitive procurement by distribution companies (megawatt)*	0 [2022]	500
Indicator #2. Distribution companies that have signed performance agreements with Unified Council for the Distribution Companies (<i>Consejo Unificado de las Empresas Distribuidoras, CUED</i>) including a publicly disclosed list of Key Performance Indicators and published annual audited financial statements for calendar years 2020 to 2023 (number)*	0 [2022]	3
Indicator #3. Distribution companies that have data collection systems in place allowing them to effectively monitor progress on Key Performance Indicators (number)*	0 [2022]	3
Indicator #4. Distribution companies with all key management positions filled following competitive procurement using meritocratic criteria by 2024 (number)*	0 [2022]	3
Pillar 2: Enhancing climate mitigation and social and environmental sustainability		
Indicator #5. Extremely poor and poor households** benefiting from <i>Bonoluz</i> (number)	330,000 [2020]	900,000
Indicator #6. Female-headed households benefitting from <i>Bonoluz</i> (number)*	231,000 [2020]	549,000
Indicator #7. Distributed renewable energy capacity connected to grid (megawatt)*	250 [2022]	400
Indicator #8. Charging stations for electric vehicles installed nationwide (number)*	350 [2022]	500
Indicator #9. Reduction from baseline of energy use in public buildings (percentage)*	0 [2022]	2
Pillar 3: Improving the financial sustainability and operational performance of the electricity sector		
Indicator #10. Number of distribution companies with a tariff shortfall*** (number)*	3 [2022]	0

* New indicator

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

*** Tariff shortfall is the difference between the revenue requirements for the distribution companies as defined in the tariff-setting methodology (set out in Prior Action 7) and the total of actual tariff revenues and subsidies from the Central Government budget.



IBRD PROGRAM DOCUMENT FOR A PROPOSED LOAN TO THE DOMINICAN REPUBLIC

1. INTRODUCTION AND COUNTRY CONTEXT

1. **The proposed Second Electricity Reform for Sustainable Growth Development Policy Loan (DPL) operation, in the amount of US\$400 million supports the efforts of the Government of Dominican Republic (GoDR) to implement a comprehensive reform in the electricity sector.** The proposed operation is the second in a programmatic DPL series of two operations 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 for: (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 mitigation 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 sustainability and operational performance of the electricity sector, while protecting poor households. The World Bank (WB) Board of Executive Directors approved the Electricity Reform for Sustainable Growth Development Policy Financing (DPL1, P175874) in the amount of US\$400 million on March 31, 2022, with the same program objectives.

2. **The DR is an upper middle-income country with a strong 4.9 percent growth rate in 2022; however, while the electricity sector has been catalytic for the country's economic growth and poverty reduction, it has also presented a significant fiscal burden to the state and a bottleneck to green, resilient and inclusive development.** The steady annual increase in electricity demand of about 7 percent has mirrored the average growth rate of 6 percent in the past decades and the doubling of the electricity supply capacity in the last 15 years has largely sustained that growth momentum. The country is highly reliant on imported fossil fuels for power generation, with 84 percent coming from coal, oil, and gas, which makes it vulnerable to adverse international fuel price shocks and contributes to high greenhouse gas (GHG) emissions.¹ The DR's electricity service quality indicators are among the lowest in the LAC region.² While performance in the distribution sector improved from 2009 to 2019 due to implementation of loss reduction measures, most of those gains were reversed during 2020 and 2021 due to COVID-19 pandemic response measures that prevented the Electricity Distribution Companies (*Empresas Distribuidoras de Electricidad*, EDEs) from disconnecting illegal connections and non-paying consumers. Power distribution losses are particularly high in areas with high poverty rates, where distribution networks are poorly managed and highly vulnerable to fraud. As a result, poor and vulnerable households are disproportionately affected by unreliable access to basic electricity services. The sector is also highly vulnerable to the impacts of climate change, as many other Caribbean countries. Meanwhile, the sector deficit has also represented between 1 to 2.3 percent of gross domestic product (GDP) since 2014.³

¹ Meanwhile, the country is endowed with significant renewable energy resources, with a potential generation of 6 Gigawatt (GW) by 2030, of which only 750 Megawatt (MW) has been developed (*Comisión Nacional de Energía* (CNE) and International Renewable Energy Agency (IRENA), REmap 2030 – *A Renewable Energy Roadmap*. See: <https://www.cne.gob.do/wp-content/uploads/2018/01/2820172920ESP20REmap20RD202030.pdf>).

² The average customer on the public power grid experienced 18 interruptions and 22 blackout hours per month in 2020, far above the averages of regional peers such as Panama and Costa Rica. <https://sie.gob.do/sobre-nosotros/departamentos/estadisticas-direccion-regulacion/>

³ International Monetary Fund, July 2022 Article IV Consultation, Country Report No. 22/217.



3. **The electricity sector governance faces significant efficiency, accountability, and transparency issues.** The General Electricity Law of 2001 (Law No. 125-01) led to the establishment of several agencies with policy-making responsibilities, independent from the Ministry of Energy and Mines (*Ministerio de Energía y Minas*, MEM). It created the Dominican Corporation of State Electricity Companies (*Corporación Dominicana de Empresas Eléctricas Estatales*, CDEEE) as the coordinating body of all state-owned enterprises (SOEs) operating in the sector, and the distribution companies in particular. CDEEE established *de facto* policies and became the recipient of all government subsidies in a context of weak government oversight and transparency. Numerous attempts at improving the sufficiency and reliability of electricity services in the 1990s and 2000s did not yield tangible progress due to entrenched governance issues and lack of public support, among others.

4. **In February 2021, the GoDR adopted the Electricity Pact (*Pacto Eléctrico*) to lay out an ambitious and comprehensive set of reforms in the electricity sector to be implemented by 2026.** The Electricity Pact was based on a broad and unprecedented consultation process, which took place over a period of five years and involved representatives of several political parties, consumer groups, local and national government leaders, and business organizations. The Pact includes commitments to improve efficiency and service quality, achieve cost-reflective tariffs that will be counterbalanced by direct cash transfers to the poorest and most vulnerable consumers, introduce better governance in electricity distribution with a goal to reintroduce private sector participation, and reduce the carbon intensity in the sector through an increased share of renewable energy (RE) and energy efficiency (EE), among others (See Box 3 in Section 3), with an overall implementation timeline extending to 2026.

5. **The proposed operation is a key component of the WB engagement in the DR, particularly during the post-crisis recovery, supporting the GoDR's crucial reform efforts in a sector that is vital to the country's continued economic growth.** The proposed operation supports a strong program of policy and institutional reforms that target fundamental and decades-long challenges in the electricity sector including addressing: (i) the inadequate legal framework for sector policymaking that failed to allocate responsibilities among public stakeholders and to ensure integration of renewable energy following a least cost planning approach; (ii) exposing the country to volatile fossil fuel prices and contributing to high system costs; (iii) the inefficient end-use of energy resulting in high energy intensity of the economy and under-developed market for energy efficiency services; (iv) the need to decarbonize the transport sector to minimize the dependence on imported fossil fuels and volatile prices; (v) the poor transparency and governance of the EDEs resulting in high system losses and affecting both technical and financial performance; (vi) the lack of effective, cost-recovery electricity tariffs affecting the financial sustainability of the distribution companies and impeding the participation of the private sector investments in distribution; and (vii) the outdated distribution grid code and absence of quality-of-service standards affecting the power system's resilience to climate change.

6. **In 2021, the year following the adoption of the Electricity Pact, and as evidenced by the first operation of the series that was approved by the World Bank Board of Executive Directors in March 2022, the GoDR took decisive actions to start addressing the fundamental challenges of the electricity sector.** On the governance front, the GoDR assigned sector institutions the responsibilities to implement the reforms of the Electricity Pact and started to address the governance challenges of the distribution sector through initiating a process that would facilitate private sector participation (supported by DPL1 Prior Action (PA)#1 and 2). On the climate sustainability front, the GoDR adopted time-bound targets to increase renewable



energy, submitted an energy efficiency law to congress, and created a national measuring, reporting, and verification system for GHG emissions covering, among others, the energy sector (supported by DPL1 PA#4, 5 and 6). On the regulatory and financial sustainability front, the GoDR, through the Superintendency of Electricity, started implementing quarterly tariff increases towards convergence with cost reflective tariffs. In order to protect vulnerable customers, the electricity tariff subsidy *BonoLuz* was integrated into the national social protection program *Supérate* (supported by DPL1 PA#3 and 7).

7. **The health, economic, and food and energy price crises of 2022 resulted in widespread blackouts and instances of social unrest, prompting the GoDR to pause key aspects of the reform, including the tariff increases to protect the vulnerable.** The multiple crises including Russia’s invasion of Ukraine resulted in high and volatile energy prices, with the country facing high inflation and food prices increasing by 8.6 percent year-on-year in September 2022. The combined effect of high fuel prices and domestic inflation led to widespread popular protests, social unrest, and political instability in other countries in the region and threatened the same in the DR. The crises highlighted the need to sequence the reform measures in a way that minimizes their impacts on the most vulnerable. Accordingly, this resulted in the GoDR adjusting the pace of some reforms under the Electricity Pact.

8. **The measures included in the second operation of the series reflect the strong commitment of the GoDR to maintaining the pace of its ambitious reform while protecting the vulnerable in the face of unprecedented crises and ensuring sustainability of the reform (see Box 1).**

- *On the governance front*, the GoDR separated and clearly assigned the policymaking, planning, and regulation functions of governmental institutions in the energy sector; it established a transparent least cost planning process to increase renewable energy and attract private investment in generation; it dissolved by law the Dominican Corporation of Electricity State Owned Enterprises (*Corporación Dominicana de Empresas Eléctricas Estatales, CDEEE*), which concentrated corruption in the sector, in particular in the distribution segment; and it committed to adopting best industry governance practices for SOEs (State-Owned Enterprises) in the distribution sector (supported by DPL2 PA#1 and 2);
- *On the climate sustainability front*, the GoDR has adopted a new grid code that will allow for greater renewable energy integration; it has facilitated the transition to e-mobility; it has mandated competitive procurement of renewable energy to further decarbonize the sector and mobilize private capital; it has incentivized smaller distributed renewable generation; and it has adopted regulations to foster energy efficiency in buildings, a key demonstrative step to raise awareness and scale up energy efficiency in other customer segments (supported by DPL2 PA#4, 5, 6 and 8);
- *On the regulatory and financial sustainability front*, the GoDR, through the Superintendency of Electricity, has adopted a tariff methodology that will allow for an accurate calculation of cost reflective “technical tariff”; while the tariff charged to customers remains below cost recovery, the GoDR has committed to compensating the distribution companies for the shortfall in order to maintain the financial viability of the sector. To protect the vulnerable in the context of the additional pressures of the energy and inflation crisis, the GoDR has improved the targeting and coverage of the electricity subsidy *BonoLuz* while expanding the number of beneficiaries under the gas and food subsidy programs (supported by DPL2 PA#3 and 7).



Box 1. Energy Sector Reform Sustainability

The GoDR has taken decisive steps to ensure the sustainability of the reforms implemented under the Electricity Pact. The Electricity Pact was the result of a broad and extensive consultation exercise, which provides greater comfort that the reforms implemented enjoy wide support and would be less vulnerable to policy reversals. The GoDR has continued its broad consultation approach in the key policy measures implemented since the adoption of the Electricity Pact.

By improving the targeting of social protection measures such as *BonoLuz*, *BonoGas* and *Alimentate*, the GoDR has demonstrated its commitment to socially sensitive policies to protect the poor and vulnerable. The upfront implementation of measures to mitigate the impact of the reforms on the poor also provides for greater sustainability of the overall reform.

The policies implemented are also establishing the fundamentals to reduce energy costs, thereby also supporting sustainability of the reform effort. By mandating least cost planning, competitive procurement of renewable energy and improvements in the grid code to aid greater absorption of renewable energy, the GoDR is taking action to reduce the cost of energy and the exposure to volatile imported fossil fuels prices. This will contribute to stabilizing energy prices and reducing needs for subsidies. Similarly, the reforms promoting energy efficiency will contribute to reducing consumption of electricity at end-user level, therefore reducing the electricity bills and providing a mitigation measure in anticipation of when tariff increases can be re-introduced. Both renewable energy investments and deployment of energy efficiency are expected to be led by the private sector.

The GoDR is committed to restoring the financial sustainability of the sector. In addition to the policies aimed at incentivizing renewable energy and energy efficiency, the GoDR has advanced critical policies to improve the transparency and governance of the Electricity Distribution Companies (*Empresas Distribuidoras de Electricidad*, EDEs), leading to reduced distribution losses; and to implement effective, cost-recovery electricity tariffs. It has signaled that the gradual tariff increases are expected to resume when inflation is reduced and the socio-economic conditions allow, after which private sector participation in electricity distribution would be reconsidered. Critical to the financial sustainability of the sector, the GoDR has committed to compensating the EDEs for the revenue shortfall arising from non-cost reflective tariffs, according to a clearly established reference technical tariff regime methodology, while supporting loss reduction through governance reform and an ambitious investment program with support from the WB.

The continued improvement in governance of EDEs will be supported by a proposed investment lending in the sector, which will also support continuity of the reforms. The Distribution Efficiency Improvement and Utility Strengthening Project (P180512) will support the implementation of the governance reform in the EDEs by financing software and hardware for data collection and business management systems that will improve operation monitoring system performance, as well as technical assistance to support recruitment of key management positions and to implement performance agreements linked to key performance indicators (KPIs).

The electricity reform effort is an anchor of the engagement from other MDBs in the DR. The operation is also 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) is preparing parallel budget support operations, based on a policy matrix that is complementary with this proposed WB DPL series, while the Interamerican Development Bank (IDB) is providing investment support for strengthening the distribution network and technical loss reduction. The continued coordination of the MDBs' support to the sector will contribute to sustainability of the reform effort.



9. **This operation is complemented by lending and technical assistance (TA) that will allow the Bank to accompany the GoDR in the implementation of critical reforms in the medium term, with a specific focus on improving the efficiency and governance of the distribution segment.** In addition to this DPL series, the WB is preparing an investment lending operation⁴ to further support improvements in governance and operations, as well as the distribution loss reduction goals of the three EDEs. The new proposed operation would seek to implement the corporate governance standards that the EDEs elaborated for this DPL and would allow the Bank to remain engaged in the implementation of the reforms of the EDEs and support monitoring the progress in governance and operational performance. The preparation of the investment lending is being informed by the Bank's strong engagement in the sector underpinned by an extensive program of TA over the past several years⁵ to support key reform measures related to energy efficiency, subsidy and tariff reforms, distributed generation, technical grid standards for the medium voltage and low voltage levels to allow for absorption of increasing renewable energy, and decarbonization pathways to reach net zero, among others.

10. **The DR's high exposure to climate-related disasters has compounded existing challenges in the electricity sector and calls for enhanced efforts to foster green and resilient growth.** Between 1997 and 2016, natural disasters resulted in average annual economic losses of around 0.26 percent of GDP. Like other Caribbean countries, increased incidence of natural disasters due to climate change carries significant risk of human and economic losses, including to energy generation, transmission, and distribution infrastructure. Most recently, on September 19, 2022, Hurricane Fiona hit the Dominican Republic (DR) as a category 1 hurricane with strong winds of up to 150 kilometers (km) per hour and heavy rains affecting over 1.4 million people. These events underline the country's vulnerability to climate change and the need to improve the resilience of the power sector.⁶

11. **The reforms proposed under the DPL series are expected to have a substantial positive impact in achieving a green, resilient, and inclusive economic recovery.** The operation is aligned with the World Bank's twin goals, it supports inclusive and resilient economic growth and declining carbon dioxide (CO₂) intensity in line with the World Bank Strategy "Green, Resilient and Inclusive Development" (GRID) approach (October 2021)⁷ as well as the World Bank Group (WBG) Global Crisis Response Framework (GCRF).⁸ The series is also fully aligned with the National Development Strategy 2030 (NDS) and the Country Partnership Framework (CPF) FY22-26 for the Dominican Republic discussed by the World Bank's Board of Executive Directors on March 29, 2022⁹, as well as the WBG Roadmap for Climate Action in Latin America and the Caribbean (LAC).¹⁰

⁴ Dominican Republic Distribution Efficiency Improvement and Utility Strengthening Project (P180512).

⁵ This has been delivered through several trust-funded activities linked to the Electricity Reform for Sustainable Growth Development Policy Loan (P175874), Supporting the Energy Transition in Central America and the Dominican Republic (P178163) PASA, and Decarbonization Pathways for the Dominican Republic: Assessment and Development of the Current NDC (P173083) ASA.

⁶ In addition to measures supported by this operation, the Bank is preparing the Country Climate and Development Report (CCDR – P179355) with the objective of analyzing how the country's development goals can be achieved in the context of mitigation and adaptation to climate change, and identifying ways to support that implementation.

⁷ See: <https://openknowledge.worldbank.org/handle/10986/36322>

⁸ See:

<https://documents1.worldbank.org/curated/en/099640108012229672/pdf/IDU09002cbf10966704fa00958a0596092f2542c.pdf>

⁹ Report No. 167896-DO.

¹⁰ World Bank Group. 2021. Climate Change Action Plan 2021-2025: Supporting Green, Resilient and Inclusive Development. Washington D.C.



12. **The proposed operation is consistent with the International Bank for Reconstruction and Development (IBRD) principles for financing in a high-income country with GDP above the Graduation Discussion Income (GDI).** Key institutional reforms supported under this series include provisions to mitigate risks related to climate change, both in terms of adaptation and mitigation challenges. The operation is also backing reforms that support the decarbonization of land transportation, implementation of energy efficiency policies, and scaling up of renewable energy where the DR is setting a model for other Caribbean and regional peers. By promoting institutional strengthening, supporting gender-focused policy reforms, and contributing to the global public goods agenda, the operation is aligned with IBRD's Graduation Policy.

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

13. **Growth reached 4.9 percent in 2022, close to its potential.** The COVID-19 crisis had major economic and social impacts. Following a sharp contraction in output, Gross Domestic Product (GDP) rebounded 12.3 percent in 2021, supported by a comprehensive government response to COVID-19, that included fiscal, macroprudential, and supervisory reforms, along with monetary easing. In 2022, the GDP grew 4.9 percent, primarily fueled by the service sector. The hotels, bars, and restaurants sector grew 24.0 percent over this period, bolstered by an active vaccination campaign that covered 56 percent of the population by the end of 2022. The health (11.3 percent y/y) and other services (8.2 percent y/y) sectors also contributed to this growth. On the demand side, private consumption contributed the most to growth (3.1 percentage point out of 4.9), driven by strong remittances inflows of about 9 percent of GDP.

14. **The current account deficit (CAD) widened due to the adverse terms-of-trade shock,¹¹ but capital inflows resulted in an overall buildup of international reserves.** The CAD deteriorated to US\$6.2 billion in 2022, up from US\$2.7 billion a year earlier, driven mostly by an increase in food and fuel imports of nearly 51 percent y/y in 2022, the largest increase in five years. This deterioration occurred despite the good performance of the tourism sector, as overall arrivals grew 11.1 percent in 2022 when compared to pre-pandemic levels of 2019.¹² The CAD was partially financed by FDI, which is expected to remain at about 3.2 percent of GDP, and an increase in other long-term capital inflows – all together supporting a reserve built up to US\$14.4 billion by end of the year, up from US\$13 billion a year earlier, and equivalent to almost 6 months of total imports. This also led to a 3.7 percent nominal exchange appreciation of the Dominican Peso (RD\$) between 2021 and 2022.

15. **Rising inflation is reducing disposable incomes, especially for the vulnerable, while employment remain below pre-pandemic levels and food insecurity rises.** Inflation reached 7.8 percent y/y in 2022, well above the Central Bank target range of 4±1 percent, driven by the known external forces (i.e., supply chains, Russia's invasion of Ukraine). Food inflation reached 11.2 percent y/y in the same period, while fuels and transport services inflation, at only 5.9 percent y/y, was cushioned by the introduction of a state subsidy.¹³ Since inflation outpaced average wages, real household incomes fell 3.8 percent. Due to the increasing cost

¹¹ DR is a net importer of oil, natural gas, soybeans, sorghum, wheat, all of which experience international price hikes.

¹² Arrivals from Europe and the US more than compensated a decrease in nearly 23,000 tourists/month from Russia and Ukraine (about 3.9 percent of total tourists).

¹³ Fuel subsidies apply when the oil price per barrel in Texas is between US\$85 and US\$115 per barrel.



of the typical consumption basket, the poverty rate (defined as living with less than US\$6.85 PPP per day) is expected to increase to 26.0 percent in 2022, above pre-pandemic levels (20.2 percent in 2019). The increase of the vulnerable population is accompanied by a middle-class contraction from 33.5 to 31.6 percent. Furthermore, the 2022Q3 employment rate remained 1.5 percentage points below pre-pandemic levels, and the informality rate remains 2.9 percentage points higher.

16. **The overall fiscal deficit reached 3.5 percent of GDP in 2022, driven by an increase in subsidies.** The overall and primary public deficits worsened by 0.6 and 0.7 percentage points of GDP y/y, respectively, last year. Overall revenues declined 0.3 percentage points, which contributed to the fiscal deterioration. On the spending side, under execution of public investments partly compensated for the increase in transfers to protect the population from energy and food price increases: 1) a 0.7 percent of GDP expansion to subsidize temporarily fuel prices at the pump; and 2) a 1.3 percent of GDP to cover the increase in the operational losses of the electricity sector, up from 0.4 percent of GDP in 2021.

17. **The debt of the consolidated public sector declined from 63 to 59 percent of GDP between 2021 and 2022, helped by strong growth and exchange rate appreciation.** Among the state debtors (i.e., central, and local government, non-financial state-owned enterprises, and the central bank), the central government's debt declined the fastest, from 47.5 to 41.4 percent of GDP. The Central Bank's debt emerged from the 2002 banking sector crisis, but the authorities are currently developing a long-due recapitalization plan. It marginally increased to 17.4 percent of GDP by 2022.

18. **A well-timed liability management operation also reduced projected debt service payments by US\$1.1 billion over the 2022-24 period.** In February 2022 (ahead of the US Federal Reserve interest rate hike), the Ministry of Finance (MoF) bought back several bonds maturing between 2022 and 2024 through a new debt issuance that reached US\$1.8 billion. Foreign sovereign debt has been rated three notches below investment grade (BB-) by Fitch and Moody's, but in December 2022 Standard & Poor's increased its rating to BB due to improved institutional framework in public administration (ability to maintain high growth and improved fiscal planning and debt management). The country's EMBI spreads fell from 3.7 to 3.6 between end-2021 and end-2022.

19. **Monetary policy, which had taken an accommodative stance during the pandemic, swung to a tightening cycle in efforts to contain inflationary pressures.** The central bank accelerated the pace of monetary tightening beyond neutral levels: as of March 2023, the policy interest rate had increased 4 percentage points (p.p.) to 8.5 percent.¹⁴ Policy rate hikes paused in the last two months of 2022 as overall inflation slowed down, reaching 5.9 percent y/y in March 2023. While this contributed to anchor inflation expectations, the appreciation of the currency also helped. The financial system remains liquid, and profitable with a liquidity ratio of 44.3 in December 2022, and a return-on-equity of 23 percent in December 2022, surpassing the 20 percent in November 2019.¹⁵ Credit to the private sector advanced by 16.7 percent y/y, as of December 2022. The Non-Performing-to-Total-Gross Loans Ratio (NPLs) has decreased from 1.9 to

¹⁴ The central bank started to move towards an inflation targeting regime since 2012.

¹⁵ The liquidity indicator is defined as the share of cash, investments in deposits and securities to total assets. This is the preferred measure of liquidity by the *Superintendencia de Bancos*.



1.0 between November of 2019 and 2022.¹⁶ The DR has already phased out the financial programs that were introduced during the pandemic.

2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

20. **GDP growth is expected to decelerate to 4.4 percent in 2023 and to return to DR's growth potential over the 2024-26 period.** Private consumption is expected to be one of the drivers in the medium-term, boosted by improving labor market conditions in key sectors (e.g., tourism and related service sectors, and other sectors attracting investments, such as sustainable agriculture). Investment, funded through FDI, is also expected to contribute to growth, supported by structural reforms and nearshoring opportunities¹⁷. The DR Central Bank expects a slow convergence of headline inflation towards its target range, given that inflation expectations are well-anchored, and assuming external conditions ease. Inflation is, thus, expected to reach the upper band of 5 percent in 2023 and fall to 4 percent during the 2024-26 period.

21. **A gradual fiscal consolidation is expected over the medium term.** Temporary fuel subsidies, the reduction of duties on fuels, and the increase in means-tested cash transfers all contributed to the widening of fiscal balance in 2022. Over the 2023-26 period, a gradual primary fiscal consolidation of 1.8 percent of GDP is expected (see table 2), driven by: 1) the phase-out of untargeted subsidies; 2) a gradual reduction of transfers to state-owned enterprises in the energy and water sectors, enabled by reforms to increase productivity in those SOEs; and 3) spending efficiency measures (e.g., procurement, social programs consolidation). The interest bill is expected to increase driven by global interest rates hikes, despite the recent improvement in the country credit rating. Finally, revenues are expected to marginally decrease in the period 2023-2026, from 15.3 in 2022 to 15.0 by 2026. Supported by recent improvements in tax administration and the fight against fiscal evasion, tax revenues are expected to be higher than pre-pandemic levels.

¹⁶ Asset quality will be under pressure by the rising interest rates, which will test the system's still adequate profitability and capital buffers. In addition, Dominican lenders are substantially exposed to the inherently risky household sector (which accounts for approximately 40% of total loans, including consumer and residential mortgage loans).

¹⁷ Recent developments include the Fideicomiso Pro-Pedernales and customs reform (Law no. 168-21) that would allow for more opportunities with external markets and reduce congestion in ports, airports and other relevant spots.



Table 1: Key Macroeconomic Indicators

	2019	2020	2021	2022(e)	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	4.9	4.4	5.0	5.0	5.0
<i>Contributions</i>								
Consumption	3.8	-1.7	4.6	3.6	3.5	4.1	4.1	4.0
Investment	2.1	-3.2	6.0	2.0	1.2	1.2	1.2	1.2
Net exports(a)	-0.9	-1.7	1.6	-0.7	-0.2	-0.3	-0.3	-0.3
GDP per capita	4.1	-7.5	11.2	3.6	3.0	3.6	3.6	3.6
GNI per capita, ATLAS method (current US\$)	7,990	7,170	8,100	...	...	...	...	...
	in percentage of GDP, unless otherwise indicated							
External sector								
Current account balance	-1.3	-1.7	-2.9	-5.7	-4.3	-3.9	-3.7	-3.4
Exports of goods and services	23.1	18.9	21.8	23.6	25.2	25.5	25.7	25.9
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	11.0	9.0	8.7	8.4	8.2	8.0
Imports of goods and services	27.6	25.8	30.3	33.4	33.5	32.7	32.1	31.6
Of which energy imports	3.4	2.3	...	...	...	...	...	...
Foreign Direct Investment	3.4	3.2	3.3	3.3	3.2	3.2	3.2	3.2
Gross International Reserves (in bill. US\$)	8.8	10.7	13.0	14.4	16.6	18.7	21.0	22.9
In percentage of GDP	9.9	13.6	13.8	13.2	14.3	15.2	16.1	16.7
In months of next year's imports	5.2	4.5	4.3	4.5	4.9	5.4	5.8	5.8
External public debt	26.6	39.3	36.1	32.7	32.5	31.9	30.6	31.1
Terms of Trade (% change)	4.1	4.4	-8.7	-4.4	4.8	2.9	1.9	1.9
Nominal exchange rate (average)	51.3	56.6	57.2	55.1	...	...	...	...
Employment and inflation								
CPI (year-average)	1.8	3.8	8.2	8.8	5.0	4.0	4.0	4.0
Unemployment Rate	5.9	7.4	7.1	4.8	...	...	...	...
Participation Rate	65.4	61.1	64.2	62.1	...	...	...	...
Of which female	53.2	48.5	53.0	49.3	...	...	...	...
Monetary and banking sector								
Base Money	10.3	14.2	15.5	11.9	...	...	...	...
Policy Interest Rate, %	5.1	3.0	4.5	8.5	...	...	...	...
Credit to the private sector	26.7	28.8	26.5	26.8	...	...	...	...
Return on equity (ROE), percentage	19.5	15.6	20.7	22.9	...	...	...	...
Nonperforming loans, % of total	1.6	1.9	1.3	1.1	...	...	...	...
Liquidity (availabilities + net investment/total assets)	35.9	45.6	47.3	44.3	...	...	...	...
Net Assets/Liabilities, ratio	1.1	1.1	1.1	1.1	...	...	...	...
Central Government (C.G.) finances								
Revenues	14.4	14.2	15.6	15.3	14.9	15.0	15.0	15.0
Expenditures	16.6	22.1	18.5	18.8	18.0	17.8	17.5	17.3
C.G Government Balance	-2.2	-7.9	-2.9	-3.5	-3.1	-2.8	-2.5	-2.3
Consolidated Public Sector Debt	50.5	69.1	62.6	59.1	58.9	58.0	56.3	55.9

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

Source: Dominican Republican authorities and World Bank Staff estimates.

22. **The public-debt-to-GDP ratio is expected to decline to around 56 percent over the medium term under the baseline scenario.** With the above-described assumptions for growth (Table 1) and primary surplus (Table 2), the debt ratio should reach 55.5 percent by 2026 (Table 3). The debt sustainability analysis suggests that a one-standard-deviation negative growth shock would increase debt to around 68 percent of GDP by 2024, and gross financing needs from 6 to above 8 percent of GDP over 2024. A combined shock (real GDP growth, inflation, primary balance, exchange rate, and interest rate) would result in debt increasing up to 74 percent of GDP. With an average maturity of 10.8 years, while roll-over risks exist, they are manageable. At the same time, Box 1 below present scenarios for the losses of the electricity sector under alternative policy and external scenarios. This presents a range of possible contingent liabilities from the sector – which can widen the fiscal deficit up to 1 percentage point of GDP by 2026 (its impact on the debt-to-GDP ratio is already captured in the combined shock stress-test). Additional contingent liabilities could arise from natural disasters, which the DR is highly vulnerable to. However, the Ministry of Finance is only starting to collect the



information needed to quantify these contingent liabilities, with World Bank support through the CAT-DDO operation (Project 178122).

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

	2019	2020	2021	2022(e)	2023(p)	2024(p)	2025(p)	2026(p)
Total Revenues (and grants)	14.4	14.2	15.6	15.3	14.9	15.0	15.0	15.0
Tax revenues	13.3	12.4	14.4	14.2	13.8	13.9	13.9	13.9
Direct taxes	4.4	4.4	5.1	5.0	4.8	4.9	4.9	4.9
Taxes on good and services	8.0	7.2	8.3	8.2	8.1	8.1	8.0	8.1
Taxes on international trade	0.9	0.7	0.9	0.9	0.9	0.9	0.9	0.9
Social contr., grants and other	1.1	1.8	1.2	1.2	1.1	1.1	1.1	1.1
Total expenditures	16.6	22.1	18.5	18.8	18.0	17.8	17.5	17.3
Compensation of employees	4.5	4.8	4.4	4.3	4.3	4.3	4.3	4.3
Use of goods and services	1.9	2.3	2.1	2.1	2.0	1.9	1.8	1.7
Capital expenditures	2.3	2.9	2.8	2.5	2.3	2.3	2.1	2.1
Interest payments	2.7	3.2	3.1	3.1	3.3	3.4	3.5	3.5
Current transfers	4.9	8.3	6.2	6.6	6.1	6.0	5.8	5.7
Of which electricity related*	0.9	0.9	0.9	1.3	0.9	0.8	0.8	0.8
Of which BonoLuz**	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2
Other expense	0.3	0.5	-0.1	0.2	0.0	0.0	0.0	0.0
Fiscal balance								
Overall balance	-2.2	-7.9	-2.9	-3.5	-3.1	-2.8	-2.5	-2.3
Primary balance	0.6	-4.7	0.2	-0.4	0.2	0.6	1.0	1.2
Financing sources								
External, net	2.1	9.3	2.9	2.6	2.1	1.8	1.5	1.3
Domestic, net	0.1	-1.4	0.1	0.9	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	62.6	59.1	58.9	58.0	56.3	55.9
Central government, net	36.8	52.9	47.5	41.4	...	...	...	...
Other NFPS	0.8	0.7	0.5	0.3	...	...	...	...
Central Bank	12.9	15.5	14.7	17.4	...	...	...	...
By creditor residence								
External	26.6	39.3	36.3	32.7	32.5	31.9	30.6	31.1
Domestic	23.9	29.8	26.4	26.4	26.4	26.1	25.7	24.8

(e) estimate; (p) projection

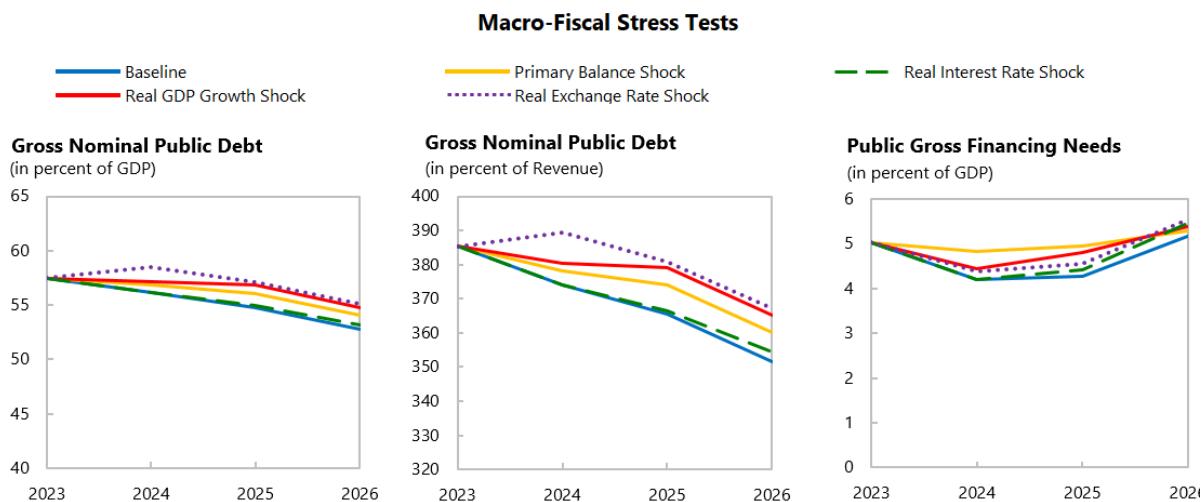
Note. Central government debt is net of intragovernmental debt/

*: Tariffs are held constant in DR's currency (fall in dollar terms), losses are reduced from 36 percent to 28 percent by 2025 as envisaged in the authorities Electricity Compact. Finally, the average price of the (imported) fuel needed for generation is kept constant at 2022 level.

**Projections based on 2023 government data on beneficiaries (households) and the total value of the subsidy. We assume that the total subsidy per households increases by 10 percent to account for adjustments, and we use the planned projections until 2026 of. If we do, we obtain numbers lower than 0.2% of GDP. We prefer to be cautious, and for that reason we decided to go with a higher number to account for uncertainty.



Figure 1. Dominican Republic, Macro-fiscal Stress Test



Source: World Bank Staff's elaboration.

23. **The macroeconomic scenario faces both demand and supply side risks.** A faster-than-expected slowdown of the U.S. economy could directly affect tourist arrivals, remittances, and exports, while pressuring on refinancing costs. Furthermore, an escalation of geopolitical risks could amplify and prolong the negative terms of trade shock and its effects on the balance of payment and on inflation. In addition, higher than projected fuel prices could lead to further deterioration of the fiscal deficit if fuel subsidies and safety nets need to be maintained or extended. New variants of COVID-19 could pose additional risks to the tourism and service sector, despite the observed resilience. Likewise, climate change has intensified the exposure to disasters in countries like the DR (both in frequency and severity), which can significantly affect GDP as well as financial and fiscal liabilities. Hurricanes Irma and Maria caused losses of 0.84 percent of GDP in 2017, while losses from floods in 2016 amounted to 0.61 percent of GDP (DR's Central Bank's Monetary Policy Report, 2017).

24. **The GoDR's macroeconomic policy framework is deemed adequate for the proposed operation.** The DR's external position remains sound with continued accumulation of reserves. The financial sector remains resilient, with increasing growth in credit and declining NPLs. The Superintendency of Banks has implemented a program to further strengthen supervisory capacity and a risk-based supervisory approach and are also working towards enhancing the macroprudential tool kit, stress testing frameworks, and a roadmap for the implementation of Basel II/III and IFRS (with IMF support). The GoDR temporarily expanded social programs in response to the food and fuel price hikes, while maintaining strong spending controls in other areas and proactively reducing debt service costs over the medium-term. The strong post-pandemic recovery was supported by a significant response package, while the upfront fiscal consolidation in 2021 and the unwinding of the temporary COVID-19 measures contributed to the stabilization of the debt-to-GDP ratio. Furthermore, debt-to-GDP is projected to gradually decline over the forecast period. Fiscal consolidation, primarily driven by a reduction in current transfers, is credible under current expectations that commodity prices will ease over time, but face risks. Compensatory adjustments in public investment, could hinder growth in the future. Fiscal consolidation could be reinforced by revenue mobilization, which could help preserve public investment. The authorities have started to work on a Fiscal Compact which included a



tax reform, but the international price shocks of 2022 delayed this discussion until 2024. If the fiscal consolidation proceeds as expected, the authorities will be able to re-build needed fiscal buffers to respond to natural disasters. Efforts to improve the disaster risks financing strategy (supported by the recently approved World Bank CAT-DDO, Project 178122) constitute appropriate mitigation strategies against downside risks.

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

	2019	2020	2021	2022(e)	2023(p)	2024(p)	2025(p)	2026(p)
Financing requirements	3,638	519	9,707	9,910	5,504	10,713	9,776	5,873
Current account deficit	1,188	1,337	2,689	6,217	5,023	4,813	4,782	4,632
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	-5,086	3,662	1,381	-3,301	2,013	553	-3,694
Gross reserve accumulation	1,150	1,963	2,301	1,407	2,119	2,167	2,217	1,918
Financing sources	3,638	519	9,707	9,910	5,104	10,313	9,776	5,873
FDI (net)	3,021	2,560	3,102	3,635	3,702	3,900	4,108	4,327
External debt disbursements public sector (net)	2,138	12,311	-1,841	1,124	1,402	6,413	5,669	1,546
Other capital flows, private (net)	-1,521	-14,352	8,445	5,151	0	0	0	0
Financing gap	0	0	0	0	400	400	0	0
IMF	0	0	0	0	0	0	0	0
World Bank (DPL Series)	0	0	0	0	400	400	0	0
IDB	0	0	0	0	0	0	0	0
To be identified	0	0	0	0	0	0	0	0

Box 2. Fiscal Impacts of the Electricity Reform under Alternative Scenarios

Between 2021 and 2022, the financial losses of the EDEs increased by US\$682 million, or from US\$740 to US\$1422 million. The cost of energy purchased from generators increased driven by the surge in international energy prices. This accounted for US\$916million, representing more than the overall increase in financial losses, as tariff increases limited operational losses. Other factors, including an increase in investment also contributed to a worsening of the overall financial imbalance (by US\$188m). Table 1.1 shows that the EDEs financial results are very volatile and variable depending on external and internal variables.

Table 1.1 EDEs increased in financial losses
(In US\$ MM)

	2021	2022	Change
Operational Losses	740	1,422	682
<i>Of which</i>			
Rev. lost (due to losses)	965	932	(32)
Gross tariff revenue	(2,463)	(2,852)	(389)
Purchases from generators	2,041	2,957	916
Other balance items	196	384	188
Memorandum items			
Losses, % of production	33.1%	32.0%	
US\$ Tariff Sell \$Cents/kWh	14.2	17.7	
US\$ Tariff Buy \$Cents/kWh	10.9	17.1	

Source: World bank staff calculations based on EDEs financial statements.



The electricity reform can potentially yield important fiscal savings. The amount of savings will depend on: 1) external factors (for instance, a reduction in global oil prices results in a reduction in the gap between tariffs and costs), 2) the fulfillment of government obligations (full payment by government agencies and the complete and timely compensation for not allowing the full implementation of tariffs determined by the electricity regulator – Prior Action #8), 3) sector efficiency gains (the pace of technical and commercial loss reduction in turn associated with the effective implementation of a least cost investment program – Prior Actions #2, #4 and #5), 4) the convergence towards cost-reflective statutory tariffs, and 5) the pace at which subsidies are shifted from supply (compensation of distribution companies’ financial losses) to demand (aid to poorest households through the expansion of the BonoLuz program - Prior Action #3), which is an important enabling factor to reduce commercial losses in poorest regions.

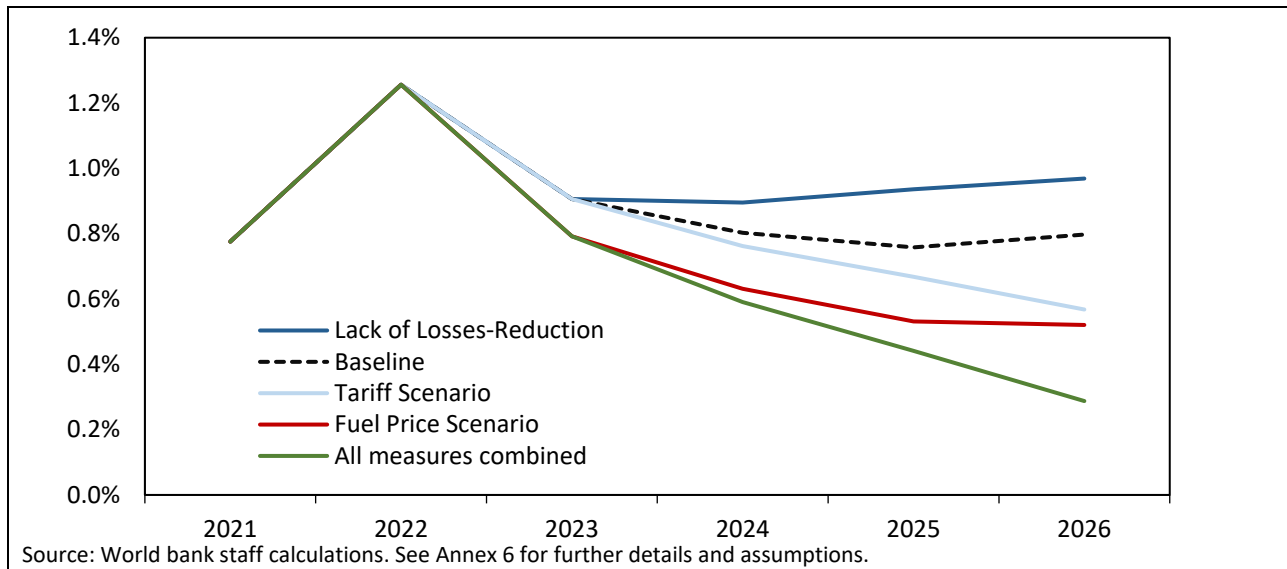
The path for the Bonoluz means-tested program expansion is fiscally neutral (i.e., increases in budget allocation should be funded by reallocating resources from untargeted programs). However, the expansion in this program, estimated at a constant 0.2 percent of GDP, should be expected to contribute to reduce commercial losses in poorest regions/neighborhoods. As the transfers are not made directly to the EDEs, but to the identified poorest households this should rather be interpreted as an increase in compliance by the poor and would then translate into lower commercial losses. To avoid complicating the simulations, the model assumes equal EDE investment ratios under all scenarios.

Staff developed a simplified model to assess the impact of three policy and external factors through which the sector impacts the central government fiscal deficit. These are tariff adjustments, loss reductions, fuel costs (CAPEX subsidies are assumed constant despite the fact these should be linked to loss reduction efforts). Annex 1 explains the assumptions and presents the simplified balance sheet of the EDEs that supports the scenarios, including capital expenditure projections. While the simplified model needs to be further improved through this DPL supervision efforts, five financial scenarios have been prepared:

- **Baseline (incorporated in the macro framework):** Tariffs are held constant in DR’s currency (fall in dollar terms), losses are reduced from 36 percent to 28 percent by 2025 as envisaged in the authorities Electricity Compact. Finally, the average price of the (imported) fuel needed for generation is kept constant at 2022 levels.
- **Lack of loss-reduction:** Including similar assumptions to the Baseline, but losses are kept constant at 36 percent over 2023-26 (this is the no-reform scenario).
- **Fuel-price scenario:** Including similar assumptions to the baseline, but fuel costs fall with the expected reduction in natural gas prices (a proxy for the price of the various fuels utilized in DR’s generation).
- **Tariff scenario:** Including similar assumptions to the baseline but: (1) tariffs are adjusted by a real increase of 5 percent per year after 2023, and (2) losses are kept constant at 36 percent over 2023-26.
- **Combined:** including losses reduction from 36 percent to 28 percent, tariffs are increased as in the “tariff scenario”, and fuel prices fall as in the “full-price scenario”.

As shown on the graph below the required subsidy to EDEs ranges between 0.3 and 1.0 percent of GDP by 2026, depending on the scenario. It is however expected to be lower than during the 2022 peak of 1.3 percent of GDP under all simulations. Loss-reduction as envisioned in the DPL generates savings of around 0.1 percentage points of GDP and would allow for the fiscal space estimated in 0.2 percentage points of GDP for the expansion of the BonoLuz program.

Graph 1.1. EDEs Operational Losses
(As a percentage of GDP)



2.3 IMF RELATIONS

25. **The DR’s most recent International Monetary Fund (IMF) Article IV consultation highlights the resilience of the economy to global shocks, with risks broadly balanced.** On July 5, 2022, the IMF published the Article IV for the DR, which highlights the strong resilience of the economy and acknowledges the prudent fiscal and monetary policies carried out by the GoDR to promote a strong recovery in 2021. The document recognizes that growth would converge to its potential of 5 percent and inflation would return to the target range by next year as the impact of global shocks recedes, in a context of financial stability and a sound external position. Likewise, the IMF commends the GoDR for having responded to the current inflationary pressures with the appropriate temporary measures, while maintaining budget discipline through expenditure control and executing proactive debt-management resulting in reduced financing risks. It noted that further reforms in the electricity sector will help control debt sustainability risks while protecting investment and social spending. Although the DR is not currently part of a standard IMF program, the Fund does provide technical assistance to strengthen the country’s revenue administration, improve fiscal transparency, and adopt prudential regulations in the banking sector.

3. GOVERNMENT PROGRAM

26. **The cornerstones of the DR’s National Development Strategy (NDS) 2030 are 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.** 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 the 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.

27. **The GoDR has committed to reducing GHG emissions by 27 percent by 2030 in the 2020 Nationally Determined Contribution (NDC).**¹⁸ In alignment with its earlier pledge to the Paris Agreement to reduce the country's vulnerability and improve its resilience to climate change impacts, 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 is 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, buildings, and transport. Furthermore, the GoDR has designated the National Council on Climate Change and Clean Development Mechanism to coordinate the implementation of the national climate agenda, as well as the country's achievement of the Sustainable Development Goals, 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.¹⁹ Finally, the GoDR 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 have benefited from extensive TA 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.

28. **In August 2022, the GoDR issued the National Energy Plan (NEP) 2022-2036²⁰ to guide the sustainable and climate-informed short- and medium-term developments of the energy sector.** The NEP serves as a planning instrument to be updated every five years. It defines the scenarios of the sector expansion to enable the country's fast-paced growth, while incentivizing greater renewable energy deployment, reducing reliance on hydrocarbon energy sources over the medium term, promoting private sector participation in generation – all in line with the GoDR's vision and commitment to increase the share of renewable energy from the current 16 percent to 30 percent by 2030. As of July 2022, the National Interconnected Electric System (*Sistema Eléctrico Nacional Interconectado, SENI*) is supplied by 40 percent natural gas, 30 percent coal, 14 percent oil, 6 percent hydropower, 6 percent wind, 3 percent solar, and 1 percent biomass in energy produced. The GoDR is advancing toward fulfilling its renewable commitments. In addition to four solar photovoltaic (PV) plants under operation, 14 RE projects, mostly solar PV, with a total capacity of 700 MW, are under construction and another 15 concessions are under consideration.

29. **The Electricity Pact remains an ambitious and comprehensive reform program with a clear roadmap to address the systemic weaknesses and binding constraints in the energy sector by the end of**

¹⁸See:

[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)

¹⁹ See:

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

²⁰ See: <https://www.cne.gob.do/documentos/plan-energetico-nacional-pen/>



2026 (Box 3). The Electricity Pact was developed through a unique stakeholder engagement process, which provided an innovative approach to building broad-based consensus for the implementation of complex and socially sensitive reforms. Since its signing in February 2021, it has provided the framework for cascading policies and implementing regulations. Working expeditiously, the GoDR has advanced the process of amending the General Electricity Law, and drafted new laws, such as the Energy Efficiency Law.

30. **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. 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 has integrated the need to establish a credible track record of tariff enforcement and competitive procurement of generation as a pre-condition for expanding private investment in the electricity sector.

Box 3. The Electricity Pact

The Electricity Pact was signed on February 25, 2021. Originally drafted in 2017, it is an accord among 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 endorsed 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 the law.

The Electricity Pact contains more than 60 concrete agreements and actions with specific timelines for completion, extending to 2026. These actions are organized around four priorities:

- a. Redefine the roles of government institutions and the private sector in the electricity sector. Key actions under this pillar include: (i) consolidating policy-making responsibilities under MEM; (ii) eliminating CDEEE; (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]
- b. 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 SOEs and disclosure of all regulatory actions. [Chapter 6]
- c. 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 PV, wind, and bioenergy to reduce emissions from the energy sector; (iii) increasing the share of generation from lower-carbon fuels such as natural gas; (iv) enacting an energy efficiency law to provide a legal framework to incentivize energy conservation investments and actions; (v) 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 (vi) conducting strict oversight of the construction and operation of the Punta Catalina coal-fired generation plant to meet environmental requirements. [Chapters 7 and 9]

- d. 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]

31. **Following the dissolution of CDEEE, the GoDR has transferred the responsibilities for management of the electricity distribution companies to the Unified Council for the Distribution Companies (*Consejo Unificado de las Empresas Distribuidoras, CUED*).**²¹ The CDEEE was the coordinating body of all SOEs operating in the energy sector, which created a powerful decision-making body that controlled the flow of funds from distribution all the way to generation. Whereas the dissolution of CDEEE was a positive step to improve transparency, there has been a need to create less decentralized decision making structures for the different parts of the sector, and CUED has taken over the role of managing and coordinating the distribution sector with a mandate to improve governance and address the poor financial situation in the EDEs.

32. **In October 2021, CUED issued an Integrated Plan for Loss Reduction in the EDEs 2022-2028 as part of GoDR's efforts to complement the policy reforms with investment measures.** The Plan identified a financing need of approximately US\$700 million to improve the commercial management of the distribution companies and addressing the high non-technical losses. To implement the first stage of the Plan, the GoDR has requested a loan from the Bank in the amount of US\$225 million to support improvements in governance and operational efficiency of the three EDEs through implementation of loss reduction measures, including the establishment of new smart metering infrastructure and related investments in all three EDEs. The new operation is expected to support the implementation of the governance reform of the EDEs by bringing in international best practices in utility reforms and hands-on support in the implementation of loss reduction measures. The loan will be implemented in parallel to another loan from the IDB in the amount of US\$155 million for distribution network improvement to reduce technical losses.

4. PROPOSED OPERATION

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

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

²¹ CUED was established in August 2020 through Presidential Decree 340-20. It is the highest authority for the EDEs and the Executive Vice President of CUED is also Executive Vice President for each of the EDEs. The Board is nominated by the majority owner, the state holding company, Equity Fund of the Reformed Companies (*Fondo Patrimonial de las Empresas Reformadas, FONPER*).



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

35. **The proposed DPL2 directly supports key components of the GoDR's NDS 2030, including in the development, climate, and gender agendas.** *First*, the DPL supports the implementation of the NDS 2030, supporting reforms on the actions envisaged. Better performance of the distribution companies will help improve the reliability of electricity supply and reduce losses, thereby bringing in additional revenues into the sector and enabling new mitigation and adaptation investments in power infrastructure. Good design and implementation of a reformed subsidy program will ensure better targeting and incentivize electricity bill payment and energy saving behaviors among consumers. *Second*, the DPL strengthens the GoDR's climate strategy and supports the achievement of its national climate policies as embodied in the NDCs 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 supporting a reform program that is expected to result in an additional 500 MW of power generation from renewable energy sources to be contracted at competitive prices, which represents approximately 10 percent of the existing installed capacity. *Third*, the reforms supported by the DPL are expected to lead to inclusion of female-headed households in the priority list for the *Bonoluz*²² transfer, and eventually lead to targeted actions to improve gender equality, contributing to the GoDR's commitment in this area.

²² *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.



36. **The health, economic, and food and energy price crises that unfolded in 2022 prompted the GoDR to adjust the pace of some of the reforms of the Electricity Pact, while amplifying efforts to protect the poor.** The multiple crises including Russia’s invasion of Ukraine resulted in high and volatile energy prices, with the country facing high inflation and food prices increasing by 8.6 percent year-on-year in September 2022. The combined effect of high fuel prices and domestic inflation led to widespread popular protests, social unrest, and political instability in other countries in the region and threatened the same in the DR. The crises highlighted the need to sequence the reform measures in a way that minimizes their impacts on the most vulnerable. Accordingly, this resulted in the GoDR adjusting the pace of some reforms under the Electricity Pact. The main changes are related to electricity tariff convergence to cost recovery, which has been paused, and to focusing on private sector participation in power distribution as the mechanism to improve the EDEs governance and performance. These two policy measures were reflected in two Indicative Triggers (IT) in the DPL1 matrix, namely:

- **IT #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.”; and*
- **IT #7:** *“The SIE²³ 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.”*

37. **Improving EDEs governance and performance through private sector participation (IT #2): The GoDR has adjusted its initial strategy of entering a concession regime that would have required substantial private investment in the short term.** The key objective for the GoDR is the improved governance, performance, and financial sustainability of the EDEs. As outlined in the first operation in this series, the GoDR aimed to achieve this objective by introducing private sector participation through a concession regime, which would have required substantial private investment in the short term. However, in the short to medium term, a Private Public Partnership (PPP) modality would not be feasible due to the existing poor governance and operational performance of the EDEs, as well as the pause in tariff increases, which will make it difficult to attract experienced private sector partners.

38. **The GoDR has now adopted a two-pronged approach to private participation in the distribution segment.** The new approach was informed by several factors: (i) market sounding among potential bidders showed limited interest due to the present poor governance and operational performance combined with the legacy of the unsuccessful privatizations in the 2000s; (ii) the global energy and inflation crises have further reduced the willingness for overseas ventures among high-quality international players with the requisite experience to commit to a multi-year concession arrangement in electricity distribution in a higher risk environment; (iii) the consistent enforcement of the agreed gradual tariff adjustments was critical to demonstrate a track record of regulatory consistency, which has now been affected by the suspension of the gradual increases; and (iv) the present political situation is not deemed conducive to large privatizations. Based on the experience from successful turnarounds of state-owned distribution companies in other regions, the GoDR has shifted its strategy to a two-pronged approach. In the short term, the GoDR will take policy actions to improve the governance, transparency, and efficiency of the distribution companies, while

²³ Superintendence of Electricity



preparing a public investment program aimed at reducing losses and improving commercial operations. At the same time, the GoDR is introducing a performance-based approach in the outsourcing specific commercial activities of the EDEs. The intent is that such measures will allow for attracting relevant private partners through, for example, a concession arrangement in the medium term.

39. **Gradual tariff increases (IT #7): In response to the rapidly rising energy prices, the GoDR has taken decisive actions to mitigate the impacts on the poor and vulnerable by suspending the planned gradual electricity tariff increases, while continuing to compensate the EDEs for the revenue shortfall.** The GoDR had started implementing a plan to improve the sector financial viability through regular electricity tariff increases over a period of 21 quarters to reach cost-recovery levels by December 2026.²⁴ However, Russia's invasion of Ukraine has led to significant increases and volatility in global prices of natural gas, oil, and coal, which are the main fuel sources for electricity generation and therefore impact on the cost structure of electricity prices in the DR. The combined effect of high fuel prices and domestic inflation led to widespread popular protests, social unrest, and political instability. Consequently, on July 19, 2022, the President of the Republic suspended the automatic tariff adjustments for electricity as a temporary measure to protect households and businesses. Concurrently, fiscal spending for social programs, including *Bonoluz* and *Bonogás* for electricity subsidy for the poorest families was expanded.²⁵ In addition, the GoDR is committed to continuing to support the financial sustainability of the sector by compensating the EDEs for the revenue shortfall arising from non-cost reflective tariffs, according to a clearly established reference technical tariff regime methodology. The GoDR remains committed to achieving the convergence of the electricity tariffs to cost recovery levels in the medium term, as per the commitments of the Electricity Pact. The fiscal impact of slower convergence of tariff will be offset by policy actions supported by this DPL to improve governance and economic efficiency of the sector through reduction of distribution losses, promotion of least-cost power generation and improvement of end-use energy efficiency.²⁶

40. **Reforms will be supported and sustained through investment lending operations under preparation.** The implementation of the governance reform of the electricity distribution companies, the reform of the *Bonoluz* program, and the tariff reform will be supported by two planned investment lending operations. The Distribution Efficiency Improvement and Utility Strengthening Project (P180512) is expected to support the implementation of the governance reform in the EDEs by financing software and hardware for data collection and business management systems. Synergies are also expected with the proposed Integrated Social Protection Inclusion and Resilience Project (INSPIRE, P179440), which aims to increase the efficiency of integrated social protection services and to promote economic inclusion and access to shock-responsive assistance, including climate shocks, for the poor and extreme poor, and in case of an eligible crisis or emergency, respond promptly and effectively to it. The INSPIRE Project will be able to support implementation of *Bonoluz* expansion and streamlining with the loss reduction activities of the EDEs, including improvements to the coverage, targeting and adequacy of the *Bonoluz* program. Because the plan is for *Bonoluz* to cover close to 50 percent of all households (one quarter of which would be non-poor, although likely vulnerable), the Inspire Project is expected to incorporate support to: (i) evaluation of the

²⁴ The first increase took effect in November 2021 and the path to cost-recovery was defined by SIE based on a preliminary estimation of a reference tariff reflecting full cost recovery. This DPL includes an accurate estimation of the reference "technical tariff".

²⁵ The GoDR remains committed to convergence of the electricity tariffs to cost recovery levels, and the gradual tariff increases introduced under DPL1 are expected to resume when inflation has been reduced and the socio-economic conditions allow.

²⁶ A full explanation of the evolution of the indicative triggers for DPL2 in DPL1 to the prior actions in DPL2 is provided in Annex 7.



efficiency of covering non-poor households with the *Bonoluz* program; (ii) understanding which eligibility criteria would guide the selection of non-poor households; and (iii) assessment of the capacity building needed to run this program at whatever scale is ultimately decided.

41. **The conceptualization of this DPL series has been underpinned by extensive analytical work, advisory services, and ongoing investments.** *First*, policy reforms under Pillars 1 and 3 have been informed by various WB Public Expenditure Review (PER) reports (P164680 and P173163), 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, and reforming the system for making budgetary transfers to the EDEs.²⁷ In addition, a 2020 WB diagnostic report on *Maximizing Private Finance to Bridge Infrastructure in Electricity and Water Sectors*²⁸ 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. Moreover, actions under Pillar 2 build on a recently completed WB engagement with the National Council for Climate Change and Clean Development Mechanism and the MEM under the *Decarbonization Pathways for the Dominican Republic: Assessment and Development of the Current NDC Advisory Services and Analytics* (P173083). Extensive TA on key issues such as electricity tariffs, loss reduction plan, and performance improvement plans for the EDEs was also financed by the WB-supported Distribution Grid Modernization and Loss Reduction Project (P147277) that closed on November 30, 2022.²⁹

42. **The implementation of several WB-financed operations has been reflected in the design of this series of operations**, namely the Support to the National Education Pact Project (P146831), the Distribution Grid Modernization and Loss Reduction Project (P147277), and the Disaster Risk Management Catastrophic – Deferred Drawdown Operation (CAT-DDO) DPLs (P159351 and P178122). Experiences from these operations 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 this DPL series, 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.

43. **The preparation of this proposed DPL2 has also reflected lessons learned and necessary adjustments to the reform as a result of the recent crises, as well as additional analytical work in the past year.** This includes the WB's *Country Economic Memorandum for the Dominican Republic* (P176709) and WB-

²⁷ World Bank (2019): Dominican Republic Public Expenditure Review, 2012-18; World Bank (2021): Dominican Republic Public Expenditure Review.

²⁸ World Bank (2020): Maximizing Private Finance to Bridge the Infrastructure Service Gap in Electricity and Water Supply and Sanitation in the Dominican Republic.

²⁹ 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.



supported *Roadmap to Sustainable Cooling in Support of the Implementation of NDC* (P173083), as well as various technical reports by MEM (such as the *Proposed Reform to the Legislation and Regulation of the Electricity Sector in the Dominican Republic* report, and WB-supported development of a national strategy for energy efficiency (P178163)), by the Superintendence of Electricity (*Superintendencia de Electricidad*, SIE) (reports related to self-generation from small-scaled renewable energy, charging infrastructure for electric vehicles, construction units for the distribution systems), and by CUED (the *Integrated Plan for Loss Reduction 2022-2028*).

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

Pillar 1: Strengthening sector governance

44. **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, which would enable the implementation of a reform program to achieve a socially, environmentally, and financially viable electricity sector.

Prior Action #1. *The Borrower, in order to increase the transparency and improve the performance and efficiency of electricity sector entities, has (i) adopted measures to separate the policymaking, planning, and regulatory functions of governmental institutions in the energy sector, including and especially for the planning and integration of renewable energy; and (ii) established a process for the systematic use of indicative least-cost electricity generation planning to increase renewable energy deployment and reduce carbon emissions; as evidenced, respectively, by: (a) Government submission No. 30406, dated December 12, 2022, of the Harmonized Electric Sector Law proposal for the National Assembly to amend the General Electricity Law; and (b) Resolution R-MEM-ADM-031-2022, dated October 3, 2022, issued by the MEM.*

45. **Rationale.** Since the signing of the Electricity Pact, substantive progress has been achieved on the implementation of the overall reform program in the electricity sector. First, the Presidential Decree No. 498-20 dated September 23, 2020, established the Electricity Sector Cabinet (*Gabinete Eléctrico*), which is composed of minister-level members headed by the Vice President of the country, and meets on a weekly basis to decide and coordinate the implementation of the reform agenda. Second, the Regulatory Decree of the Electricity Pact (Presidential Decree No. 655-21 dated October 15, 2021) assigned institutional responsibilities, defined clear actions with time-bound targets, and mandated that adequate financial resources are made available to reach those targets. Nevertheless, the following key issues remained to be addressed: (i) the fragmented and often overlapping roles in planning for and procurement of renewable energy between MEM and the National Energy Commission (*Comisión Nacional de Energía*, CNE); (ii) the complex and non-transparent arrangements for the allocation and transfer of risks from natural disasters and climate change; and (iii) the regulatory arrangements for electricity cooperatives (hitherto the responsibility of CNE). It was envisaged that these regulatory changes would require a new law.

46. Meanwhile, the GoDR issued in December 2020 an updated NDC,³⁰ which pledged to reduce GHG

³⁰See:



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 the country in 2019³¹) and transitioning to a lower carbon electricity mix is critical to meet the country's climate change commitments. The 2020 NDC 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 switching to lower-carbon fuels, improving energy efficiency, and reducing fuel consumption from road transportation. MEM issued a Resolution in November 2021 that sets a commitment to reach 25 percent of renewable energy penetration in the electricity mix by 2025 and 30 percent 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 meaningfully incorporate these RE integration and CO₂ emission targets, it is necessary to define a sound approach and process for regular least-cost generation expansion planning, the lack of which has been a major constraint for the achievement of key sector objectives around environmental sustainability and affordability. Regional experience shows that RE sources such as solar and wind are likely to be selected as least-cost generation sources for system expansion if proper measures are taken to: (i) ensure competitive pricing, and (ii) build in system flexibility through smart grid solutions and energy storage.

47. **Substance of the Prior Action.** To address the issues mentioned above, the Government undertook two key actions. First, submitted to Congress a proposal to amend the General Energy Law entitled "The Harmonized Law of the Electricity Sector", which will formally designate MEM as the overarching governing body for the sector's policy, planning and procurement regulations, integrate CNE into MEM to centralize and strengthen the planning functions, while transferring the responsibility for the regulation of electricity cooperatives from CNE to SIE. This will bring significantly greater clarity and transparency to the roles and functioning of key sector entities, and in particular streamline the oversight and accountability over the planning for and procurement of renewable energy, thereby helping to facilitate greater RE integration – a key goal of the Electricity Pact.

48. Second, the Resolution of MEM to institutionalize least-cost planning provides a mechanism for assessing the impact of policy choices, such as the introduction of renewable energy, energy efficiency, GHG emission limits, fuel diversification, and decarbonization of transport on the energy demand and system requirement. The Resolution provides for the establishment of a planning commission formed by MEM and CNE representatives, which will facilitate the preparation of a 15-year least cost expansion plan, as well as medium-term plans that will be fully updated every five years through extensive consultations with key stakeholders, whereas partial updates can be done more frequently as needed. More importantly, it institutionalizes the elaboration of scenarios, methodologies, and models for estimating electricity demand; identification of specific renewable energy projects, funding sources, and implementation framework (public, private, or PPPs); and monitoring of their successful completion towards meeting renewable energy, GHG emissions reduction, and fuel diversification objectives. The least-cost plans will facilitate the development

[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)

³¹ Economic Commission for Latin America (ECLAC), 2020. Energy transition of the Dominican Republic. How do the decarbonization strategies of the electricity sector accelerate the participation of the private sector in the NDC of determined contribution at the national level?



of a pipeline of energy projects, especially RE, with key information that will help attract financing, including from the private sector, creating a path for reducing the carbon intensity of the power sector and meeting the demand for decarbonization in the transport sector and beyond. This PA aligns with Pillar 4 – Strengthening Policies, Institutions and Investments for Rebuilding Better (climate-smart policies and incentives, and green and sustainable growth) of the GCRF.

49. **Expected Results.** The Harmonized Law of the Electricity Sector will serve to establish a transparent and effective governance framework for policy, planning, procurement, and regulation of the electricity sector, with responsibilities clearly assigned to the MEM and the SIE. This is expected to foster transparent centralized planning, more coherent policies, and more transparent balancing of competing priorities, including the ability to manage competitive procurement for renewable energy, to prioritize investments that will enhance the resilience of key electricity infrastructure to climate change, and to contribute to the implementation of the NDS 2030.

50. The implementation of the Resolution on least-cost generation planning is expected to inform the choices and priorities in the implementation of mitigation measures in the energy sector and in investments for future electricity generation technologies, with a focus on the more affordable, secure, and resilient renewable energy sources. It will also support the strengthening of the policymaking and planning functions assigned to MEM under the Electricity Pact. The World Bank plans to provide TA to support preparation of the plan as well as advisory support regarding its implementation (e.g., through design of auctions for renewables). The resulting 15-year plan, to be completed by the end of 2023, is expected to enable 500 MW of new privately financed renewable energy capacity to be contracted competitively by the distribution companies by 2024.

Prior Action #2. *The Borrower, in order to enhance the governance, efficiency and transparency of electricity distribution, has (i) derogated the legislation that created the state-owned CDEEE (Corporación Dominicana de Empresas Eléctricas Estatales); and, through the CUED (Consejo Unificado de las Empresas Distribuidoras), (ii) adopted industry best practices for the management of state-owned enterprises, strengthened the CUED supervision and oversight role over the Distribution Companies' operations, and proposed performance improvement targets for Distribution Companies for 2023 through 2026; as evidenced, respectively, by: (a) Law No. 365-22, dated November 29, 2022, and duly published in the Borrower's Official Gazette No. 11.090, dated December 9, 2022; and (b) Resolution No. 1, dated February 10, 2023.*

51. **Rationale.** CDEEE was identified as a major source of concerns over poor governance and lack of financial viability in the distribution segment. Its dissolution by law is critical to establishing the foundations for a more transparent and efficient sector. The Presidential Decree No. 342-20 dated August 16, 2020, was issued to mandate the transfer of the policymaking functions to the MEM and put in place a special commission to liquidate the vertically integrated CDEEE. An amendment to the General Electricity Law is required to derogate the articles that created and established the functions of CDEEE.

52. Meanwhile, despite several attempts to improve the poor operational and financial performance of the EDEs, electricity distribution continues to suffer from low reliability of electricity services, limited resilience to climate events due to under-investments, high distribution losses (unmetered electricity, unbilled electricity, power theft, and technical losses), and poor governance. The EDEs have not issued audited financial statements for 2021 and 2022 and management has been unable to address the causes



underpinning poor financial performance. These include a politicized process for appointments to management positions and political interference in operation decisions regarding payment enforcement and loss prevention. The GoDR continues to pursue a long-term objective of introducing private sector participation as an efficient means to improve the operational performance and sustainability of the distribution sector. However, in the short to medium term, such Private Public Partnership (PPP) modality would not be feasible due to the existing poor governance and operational performance, as well as the pause in tariff increases, which will make it difficult to attract experienced private sector partners. Therefore, the GoDR is now pursuing a two-step strategy starting with the adoption of a governance reform to ensure good performance of state-owned companies to be followed by a second step that will include PPP arrangements with private partners.

53. **Substance of the Prior Action.** The GoDR has undertaken two key actions to bring transparency and improve the efficiency of power distribution. First, the GoDR has amended the General Electricity Law to derogate the articles that created and established the functions and financing of the CDEEE.³² This eliminates an entity that has *de facto* created policies, while operating within an environment of weak government oversight, and lack of transparency. Second, CUED, an entity that has been created by Presidential Decree with a mandate to take over the role of coordinating the management of the distribution companies (See Section 3), has issued a resolution³³ to reform the governance and improve the performance of the EDEs by adopting the Organization for Economic Cooperation and Development (OECD) governance guidelines for SOEs.³⁴ It includes a set of time-bound reforms, regarding: (i) the governance structure of the EDEs, assigning oversight and monitoring role to CUED; (ii) the transparent and competitive process and requirements for appointing top management positions in the EDEs (by the third quarter of 2023); (iii) the restructuring of the EDEs by introducing a matrix structure to enhance efficiency and transparency; (iv) the introduction of processes to ensure effective monitoring and follow-up on the progress toward predefined Key Performance Indicator (KPI) targets, including distribution losses, initially for the years 2023 and 2024, to be renewed on a rolling basis; (v) gradual introduction of a performance-based approach in the outsourcing of specific commercial activities of the EDEs; and (vi) improved transparency measures including periodical publication of KPIs, and commitment to produce annual audited financial statements for each of the EDEs. This PA aligns with Pillar 4 – Strengthening Policies, Institutions and Investments for Rebuilding Better (institutional strengthening and capacity building) of the GCRF.

54. **Expected Results.** The governance reforms set out by CUED will introduce merit-based appointment to key senior management positions in the EDEs (directors and managers), ensuring a high level of qualifications and professionalism and minimizing politicization of the management of the EDEs, and therefore improving overall governance. The adoption of KPIs, internal benchmarking, and establishment of data collection systems allowing the EDEs to monitor progress effectively, is expected to improve the efficiency and quality of the commercial and distribution services, reduce losses and GHG emissions, and improve resilience through increased focus on accountability and transparency of the technical performance and financial sustainability of the EDEs. Improvements in the current models for outsourcing of technical and

³² Article 138 of Law 125-01 is derogated, with the exception of Paragraph I by which the Executive Branch is instructed to create the Dominican Electric Transmission Company (*Empresa de Transmisión Eléctrica Dominicana*, ETED) and the Dominican Hydroelectric Generation Company (*Empresa de Generación Hidroeléctrica Dominicana*, EGEHID).

³³ The resolution has the force of a mandate from the owner of the EDEs, which is the Equity Fund of the Reformed Companies (*Fondo Patrimonial de las Empresas Reformadas*, FONPER) acting on behalf of the GoDR.

³⁴ See: <https://www.oecd.org/corporate/guidelines-corporate-governance-soes.htm>



commercial activities, including loss reduction measures, will allow remuneration based on the performance as measured through main indicators (e.g., reliability, energy losses, and collection percentage). A WB lending operation under preparation includes measures to strengthen the CUED's ability to monitor the performance of the sector. In addition, the proposed lending operation would continue to support the implementation of the EDE governance and performance improvement reform through a dedicated TA component.

55. It is expected that by the end of 2024, all three EDEs will have signed performance agreements with CUED, including a publicly disclosed list of KPIs, and published annual audited financial statements for calendar years 2021 to 2023. Furthermore, all three EDEs are expected to have data collection systems in place, allowing them to effectively monitor progress on KPIs, and to have all key management positions filled following competitive procurement using meritocratic criteria.

Pillar 2: Enhancing climate mitigation and social and environmental sustainability

56. **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.** Measures under this pillar support the decarbonization of the economy by incentivizing programs 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.

Prior Action #3. *The Borrower, through the Presidency, has mitigated the impact of the energy price increases on vulnerable consumers, including female-headed households, as evidenced by: (i) Supérate Program Administrative Resolution No. 003-2022, dated April 12, 2022, and published on the Supérate Program website, which expanded the number of beneficiaries of the Aliméntate and Bonogás subsidies; and (ii) Supérate Program Administrative Resolution No. 007-2022, dated August 15, 2022, and published on the Supérate Program website, which improved the targeting and coverage of the Bonoluz subsidy.*

57. **Rationale.** In response to the severe impact on the population of the skyrocketing prices on essential food items and gas, which is widely used for cooking, the GoDR realized that the existing eligibility criteria for receiving the targeted cash subsidies under the *Bonogás* and *Aliméntate* programs were too narrow and that there was an urgent need to expand access to these programs. The support provided under these programs had largely not changed since 2008 and the recent multi-fold shocks had pushed more households into vulnerable conditions.

58. Up to now, the targeting and coverage of the *Bonoluz* electricity subsidy program has been suboptimal. First, 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. As a result, only around 48 percent of current *Bonoluz* beneficiaries are extreme poor or poor households as measured by the Life Quality Index (*Índice de Calidad de Vida*, ICV) of the Unified System of Beneficiary Identification



(*Sistema Único de Beneficiarios, SIUBEN*)³⁵, that is, ICV1 and ICV2, respectively.³⁶ Second, only 26 percent of the total number of poor and extremely poor households are beneficiaries of the program and the coverage of poor households is inadequate to ensure affordability of basic electricity services.

59. Meanwhile, the GoDR implemented in June 2021 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. It uses the targeting system based on beneficiaries registered in SIUBEN, which classifies households based on a means-tested ICV³⁷, ensuring adequate targeting and coverage of beneficiaries. Article 5(d)(ii) of Presidential Decree No. 377-21, dated June 14, 2021 laid out the framework for integrating *Bonoluz* subsidy program into the national social protection program *Supérate*. Accordingly, there is a need to update the targeting and coverage of the *Bonoluz* subsidy in line with *Supérate*, where the criteria would be based on the ICV categorization of multidimensional poverty index instead of consumption level. Meanwhile, the program is expected to be reformed in a way that would also help address the incentive to enhance payment discipline among the most vulnerable consumers, thereby improving collection rates as legal connections are established for new beneficiaries that sign contracts, and contributing to the financial self-sustainability of the EDEs.

60. Furthermore, households consisting of a single female with children represent 6.5 percent of the total households, but they represent 13 percent of poor households, highlighting their economically vulnerable position.³⁸ *Bonoluz* did not have a clear requirement for including female-headed households, which would allow for the program to implement targeted actions to ensure the inclusion of eligible female-headed households, such as widows and single mothers, to also be included in the priority list for the *Bonoluz* transfer, missing the opportunity to take targeted actions to improve gender equality.

61. **Substance of the Prior Action.** The Government has taken steps to lay out the improvements in the targeting of the program to support improvements in the payment discipline by households and to mitigate the anticipated impact of the future removal of end-user tariff subsidies. The redesigned *Bonoluz* subsidy will consist of a monetary transfer corresponding to the monthly energy consumption of 100 kWh for eligible households. The eligibility criteria include households that have been identified, censused, and categorized by SIUBEN as ICV1 and ICV2 in line with the *Supérate* program, receive the *Alimentate* subsidy, have been paying clients of one of the EDEs with a residential electricity tariff category (*Baja tensión simple 1, BTS-1*), and are current with their electricity bills. Notably, the eligibility criteria also include vulnerable households in ICV3, such as female-headed households. Targeting has been improved by identifying beneficiaries based on their poverty and vulnerability status, including eligible female-headed households, as opposed to the current practice of providing subsidies to consumers based solely on the level of their electricity consumption.

³⁵ 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.

³⁶ Based on WB analysis in Annex 5 of the Program Document for DPL1:

See: <https://documents1.worldbank.org/curated/en/202841649092948080/pdf/Dominican-Republic-Electricity-Reform-for-Sustainable-Growth-Development-Policy-Financing.pdf>

³⁷ 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.

³⁸ World Bank Dominican Republic Gender Assessment October 2022.



62. The reform is aligned with international best practice which indicates that electricity consumption is not always a good indication of poverty or vulnerability. Under the new targeting criteria, the *Bonoluz* program will prioritize households that are in the extreme poor (ICV1) and poor (ICV2) categories. Female-headed households in ICV3 are also considered vulnerable groups and have been included as additional priority beneficiaries to receive the *Bonoluz* subsidy by *Supérate*. The beneficiaries' payment of their electricity monthly bills is also a new requirement to remain in the program. A cross-sectoral group including *Supérate*, SIUBEN, SIE, and the EDEs has been working to coordinate the implementation of this reform. Finally, the payment mechanisms for *Bonoluz* will be reviewed to ensure that payments are received by the EDEs in a timely manner and that the payment culture is improved. An operational guideline is being prepared to document all the procedures related to the reformed *Bonoluz* to ensure its sustainable implementation across governments, including guidelines for inclusion of female-led households. 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.

63. *Supérate* also issued in April 2022 the Resolution 003-2022, which has aimed to expand access to *Aliméntate* for additional 300,000 beneficiaries and access to *Bonogás* for an additional 400,000 beneficiaries. The extension of benefits of these programs will be carried out in line with *Supérate's* overall updated focalization of beneficiaries based on the multi-dimensional poverty index (ICVs), as opposed to the previously utilized income-based criteria. This PA aligns with Pillar 3 - Strengthening Resilience (adaptive social protection systems) of the GCRF.

64. **Expected Results.** The successful implementation of the reformed *Bonoluz* would enable increased coverage of targeted groups and would rely on *Supérate's* strong system of local offices, which regularly liaise with the local communities in need. The reform is also expected to improve the payment culture through promotion and educational activities carried out by *Supérate's* field promoters. The reform is expected to become the main tool to mitigate the impact of future planned electricity tariff increases and an important instrument to strengthen payment discipline and support the reduction of electricity theft. The Government estimated that from the current 330,000 active beneficiaries, some of whom will no longer be eligible based on the new targeting criteria, there are about 900,000 households classified as extreme poor or poor that would be eligible to receive the *Bonoluz* support. The number of female-led households with access to *Bonoluz* will increase from 231,000 to 549,000. The reform of *Bonoluz* is not expected to add to the fiscal burden because of the narrowing of the criteria, which will exclude beneficiaries that are no longer eligible and because the subsidy will be directly linked to the payment for electricity which will cause the beneficiaries to regularize their connections and start paying, thereby reducing the need for the GoDR to cover the operational losses in the EDEs³⁹. The expected result of the *Supérate* resolution is an expansion of 400,000 beneficiaries for *Bonogás* and an expansion of 300,000 beneficiaries for *Aliméntate*.

Prior Action #4. *The Borrower has updated the legal framework to enable the development of low-cost renewable energy generation by: (i) mandating the competitive procurement of renewable energy projects; and (ii) incentivizing the implementation of renewable energy in hybrid-systems, auto-generation systems,*

³⁹ Experience from the Distribution Grid Modernization and Loss Reduction Project (P147277) has shown indicates that 100 kWh per month will be enough to cover most basic services for an average household in the areas where the non-technical losses are concentrated.



and community-based generation systems; as evidenced by Presidential Decree No. 65-23 dated February 20, 2023, duly published on the Borrower's Official Gazette No. 11101 dated February 28, 2023.

65. **Rationale.** The updated 2020 NDC identified increased use of renewable energy resources as a key climate change mitigation measure. The country's abundant renewable energy resources such as solar PV, wind energy, and bioenergy have not been fully exploited. By the end of 2020, installed capacity of large-scale solar PV and wind plants reached 590 MW, and concessions were awarded by the CNE for the development of an additional 1,000 MW of solar, wind, waste, and biomass generation. Government policy is to develop renewable energy through private sector investments. 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 constraints to private sector solutions. Until recently, power purchase agreements (PPAs) with renewable energy generators were negotiated directly between generators and CDEEE without competitive procedures, which has also kept renewable energy costs relatively high compared to prices obtained in competitive auctions in the region.⁴⁰

66. The Presidential Decree No. 608-21, issued in September 2021, removed CDEEE from the power purchase contracting process and enabled 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. The Decree also included preferential purchase and preferential dispatch of electricity generated from renewable energy resources, reference prices as ceiling prices in the PPAs to lower the cost of renewable energy. Finally, the Decree mandated 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 for all sizes of renewable energy plants including community systems and small-scale solar facilities for self-consumption as well as export to the grid (so-called *prosumers*), and establishing competitive procurement processes, which are critical to attracting experienced developers and achieving affordable prices in a transparent manner. The procurement functions for renewable energy used to be under CDEEE and are now the responsibility of CUED acting as the administrator of the distribution companies. This arrangement will be formalized in the Harmonized Law for the Electricity Sector, which is being discussed in Congress (see PA 1).

67. **Substance of the Prior Action.** A Presidential Decree has updated the legal framework for development of renewable energy investments by private developers, including mandating the use of competitive procurement practices, thereby supporting one of the main climate mitigation measures in the country's NDC and related policy commitments. The Decree lays out a clear process for procuring a range of renewable energy sources as well as technologies that support their integration in the electricity system, such as battery storage. Competitive procurement will allow the DR to tap into its considerable variable renewable energy resources, which due to the lower deployment costs are likely to become the least-cost generation option, even compared with coal.⁴¹ In addition, the Decree supports the establishment of small- and medium-scale distributed generation as well as hybrid and community-based RE systems. The support includes access to concessional financing, right to grid injection, right of priority dispatch, and dispensation

⁴⁰ In Brazil and 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 in both countries.

⁴¹ 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>



from charges related to frequency stabilization and reactive power compensation. This PA aligns with Pillar 3 - Strengthening Resilience (climate resilience) of the GCRF.

68. **Expected Results.** New energy capacity will need to be added to the DR power grid in the near future to keep pace with the rapidly growing demand. Options will first be identified through a least-cost generation planning approach (see PA 1), which will consider the country's decarbonization targets as defined in the NDC. This process is expected to lead to identification of a range of potential RE projects that will be least-cost generation expansion options for the DR provided they can be contracted using an approach that will bring RE generation purchasing prices closer to those achieved in locations with similar resource potential as the DR. Unlike previous practice where such capacity additions from RE sources happened through directly negotiated deals with little transparency, Decree 65-23 will mandate large-scale RE generation to be competitively procured, which is expected to considerably lower the cost of wind and solar energy, effectively making them the least-cost energy source for generation expansion. MEM estimates that the combination of PA1 and PA4 can be expected to enable 500 MW of new privately financed renewable energy capacity to be contracted competitively by the distribution companies by 2025.

69. The improved framework for distributed generation will support the expansion of both medium-scale community-owned RE projects as well as privately owned small-scale installations (for instance rooftop solar) through access to concessional financing, right to grid injection and priority dispatch, and dispensation from charges related to frequency stabilization and reactive power compensation. When implemented in combination with PA 8, which will change the grid code to facilitate the integration of distributed generation, this policy measure is expected to allow a scaling up of distributed renewable energy from a baseline of 250 MW in 2022 to a target of 400 MW in 2024, thereby reducing technical losses in distribution systems and delivering positive environmental impacts.

Prior Action #5. *The Borrower, through the Superintendencia de Electricidad, has facilitated the decarbonization of the transport sector by adopting regulations for the development and operation of electric vehicle charging stations ("Charging Stations"), as evidenced by: (i) Resolution on Charging Stations' technical standards No. SIE-137-2022-REG, dated December 19, 2022; and (ii) Resolution on tariffs applicable to Charging Stations No. SIE-138-2022-REG, dated December 19, 2022.*

70. **Rationale.** Petroleum products (which are mainly used for transportation) account for approximately 60 percent of annual total GHG emissions in the DR. The transition to electric mobility is a global trend of the industry requiring adoption of policy and regulatory measures to prepare for a future market in which electric vehicles (e-vehicles) are expected to become dominant. According to the National Energy Plan 2022-2036⁴² estimations, the number of imported e-vehicles grew from 250 in 1998 to nearly 2,000 in 2020. The growth was enabled by preferential financing rates, as well as by the short distance from the country's capital to any potential point of interest (~300 km), which is conducive to e-vehicles adoption. However, the limited number of available charging stations continues to be one of the main concerns of users and bottleneck to further uptake, and the lack of technical standards, (mostly related to standards for charging connectors ensuring general applicability and safety requirements) and charging tariff have been hindering its expansion. The National Institute of Traffic and Land Transportation (*Instituto Nacional de Tránsito y Transporte Terrestre*, INTRANT) published the Action Plan for Electric Mobility in 2020, outlining 27 lines of actions. Of

⁴² See: <https://www.cne.gob.do/plan-energetico-nacional-pen/>



these, the establishment of tariffs for charging of electric vehicles is of high priority, as this will remove a major obstacle for the establishment of private sector-owned charging stations, allowing to recover investments in charging infrastructure.

71. Regulation of charging stations is important because it will open the e-mobility market and provide fair and transparent competition between car brands. The effectiveness of focusing government support on charging infrastructure has been demonstrated in recent international studies showing that public investment in charging infrastructure is more than 5 times more effective than direct subsidies towards vehicle purchases⁴³ to abate the same amount of CO₂ emission. Even though a part of electricity is generated from fossil fuels, evidence from international experience⁴⁴ (e.g., Poland or Kazakhstan) show that even in cases where the electric grid is not fully decarbonized, electric vehicles are more efficient and cause less GHG emissions than Internal Combustion Engine cars. It should also be considered that incremental generation caused by an expansion of electricity demand from e-mobility is likely to be covered from RE sources as a consequence of PA1 and PA4.

72. **Substance of the Prior Action.** This regulation establishes the tariff setting principles, pricing formulas, and application conditions for private owners of charging systems for electric vehicles.⁴⁵ The tariff is composed of a fixed monthly charge and a charge for energy in hourly blocks corresponding to peak hours (between 07:00 PM and 12:00 AM) and off-peak hours (between 12:01 AM and 6:59 PM). The tariff reflects the cost to the system and does not constitute a subsidy. The regulation also establishes an obligation for the electricity distribution companies to supply adequate power to privately owned charging systems considering the capacity needed to supply the new maximum demand and the cost of installing meters. This PA aligns with Pillar 4 - Strengthening Policies, Institutions and Investments for Rebuilding Better (climate-smart policies and incentives, and green and sustainable growth) of the GCRF.

73. **Expected Results.** The strengthening of regulatory framework for the development of technical standards and tariff methodology for charging stations will provide an adequate environment for the recovery of investments and operational costs by private sector investors. This is expected to drive the implementation of projects, programs, and replacement plans for public institutions and public transport, while incentivizing the uptake of electric passenger cars, thus promoting a significant expansion of charging infrastructure throughout the country through private sector investments in charging stations and other infrastructure necessary for the expansion of electric mobility and contributing to the reduction of the country's GHG emissions, in line with its international commitments. This policy will be monitored by the number of public charging stations installed nationwide, which is expected to grow from 350 by December 2022 to 500 by December 2024.

Prior Action #6. *The Borrower has incentivized energy efficiency in the public sector by requiring energy-efficient technologies, consumption habits, and alternatives to fossil fuels in the executive branch, including autonomous and decentralized entities, as evidenced by Presidential Decree No. 158-23 dated April 13, 2023, and duly published in the Borrower's Official Gazette No. 11105, dated April 14, 2023.*

⁴³ World Bank (2022). Economics of Electric Vehicles for Passenger Transportation. See:

<https://documents1.worldbank.org/curated/en/099330011042228036/pdf/P172382084bde40090817d0db756670bd3b.pdf>

⁴⁴ World Bank (2022). Economics of Electric Vehicles for Passenger Transportation. See:

<https://documents1.worldbank.org/curated/en/099330011042228036/pdf/P172382084bde40090817d0db756670bd3b.pdf>

⁴⁵ Resolutions SIE-137-2022-REG and SIE-138-2022-REG



74. **Rationale.** Efforts to increase energy efficiency and promote rational energy use in the DR were initiated in 2010 with the launch of the National Energy Plan 2010-2025, which had the following strategic objectives: (i) promote the passing of energy efficiency legislation; (ii) implement energy efficiency programs in government institutions; and (iii) sensitize the public at large on rational energy use through awareness-raising campaigns. The updated 2020 NDC also identified energy efficiency actions and investments needed to meet the country's GHG mitigation targets with the majority of these investments expected to come from the private sector. The National Energy Plan 2022-2036 highlighted the completion of energy audits as an important first step to inform public and private decision makers on the energy saving opportunities, but no framework has been established to organize and incentivize energy audits. Despite implementation of awareness-raising campaigns, results towards reducing waste in energy transformation and use have been very limited due to lack of an institutional mandate to organize the energy efficiency agenda, including setting minimum energy performance standards for appliances and energy-efficient building codes.

75. In January 2022, a draft Energy Efficiency Law was submitted to Congress. The proposed legislation would establish a comprehensive legal framework for the promotion of energy efficiency and for attracting private sector investments for implementation of energy efficiency measures. The draft Law would introduce an incentive regime to drive private sector investments in energy efficiency in all spheres of consumption including the transport, building and industrial sectors, including addressing excessive use of energy in water utilities. To this end, the Law would provide for: (i) establishment of policy instruments and development of activities that promote investment in energy-efficient technologies and instilling efficient consumption habits; (ii) promotion of a market of certified and accredited companies for the provision of energy efficiency-related services; (iii) promotion of alternatives to fossil fuels as primary energy sources; (iv) establishment of a system of incentives and sanctions; (v) identification of mechanisms that allow for the monitoring of the measures, data, and achievements related to the Law; and (vi) designating MEM with the responsibilities to facilitate cross-sectoral coordination and support the implementation of the Law. In addition, the Law would mandate the issuance of an implementing decree for energy efficiency that provides clear guidelines and responsibilities of key actors. The Bill has broad support in both chambers of Congress. As of May 2023, it is expected that the draft Law will be approved in both chambers during the second or third quarter of calendar year 2023. Meanwhile, the MEM has identified improved energy efficiency in public buildings as an important early objective.

76. **Substance of the Prior Action.** Due to the protracted legislative process, the GoDR has issued a Presidential Decree mandating the use of energy-efficient equipment and installations through setting of minimum efficiency standards, adoption of efficient consumption habits, and considerations on alternatives to fossil fuels in public buildings. The Decree will contribute significantly to the development, implementation and scaling up of energy efficiency initiatives for several reasons. First, the public sector is a significant consumer of energy. Second, the public sector can provide an early market opportunity for energy efficiency service and equipment providers, which will facilitate the establishment of local value chains and human resource capacity necessary to tackle the wider energy efficiency challenges identified in the draft Law. And finally, the energy efficiency initiatives in the public sector if well implemented, will provide an important demonstration and awareness raising effect for businesses and households, which are then more likely to also invest in energy efficiency measures. This PA aligns with Pillar 4 - Strengthening Policies, Institutions and Investments for Rebuilding Better (climate-smart policies and incentives, and green and sustainable growth) of the GCRF.



77. **Expected Results.** The Decree will provide for an early start of the implementation of the provisions of the draft EE Law, which is pending approval in Congress. Once the EE Law has been approved, an implementing Decree will be issued, which is expected to contain similar provisions as the Presidential Decree. The Decree will apply to public buildings and will result in adoption of efficient consumption habits to be monitored and enforced through trained staff in each institution as well as the setting of minimum efficiency standards for new equipment and installations, most importantly for air-conditioning and lighting. The guidelines will also include mandatory considerations of auto-generation options such as solar panels in public buildings, contributing to the reduction of the country's GHG emissions in line with its NDC commitments and NDS 2030 goals. The MEM expects to monitor the efficacy of these measures by tracking the specific energy use per square meter in the public sector and has set the target that by 2024 the specific energy consumption rate in all large public sector buildings (kWh/m²) will be reduced by 2 percent from a baseline in 2022.

Pillar 3: Improving the financial sustainability and operational performance of the electricity sector

78. **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.**

***Prior Action #7.** The Borrower, through the Superintendencia de Electricidad, has introduced incentives for Distribution Companies to meet supply and distribution costs, enhance service quality, and reduce greenhouse gas emissions, by adopting a comprehensive regulatory framework setting forth the methodology to calculate, and periodically adjust, the technical tariff for regulated demand, as evidenced by Resolution No. SIE-065-2022-MEMI, dated June 30, 2022.*

79. **Rationale.** Efforts to ensure that electricity distributors cover the efficient cost of providing the electricity service were initiated in 2001 with the issuance of the General Electricity Law No. 125 of 2001. However, more than 20 years after the issuance of the Law, the country does not have a tariff regime that would allow it to meet the objective of covering the efficient costs of providing the service. A reference technical tariff regime (*Tarifa Técnica de Referencia*) would allow electricity distribution companies to cover the efficient cost of providing the service in the future and is composed of two parts: (i) supply costs (average cost of energy, costs for use of the transmission system, and costs of efficient losses); and (ii) costs for providing electricity distribution and commercialization services. Importantly, the loss levels included in the setting of a technical tariff will become minimum targets for the loss reduction levels of distribution companies, so the companies will have strong financial incentives to pursue these loss reduction targets and thereby contribute to GHG emission reduction. The technical tariff therefore has clear positive environmental impacts. The technical tariff methodology will also serve to calculate the GoDR compensation required to the EDEs, while tariffs converge towards full cost recovery, thereby also providing a transparent assessment of the efficient costs of the sector and an incentive towards resuming tariff adjustments when social and economic circumstances allow.

80. **Substance of the Prior Action.** Resolution SIE-065-2022 establishes a comprehensive regulatory framework for the methodology and implementation of the general procedure for calculating the technical tariff for regulated demand, including both supply and distribution costs. The distribution costs include an



investment plan for the tariff cycle that would allow the distribution companies to meet the energy loss reduction and service quality goals established, thereby contributing to GHG emissions reduction. This PA aligns with Pillar 4 - Strengthening Policies, Institutions and Investments for Rebuilding Better (climate-smart policies and incentives, and green and sustainable growth) of the GCRF.

81. **Expected Results.** It is expected that in 2023 the SIE will carry out the technical studies that will allow the application of the provisions of the Resolution SIE-065-2022 and, thus determine the technical tariff for each electricity distribution company. This technical tariff, which will be a key milestone for the sector, will allow for establishing a future convergence path towards financial sustainability of the electricity distribution companies, integration of variable renewable energy, and introduction of incentives to reduce distribution losses. By 2024, the revenues of the EDEs will reflect the technical tariff by way of a transfer of funds from the GoDR to match the difference between revenues based on actual (politically determined) tariff and those that would have been realized by applying the technical tariff thereby eliminating the tariff shortfall, which will provide financial stability and allow for efficient operation. Going forward, GoDR expects to include a provision in the state budget to compensate the EDEs according to the tariff methodology. In terms of fiscal impact, this measure is expected to be neutral since it simply frontloads budget transfers to SOEs which, if not paid, would result in financial losses in these companies that in turn would necessitate a continuation of the annual budget transfers to the EDEs that allow them to pay their capital and operational costs. For the 2023 budget the Ministry of Finance expects these transfers to amount to US\$1.425 billion.⁴⁶ By the end of 2026, in line with the commitments under the Electricity Pact, electricity tariffs are expected to have converged to cost reflectiveness, and the technical tariff regime will continue to apply as the reference for fully cost reflective tariffs going forward.

Prior Action #8. *The Borrower, through the Superintendencia de Electricidad, has adopted a regulatory framework to improve the Distribution Companies' service in terms of quality, resilience, and cost-of-service delivery, and allow for the greater integration of renewable energy into the grid, as evidenced by: (i) Resolution No. SIE-143-2022-MEMI, dated December 26, 2022, which updated the technical standards in terms of: (a) commercial service (e.g., maximum time allowed to attend to connection requests, maximum time for commercial service to consumers, billing errors, etc.); (b) technical product (e.g., variations in voltage levels and frequency); and (c) technical service (e.g., frequency and duration of failures, including those induced by climate change related weather events); and (ii) Resolution No. 004-2023-REG, dated January 11, 2023, which established design and construction standards for medium voltage/low voltage network to reduce the effects of climate events on such network and systems, as well as foster a greater integration of renewable energy into the grid.*

82. **Rationale.** The power infrastructure in the DR has been developed over time and there was not a systematic way to date to determine how vulnerable power assets are to a variety of disasters and climate-induced weather events, or how to ensure the reliability and quality of electricity supply in the face of rapidly expanding demand. To inform future investments that would not only expand the grid, but also doing so in a resilient manner and to allow for greater integration of renewable energy, a set of harmonized distribution norms are needed. Meanwhile, to establish the technical tariff for regulated demand of resilient infrastructure services, it is necessary to determine the cost of supply and the efficient costs of the distribution network – as determined in the network code, which should include rules to allow absorption of

⁴⁶ The 2023 budget has an allocation of \$1.297 billion to cover operational shortfalls and \$125 million are available for investments.



resilient distributed generation based on renewable energy sources. The efficient costs of providing resilient electricity distribution services are composed of capital costs and operating costs. Capital costs result from valuing the regulatory asset base at its new replacement value. The value of such assets should be determined based on the conformation and valuation of construction units, which result from the design and construction standards for medium- and low-voltage distribution systems. Resilient network design and construction standards ultimately depend on the technical service quality requirements established by the SIE, i.e., the expected frequency and duration of outages. Therefore, to assess the value of the distribution networks, it is necessary to establish the expected service quality levels (the System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI)) and thus define the type of construction unit that can meet these requirements.

83. **Substance of the Prior Action.** SIE has issued two resolutions. First, Resolution SIE-143-2022-MEMI dated December 26, 2022 defines the quality standards of resilient electricity distribution service (technical quality, i.e., frequency and duration of failures), including those induced by climate change related weather events, product quality (such as variations in voltage levels, frequency), and quality of commercial service (maximum time allowed to attend connection requests, maximum time for commercial service to consumers, billing errors, among others). Second, Resolution No. 004-2023-REG dated January 11, 2023, lays out the medium voltage/low voltage (MV/LV) network design and construction standards (“network code” or “grid code”), which include the mandate and guidelines for the construction of underground distribution lines as a mechanism to support greater resilience to disaster and climate change-induced events, as well as standards allowing for greater connection of resilient distributed generation from renewable energy sources. These resolutions will lay the foundations for enhancing the resilience of electricity distribution service in the DR, while giving the appropriate signal for it to be incorporated in the calculation of the technical tariff that will allow recovering the costs of providing the service with these standards. To monitor the implementation and due compliance with the provisions of these resolutions, the SIE has created a specific directorate for this purpose: *Department of Supervision of the Retail Electricity Market (Dirección de Fiscalización de Mercado Eléctrico Minorista)*. This PA aligns with Pillar 3 - Strengthening Resilience (climate resilience) of the GCRF.

84. **Expected Results.** The new grid code is expected to lead to an increase in the resilience of the grid to climate change-induced weather events, as well as to foster the greater absorption of renewable energy from distributed generation into the grid and thereby encourage generation from small and medium size RE distributed country-wide. In combination with the implementation of PA 5, which will provide access to concessional financing, right to grid injection and priority dispatch for distributed generation, this PA is expected to contribute to the achievement of the scaling up of distributed renewable energy from a baseline of 250 MW in 2022 to a target of 400 MW in 2024. Furthermore, the definition of technical standards of service quality that can be met is expected to lead to an improvement in the quality of service, i.e., frequency and duration of outage, and higher requirements for commercial services. The definition of the design and construction standards for MV and LV networks will allow the calculation of the technical tariff by the SIE next year.⁴⁷

⁴⁷ It is also expected that improved quality of service will facilitate a resumption of tariff adjustments when circumstances allow.



Table 4: Prior Actions and Analytical Underpinnings

85. **This operation has been developed following a comprehensive set of TA, which provide technical inputs to the preparation of regulatory measures related to renewable energy, distributed generation, and energy efficiency.** It also draws on the advisory work provided by the IDB on the proposed reforms to harmonize the electricity sector governance, centralize the planning function, and prepare a guide for carbon-neutral electricity planning.



Prior Actions	Analytical Underpinnings
Pillar 1: Strengthening sector governance	
<p>Prior Action #1. The Borrower, in order to increase the transparency and improve the performance and efficiency of electricity sector entities, has (i) adopted measures to separate the policymaking, planning, and regulatory functions of governmental institutions in the energy sector, including and especially for the planning and integration of renewable energy; and (ii) established a process for the systematic use of indicative least-cost electricity generation planning to increase renewable energy deployment and reduce carbon emissions; as evidenced, respectively, by: (a) Government submission No. 30406, dated December 12, 2022, of the Harmonized Electric Sector Law proposal for the National Assembly to amend the General Electricity Law; and (b) Resolution R-MEM-ADM-031-2022, dated October 3, 2022, issued by the MEM.</p>	<ul style="list-style-type: none"> • MEM and Interamerican Development Bank with Tetra Tech (2022): <i>Proposal for Regulatory and Legislative Reforms of the Electricity Sector in the Dominican Republic</i> • 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 Diagnostic (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>
<p>Prior Action #2. The Borrower, in order to enhance the governance, efficiency and transparency of electricity distribution, has (i) derogated the legislation that created the state-owned CDEEE (<i>Corporación Dominicana de Empresas Eléctricas Estatales</i>); and, through the CUED (<i>Consejo Unificado de las Empresas Distribuidoras</i>), (ii) adopted industry best practices for the management of state-owned enterprises, strengthened the CUED supervision and oversight role over the Distribution Companies’ operations, and proposed performance improvement targets for Distribution Companies for 2023 through 2026; as evidenced, respectively, by: (a) Law No. 365-22, dated November 29, 2022, and duly published in the Borrower’s Official Gazette No. 11090, dated December 9, 2022; and (b) Resolution No. 1, dated February 10, 2023.</p>	<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 • CUED (2021): <i>Plan Integral de Reducción de Pérdidas 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>
Pillar 2: Enhancing climate mitigation and social and environmental sustainability	
<p>Prior Action #3. The Borrower, through the Presidency, has mitigated the impact of the energy price increases on vulnerable consumers, including female-headed households, as evidenced by: (i) <i>Supérate</i> Program Administrative Resolution No. 003-2022, dated April 12, 2022, and published on the <i>Supérate</i> Program website, which expanded the number of beneficiaries of the <i>Alimentate</i> and <i>Bonogás</i> subsidies; and (ii) <i>Supérate</i> Program Administrative Resolution No. 007-2022,</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



Prior Actions	Analytical Underpinnings
<p>dated August 15, 2022, and published on the <i>Supérate</i> Program website, which improved the targeting and coverage of the <i>Bonoluz</i> subsidy.</p>	<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 updated the legal framework to enable the development of low-cost renewable energy generation by: (i) mandating the competitive procurement of renewable energy projects; and (ii) incentivizing the implementation of renewable energy in hybrid-systems, auto-generation systems, and community-based generation systems; as evidenced by Presidential Decree No. 65-23 dated February 20, 2023, duly published on the Borrower’s Official Gazette No. 11101 dated February 28, 2023.</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, through the <i>Superintendencia de Electricidad</i>, has facilitated the decarbonization of the transport sector by adopting regulations for the development and operation of electric vehicle charging stations (“Charging Stations”), as evidenced by: (i) Resolution on Charging Stations’ technical standards No. SIE-137-2022-REG, dated December 19, 2022; and (ii) Resolution on tariffs applicable to Charging Stations No. SIE-138-2022-REG, dated December 19, 2022.</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 R.D.</i> ESMAP (2021), ‘From Sun to Roof to Grid: Distributed PV in Energy Sector Strategies’ <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 incentivized energy efficiency in the public sector by requiring energy-efficient technologies, consumption habits, and alternatives to fossil fuels in the executive branch, including autonomous and decentralized entities, as evidenced by Presidential Decree No. 158-23 dated April 13, 2023, and duly published in the Borrower’s Official Gazette No. 11105, dated April 14, 2023.</p>	<ul style="list-style-type: none"> National Institute of Traffic and Land Transportation (INTRANT) and IDB (2020): National Strategic Plan for Electric Mobility in the Dominican Republic
<p>Pillar 3: Improving the financial sustainability and operational performance of the electricity sector</p>	
<p>Prior Action #7. The Borrower, through the <i>Superintendencia de Electricidad</i>, has introduced incentives for Distribution Companies to meet supply and distribution costs, enhance service quality, and reduce greenhouse gas emissions, by adopting a comprehensive regulatory framework setting forth the methodology to calculate, and periodically adjust, the</p>	<ul style="list-style-type: none"> BA (2019): <i>Estudio Tarifario Complementario al de Determinación de la Tarifa Técnica para las Empresas Distribuidoras, Informe Final de Consultoría</i> World Bank (2019): Dominican Republic Public Expenditure Review, 2012-18

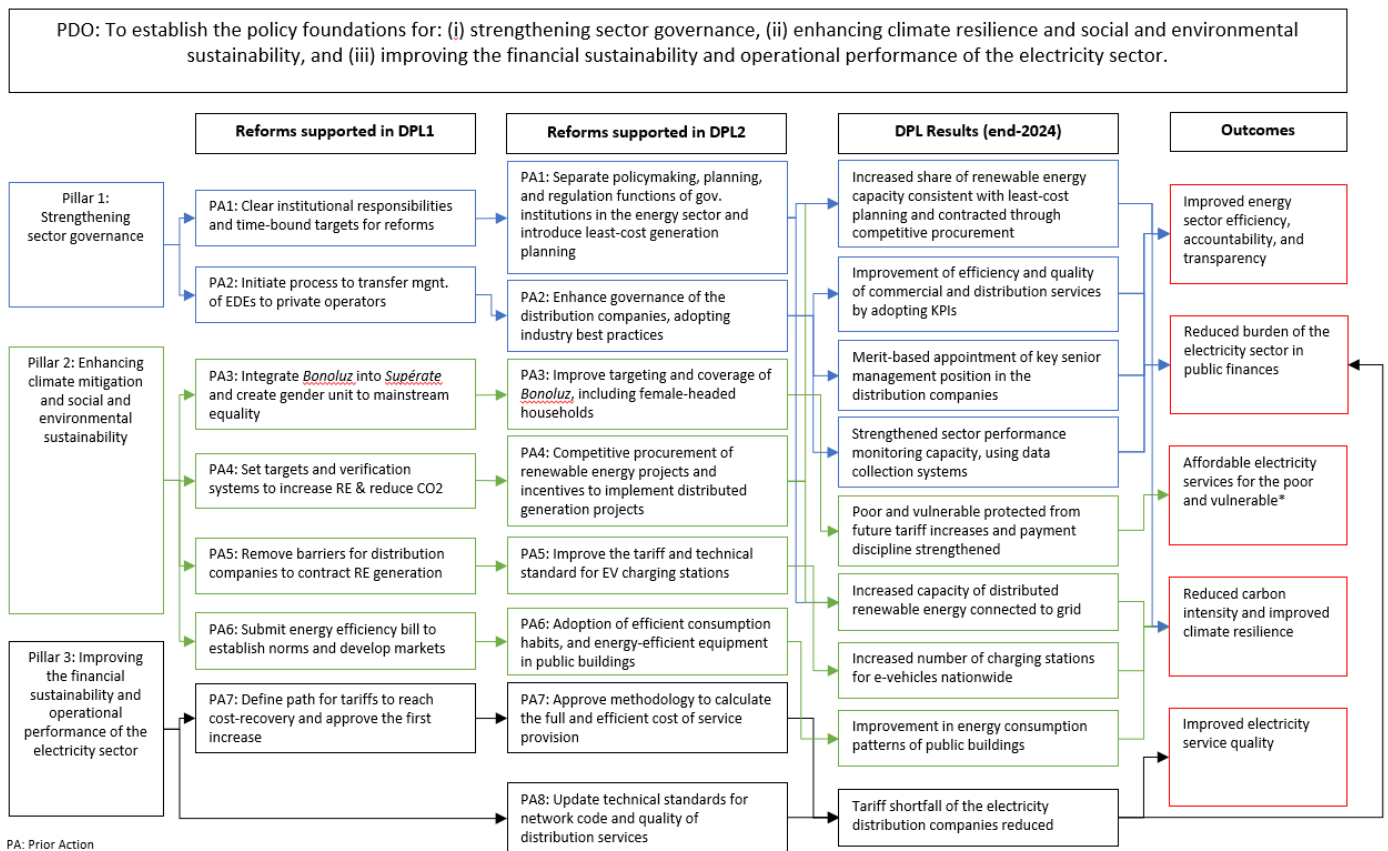


Prior Actions	Analytical Underpinnings
<p>technical tariff for regulated demand, as evidenced by Resolution No. SIE-065-2022-MEMI, dated June 30, 2022.</p>	<ul style="list-style-type: none"> • World Bank (2021): Tariff and Subsidy work performed in 2021-2022 under ESMAP grant • SIE (2022): <i>Determinación 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 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>
<p>Prior Action #8. The Borrower, through the <i>Superintendencia de Electricidad</i>, has adopted a regulatory framework to improve the Distribution Companies’ service in terms of quality, resilience, and cost-of-service delivery, and allow for the greater integration of renewable energy into the grid, as evidenced by: (i) Resolution No. SIE-143-2022-MEMI, dated December 26, 2022, which updated the technical standards in terms of: (a) commercial service (e.g., maximum time allowed to attend to connection requests, maximum time for commercial service to consumers, billing errors, etc.); (b) technical product (e.g., variations in voltage levels and frequency); and (c) technical service (e.g., frequency and duration of failures, including those induced by climate change related weather events); and (ii) Resolution No. 004-2023-REG, dated January 11, 2023, which established design and construction standards for medium voltage/low voltage network to reduce the effects of climate events on such network and systems, as well as foster a greater integration of renewable energy into the grid.</p>	

86. The expected results and outcomes of the reforms supported under the DPL program are presented in Figure 2 below.



Figure 2. Results chain of the DPL program



Results: to be achieved by 2024 (date of closing of the DPL series)

Outcomes: to be achieved within approximately 5 years from DPL1 approval and drawing results from WB DPL series as well as government's own efforts and parallel loans with other IFIs. This would include the outcomes of the 20-quarter tariff reform program (expected completion end-2026), private concession of at least one of the EDEs operational, completed *Bonoluz* reform, RE contract signed.

Source: WB staff elaboration.

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

87. The proposed operation is fully aligned with the objectives of the World Bank Group's (WBG) Country Partnership Framework (CPF) for the Dominican Republic (FY22-26) (Report No.167896-DO) 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.

88. The DPL is also aligned with the three dimensions set forth in the World Bank Group Green, Resilient and Inclusive Development (GRID) (October 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, including female-headed households, in the roll-out of an ambitious electricity tariff reform program while improving the targeting to ensure fiscal efficiency.

89. **The DPL also aligns with the Global Crisis Response Framework, specifically Pillar 3 (Strengthening Resilience) and Pillar 4 (Strengthening Policies, Institutions and Investments for Rebuilding Better).** PAs 1, 5, 6, 7 align with sub-pillars *Climate smart policies and incentives* and *Green and sustainable growth*, and PA 2 with *Institutional strengthening and capacity building* sub-pillar, under Pillar 4. PA 3 aligns with the sub-pillar *Adaptive social protection systems*, and PAs 4 and 8 with the sub-pillar *Climate resilience* under Pillar 3.

90. **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 attracting 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.

91. **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.

92. **The GoDR has applied for Bank financial support for investment project financing in support of the loss reduction program to be implemented by the reformed EDEs.** The investment loan would complement the proposed policy lending by continuing to improve the governance of the EDEs and supporting the implementation of the CUED Resolution. The investment project would support improvements in the current models for outsourcing of technical and commercial activities, including loss reduction measures, with the aim of improving system reliability and consumer satisfaction at the same time as reducing non-commercial losses and improving bill collections.



4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

93. **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 critical elements of the GoDR's reform program embedded in the Electricity Pact. The first draft of the Electricity Pact was initially presented 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, and included the private sector, labor representatives, civil society organizations, universities as well as independent sector experts.⁴⁸ This multi-stakeholder dialogue continued within the CES until the signing of the Pact in 2021. Feedback from the consultation process at all stages 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. Every PA supported by the DPL complied with the regular consultation processes provided by the Constitution and the Law. Article 138 of the Constitution regulates the principles of public administration, including transparency. Article 31 of the Law 107-03 on the Rights of Persons in their Relations with the Administration and Administrative Procedure, outlines the process applicable to the elaboration of the administrative regulations, plans, and programs, such as those supported by this DPL, are subject to the following principles and criteria: (i) hearing of citizens directly affected in their rights and interests; (ii) public participation; (iii) adequate timing of the hearing, participation, and interinstitutional collaboration; (iv) consideration and motivation; and (v) publication.

94. **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 International Finance Corporation (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. As a follow up to the recently completed Distribution Grid Modernization and Loss Reduction Project (P147277) the WB plans to provide financial support to the National Loss Reduction Program, which also will include projects financed by the IDB, the European Investment Bank (EIB), 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 TA package, in coordination with the German Agency for International Cooperation (GIZ) and the Japan International Cooperation Agency (JICA), which maintain active TA programs in the electricity sector.

95. **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

⁴⁸ 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>



5.1. POVERTY AND SOCIAL IMPACT

96. **Policies under Pillar 1 are expected to have indirect positive impacts on social and poverty outcomes.** Policy reforms aimed at strengthening energy sector governance and operational performance of sector entities are expected to have indirect positive impacts in the short to medium-term. Two policies were analyzed, one is measures to increase transparency and improve the performance and efficiency of electricity sector entities, which can promote transparency and accountability, reduce corruption, improve overall efficiency of the sector, increase access to reliable and affordable energy, and support the transition to cleaner, low-carbon energy sources. The other policy is enhancing governance, efficiency, and transparency in electricity distribution and strengthening the control and supervision of distribution companies, which can lead to increased reliability and quality of the electricity supply, reduced power outages, and lower electricity prices for consumers. The dissolution of CDEEE have meant some loss of employment in that organization but it is expected that most of this staff have been or will be absorbed by the EDEs.

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

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



5.2. ENVIRONMENTAL, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

99. **The environmental analysis of the DPL found that most of the policies supported under Pillar 2 are expected to have significant positive effects on the environment and climate change and support the country's actions toward its NDC commitment.** Policy measures under PA 1 aim at strengthening the electrical system planning by incorporating energy efficiency, environmental policy and land use planning objectives which will in turn promote environmental sustainability and decarbonization. It will also strengthen MEM's institutional capacity, which will be essential for the ongoing electricity reform and the country's commitment to the Electricity Pact. PA 2 promotes the strengthening of the institutional capacity of the EDEs, reinforcing their governance, building their institutional performance including their capability for environmental management and sustainability. PAs 4, 5, and 6 promote and incentivize the development and use of renewable energy projects, transitioning to a lower carbon electricity mix, contributing to climate change mitigation by improving energy efficiency and reducing fossil fuel consumption. PA 4 will promote the development of renewable energy projects, which will reduce the country's reliance on fossil fuels, and contribute to positive environmental and health benefits through the reduction of GHG emissions, black carbon, and other particulate matter (nitrogen oxides and sulfur oxides, among other primary and secondary pollutants). PA 6 will strengthen the legal and regulatory framework for energy efficiency, supporting the implementation of energy efficiency projects and contributing to a reduction in GHG emissions. Potential negative environmental effects related to the development or construction of renewable energy and energy efficiency projects are expected to be mitigated through the country's environmental regulatory framework. No environmental effects are expected from the implementation of measures supported under PAs 3, 7, and 8.

100. **DR 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. The country has been gradually expanding the application of International Organization for Standardization (ISO) standards related to environmental management (ISO14000: 2015), energy management (ISO50001:2015), and energy audits (ISO50002:2014). ISO50001 provides a framework for implementing an energy management system which will assist with improving energy efficiency and reducing environmental impact, ISO50002:2014 outlines the requirements for conducting energy audits to gauge energy performance. With these certifications, the energy sector of DR has the means to effectively incorporate new sustainable energy resources. However, a systematic review of the environmental performance of the DR's energy sector has not been conducted by the Bank as of yet.



101. **The Ministry of the Environment and Natural Resources (*Ministerio de Medio Ambiente y Recursos Naturales*, MMARN) 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 the private sector is subject to the environmental impact evaluations mandated by law and the requirements imposed by the MMARN. Environmental licenses and permits are required prior to the implementation of the works and shall be maintained throughout the life of the project. MMARN 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. MMARN'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 MMARN oversees the environmental licensing systems, as well as for monitoring project implementation and environmental compliance. For the energy sector and besides the MMARN, 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. Furthermore, as required in the compendium of regulations and procedures for environmental authorizations of the MMARN (2014)⁴⁹, projects must comply with systematic self-evaluation environmental compliance reports to ensure adherence to the environmental commitments in the Environmental Management and Adequacy Programs as required in the environmental licenses and permits. The MEM through its Directorate of Environmental and Social Affairs coordinates with the MMARN in all necessary follow-up actions related to environmental management and compliance required for projects, including all licensing procedures and their subsequent supervision measures.

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

102. **The Public Expenditure and Financial Accountability (PEFA) Assessment completed in 2016⁵⁰ 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,⁵¹ that show in both cases good alignment with international good practices. The remaining pillars have mixed results.

103. **The implementation of government 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 of the central government budget are presented for external audit

⁴⁹ Compendium of regulations and procedures for environmental authorizations of the MMARN (2014) available in: <https://ambiente.gob.do/files/REG-03.pdf>

⁵⁰ A PEFA Assessment has been conducted in 2022 with support from the European Union (EU), but the PEFA Report has not been completed and it is not available for review on the PEFA website.

⁵¹ 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.



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 months for 2018 and within four months after their reception by the Supreme Audit Institution (SAI) for the years 2020 and 2021.⁵² The DR annual budget law is routinely made public as was the case with the Budget Law for FY 2023.⁵³

104. **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 General Public Procurement Directorate (*Dirección General de Contrataciones Públicas*, 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.

105. **The GoDR is committed to PFM reforms. The GoDR, with support from the European Union (EU), has prepared its PFM Reform Action Plan 2020-2022 (PROGEF)**⁵⁴ with the objectives of enhancing the link between medium-term budgeting and planning; strengthening PFM systems integration; increasing accountability and reinforcing controls over the management of goods, assets, and public services; and improving PFM governance. PROGEF implementation has shown some positive impacts, including the first stock taking, entitlement of property and accounting recording of more than 2,860 real estate of the ministries of Public Health, Education and Defense, that took place in 2021. Besides, the Accountant General Office (DIGECOG) registered 1,221 users from 652 government institutions to the System for Analysis of Compliance with Accounting Regulations (SISASNOC, for its acronym in Spanish), a set of rules aimed to produce high-quality, reliable, and timely financial information and more than 1600 government technicians were trained on public sector accounting techniques. Other agencies of the Ministry of Finance such as the Budget Office and Treasury Office are advancing the implementation of the activities included in PROGEF.

106. **Foreign exchange (FOREX) controls.**⁵⁵ The published audited financial statements of the DR Central Bank for 2019, 2020 and 2021⁵⁶ were reviewed by the Bank. 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 2020-2021), 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

⁵² See: <https://camaradecuentas.gob.do/index.php/areas-sustantivas/direccion-de-analisis-presupuestario/informes-al-congreso-nacional>

⁵³ www.digepres.gob.do/wp-content/uploads/2022/12/366-Ley-366-22_compressed-1.pdf

⁵⁴ *Programa de Reforma de la Gestión de las Finanzas Públicas (PROGEF) en la República Dominicana 2021-2024.*

⁵⁵ IMF Safeguard Assessment carried out in 2021 was not made available for FMS's review.

⁵⁶ <https://www.bancentral.gov.do/a/d/2565-estados-financieros> DR Central Bank audited financial statements for 2017 and 2018.



concluded that controls over FOREX do not pose substantial risks to the achievement of the Program Development Objective (PDO).

107. **Based on the analysis of the DR PFM system and the FOREX internal control**, the overall integrated fiduciary risk to this operation arising from the DR's public financial management (PFM), including public procurement system, is assessed as moderate. To mitigate fiduciary risk arising from procurement practices, the Bank is currently working with DGCP to support the public procurement reform. The Bank is advising the GoDR on how to improve transparency and accountability through comments provided to the draft Procurement Law, supporting the implementation of Framework Agreements, and advising on how to expand data usage to improve transparency and accountability. The Bank has undertaken an analysis of the purchasing practices of the GoDR and has provided recommendations for quick wins (Quick Gains Analysis). On this basis, no additional fiduciary risk mitigation measures are required for this Program.

108. **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 (*Cuenta Única del Tesoro*, TSA), 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 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 financial support provided under this operation is not intended to finance goods or services on the list of "Excluded Expenditures".⁵⁷ 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

109. **The Ministry of Finance is responsible for collecting and monitoring information related to program implementation towards the achievement of results for this DPL.** 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 and *Supérate*. The WB will work with the Ministry of Finance to confirm the results framework through ongoing policy dialogue and technical assistance projects.

110. **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 Financing may submit complaints to the responsible country authorities, appropriate local/national grievance mechanisms, or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability

⁵⁷ See the General Conditions for DPL.



Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. 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 Bank's Accountability Mechanism, please visit <https://accountability.worldbank.org>.

6. SUMMARY OF RISKS AND MITIGATION

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

112. **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. The suspension of the gradual tariff increases was a clear demonstration of this type of risk. Mitigating factors are embedded in the design of the reform program by strengthening governance and transparency of decision making in the distribution companies as well as the steps to improve the sectors financial sustainability and reduce its fiscal burden. The GoDR has demonstrated their commitment to continue the sector reforms through their tight supervision of the reform progress as evidenced by weekly meetings in the Electricity Cabinet led by the Vice President of the Republic. Finally, by supporting an investment program in loss reduction measure that will complement the governance reform of the EDEs, the GoDR are talking the necessary steps to improve the reliability and sufficiency of electricity supply, further mitigating the risk of declining political support for the reform program over time.

113. **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 power cuts as a result of the loss reduction activities to reduce unmetered power consumption before they see a substantive improvement in the reliability and quality of electricity services they receive. To mitigate these risks, the reform program builds on a comprehensive consultation process including all key sector stakeholders which resulted in the signing of the Electricity Pact. All the regulatory reforms in this Program including the new cost-reflective methodology have been consulted with relevant sector stakeholders and the public. The GoDR is also implementing communications and awareness campaigns in support of the reforms of tariff methodology and payments for self-generation of power.



Table 5: Summary Risk Ratings

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



ANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions		Results		
Prior Actions under DPL 1 (March 2022)	Prior Actions for DPL 2 (January 2023)	Indicator Name	Baseline	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.	Prior Action #1. The Borrower, in order to increase the transparency and improve the performance and efficiency of electricity sector entities, has (i) adopted measures to separate the policymaking, planning, and regulatory functions of governmental institutions in the energy sector, including and especially for the planning and integration of renewable energy; and (ii) established a process for the systematic use of indicative least-cost electricity generation planning to increase renewable energy deployment and reduce carbon emissions; as evidenced, respectively, by: (a) Government submission No. 30406, dated December 12, 2022, of the Harmonized Electric Sector Law proposal for the National Assembly to amend the General Electricity Law; and (b) Resolution R-MEM-ADM-031-2022, dated October 3, 2022, issued by the MEM.	Indicator #1. New renewable energy capacity consistent with least-cost planning and contracted through competitive procurement by distribution companies (megawatt)*	0 [2022]	500
Prior Action #2. The DGAPP has taken steps to improve the governance and performance of electricity distribution companies and the	Prior Action #2. The Borrower, in order to enhance the governance, efficiency and transparency of electricity distribution, has	Indicator #2: Distribution companies that have signed performance agreements with	0 [2022]	3



Prior Actions		Results		
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.	(i) derogated the legislation that created the state-owned CDEEE (<i>Corporación Dominicana de Empresas Eléctricas Estatales</i>); and, through the CUED (<i>Consejo Unificado de las Empresas Distribuidoras</i>), (ii) adopted industry best practices for the management of state-owned enterprises, strengthened the CUED supervision and oversight role over the Distribution Companies' operations, and proposed performance improvement targets for Distribution Companies for 2023 through 2026; as evidenced, respectively, by: (a) Law No. 365-22, dated November 29, 2022, and duly published in the Borrower's Official Gazette No. 11090, dated December 9, 2022; and (b) Resolution No. 1, dated February 10, 2023.	the Unified Council for the Distribution Companies (<i>Consejo Unificado de las Empresas Distribuidoras</i> , CUED) including a publicly disclosed list of Key Performance Indicators and published annual audited financial statements for calendar years 2020 to 2023 (number)*		
		Indicator #3: Distribution companies that have data collection systems in place allowing them to effectively monitor progress on Key Performance Indicators (number)*	0 [2022]	3
		Indicator #4: Distribution companies with all key management positions filled following competitive procurement using meritocratic criteria by 2024 (number)*	0 [2022]	3
Pillar 2: Enhancing climate mitigation 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 SUPERATE; and (b)	Prior Action #3. The Borrower, through the Presidency, has mitigated the impact of the energy price increases on vulnerable consumers, including female-headed households, as evidenced by: (i) <i>Supérate</i> Program Administrative Resolution No. 003-2022, dated April 12, 2022, and published	Indicator #5: Extremely poor and poor households** benefiting from <i>Bonoluz</i> (number)	330,000 [2020]	900,000
		Indicator #6: Female-headed households benefitting from	231,000 [2020]	549,000



Prior Actions		Results		
<p>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.</p>	<p>on the <i>Supérate</i> Program website, which expanded the number of beneficiaries of the <i>Aliméntate</i> and <i>Bonogás</i> subsidies; and (ii) <i>Supérate</i> Program Administrative Resolution No. 007-2022, dated August 15, 2022, and published on the <i>Supérate</i> Program website, which improved the targeting and coverage of the <i>Bonoluz</i> subsidy.</p>	<p><i>Bonoluz</i> (number)*</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, 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.</p>	<p>Prior Action #4. The Borrower has updated the legal framework to enable the development of low-cost renewable energy generation by: (i) mandating the competitive procurement of renewable energy projects; and (ii) incentivizing the implementation of renewable energy in hybrid-systems, auto-generation systems, and community-based generation systems; as evidenced by Presidential Decree No. 65-23 dated February 20, 2023, duly published on the Borrower's Official Gazette No. 11101 dated February 28, 2023.</p>	<p>Contributes to Indicator #1 on RE procured by distribution companies.</p> <p>Indicator #7. Distributed renewable energy capacity connected to grid (megawatt)*</p>	<p>250 [2022]</p>	<p>400</p>
<p>Prior Action #5. The Borrower has taken measures to increase the share of renewable</p>	<p>Prior Action #5. The Borrower, through the <i>Superintendencia de Electricidad</i>, has</p>	<p>Indicator #8. Charging stations for electric vehicles installed</p>	<p>350 [2022]</p>	<p>500</p>



Prior Actions		Results		
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.	facilitated the decarbonization of the transport sector by adopting regulations for the development and operation of electric vehicle charging stations (“Charging Stations”), as evidenced by: (i) Resolution on Charging Stations’ technical standards No. SIE-137-2022-REG, dated December 19, 2022; and (ii) Resolution on tariffs applicable to Charging Stations No. SIE-138-2022-REG, dated December 19, 2022.	nationwide (number)*		
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.	Prior Action #6. The Borrower has incentivized energy efficiency in the public sector by requiring energy-efficient technologies, consumption habits, and alternatives to fossil fuels in the executive branch, including autonomous and decentralized entities, as evidenced by Presidential Decree No. 158-23 dated April 13, 2023, and duly published in the Borrower’s Official Gazette No. 11105, dated April 14, 2023.	Indicator #9. Reduction from baseline of energy use in public buildings (percentage)*	0 [2022]	2
Pillar 3: Improving the financial sustainability 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	Prior Action #7. The Borrower, through the <i>Superintendencia de Electricidad</i> , has introduced incentives for Distribution Companies to meet supply and distribution costs, enhance service quality, and reduce greenhouse gas emissions, by adopting a comprehensive regulatory framework	Indicator #10: Number of distribution companies with tariff shortfall*** (number)*	3 [2022]	0



Prior Actions		Results		
<p>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.</p>	<p>setting forth the methodology to calculate, and periodically adjust, the technical tariff for regulated demand, as evidenced by Resolution No. SIE-065-2022-MEMI, dated June 30, 2022.</p>			
	<p>Prior Action #8. The Borrower, through the <i>Superintendencia de Electricidad</i>, has adopted a regulatory framework to improve the Distribution Companies’ service in terms of quality, resilience, and cost-of-service delivery, and allow for the greater integration of renewable energy into the grid, as evidenced by: (i) Resolution No. SIE-143-2022-MEMI, dated December 26, 2022, which updated the technical standards in terms of: (a) commercial service (e.g., maximum time allowed to attend to connection requests, maximum time for commercial service to consumers, billing errors, etc.); (b) technical product (e.g., variations in voltage levels and frequency); and (c) technical service (e.g., frequency and duration of failures, including those induced by climate change related weather events); and (ii) Resolution No. 004-2023-REG, dated January 11, 2023, which established design and construction standards for medium voltage/low voltage network to reduce the effects of climate</p>	<p>Contributes to Indicator #7 on integration of distributed generation from RE.</p>		



Prior Actions		Results		
	events on such network and systems, as well as foster a greater integration of renewable energy into the grid.			

* New indicator

** 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.

***Tariff shortfall is the difference between the revenue requirements for the distribution companies as defined in the tariff-setting methodology (set out in Prior Action 7) and the total of actual tariff revenues and subsidies from the Central Government budget.



ANNEX 2: FUND RELATIONS ANNEX⁵⁸

Dominican Republic—Assessment Letter for the World Bank

February 6, 2023

The Dominican Republic continued its strong rebound in 2022, while the slight growth deceleration projected in 2023 should support inflation's return to the central bank's target range in 2023. Current policies remain broadly in line with the assessment and recommendations of the 2022 Article IV Consultation,¹ and are consistent with maintaining macroeconomic stability, amid exceptional shocks and elevated risks. 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 2023.

1. After rebounding strongly, the post pandemic recovery is moderating, with inflation expected to return to its target range (4±1 percent) this year. Following 12 percent GDP growth in 2021, IMF staff estimate that economic activity expanded by 5 percent in 2022 led by services and manufacturing. Real GDP growth in 2023 is projected to slow slightly to 4 ¼ percent due to the lagged effects of financial tightening and lower global demand, returning to trend (5 percent) in 2024. Inflation, strongly impacted by global developments, has declined from its April peak 9.6 percent to 7¾ percent in December. Inflation is expected to decline further to under 5 percent in 2023 in response to lower projected commodity prices and a restrictive monetary stance. Fiscal measures—a freeze on fuel prices and electricity tariff adjustments—have played a mitigating role on inflation at the expense of a higher deficit.

2. The external position continues to be in line with fundamentals. The current account deficit in 2022 widened by more than anticipated at the time of the 2022 AIV due to higher-than-expected import prices, lower-than-expected exports (on account of the slowdown to trade partners' growth), and a higher-than-expected government deficit. Despite such widening, staff assesses that the deficit remains in line with fundamentals and desirable policy settings and without significant exchange rate misalignment. Moreover, stronger FDI and other capital inflows contributed to an increase in international reserves to historical highs at end-2022 and are healthy by traditional metrics. The current account is expected to gradually narrow in line with declining import prices and lower growth and to be fully financed by FDI. Gross financing needs and debt levels remain moderate, and the country has maintained good access to international capital markets.

3. The financial sector remains robust, financed by deposit growth, and credit has continued to grow. The prudential flexibility measures introduced in 2020 have been phased out in line with the announced schedule and provisioning coverage is around the pre-pandemic average. Nonetheless, tighter financial conditions require enhanced monitoring given their impact on the valuation of DTI's securities portfolio and the repayment capacity of borrowers. Reflecting

¹ Press Release and Country Report 22/217 were issued in July 2022 (see <https://www.imf.org/en/Countries/DOM>).

⁵⁸ The Letter was prepared with 2022 data



the DR's relative resilience and improved fundamentals, S&P recently raised their sovereign credit rating from BB- to BB.²

4. Near-term risks—largely linked to global developments—have receded somewhat relative to the 2022 Article IV but remain tilted to the downside. A recession in advanced economies—amid deepening geo-economic fragmentation and geopolitical tensions—would have strong negative spillovers for foreign exchange earnings and growth. A prolonged period of tight global financial conditions could further slow global and domestic growth, increase financing costs and debt burdens, and negatively impact capital flows. More persistent inflation may require further tightening of monetary policy and may prompt further delays in removing subsidies and slow fiscal consolidation. More frequent/intense natural disasters may cause severe economic damages, lower economic activity, and worsen the fiscal deficit.

5. The policy mix remains appropriate and broadly aligned with the 2022 Article IV assessment amid more persistent external shocks. The authorities deployed some of the fiscal space created by the frontloaded 2021 fiscal consolidation, as well as higher revenues,³ to provide subsidies and transfers to mitigate the impact of the commodity price shock on the population. Nonetheless, higher spending—including to address climate events—led to a widening central government deficit (estimated at 3.5 percent of GDP) in 2022. Fiscal policy is projected to reduce the deficit to 3 percent of GDP in 2023 and further gradual consolidation is embodied in the medium-term fiscal framework. The declining public debt projected by staff is consistent with the debt sustainability analysis presented at the time of the 2022 Article IV, and that risk factors such as the high share of debt held by non-residents in foreign currency are mitigated by long maturities and the debt holder profile. The central bank continued tightening the monetary stance throughout 2022—with the policy rate increasing to 8.5 percent (550bps cumulative increase since November 2021) and has continued to mop-up liquidity through reserve requirement increases last August. With the real rate currently over 100bps above the central bank's assessment of the neutral rate based on expectations surveys, further policy increases are expected to be data dependent.

6. Progress continues with the wide-ranging reform agenda, including groundwork on a fiscal responsibility law (FRL), financial sector and electricity sector reforms, and governance. The authorities remain committed to fiscal prudence and public financial management (PFM) improvements. An FRL—currently being designed with Fund support—would better anchor the fiscal framework and guide market expectations. Tighter controls, internal audits of spending, reporting on fiscal risks, and progress in multi-year fiscal budgeting have strengthened PFM in recent years.⁴ The authorities continue to make progress on the Electricity

² Fitch and Moody's retained their ratings with stable outlook at BB- and Ba3 respectively.

³ Higher-than-expected revenues relative to the 2022 Article IV were largely driven by higher-than-expected private consumption and import prices.

⁴ The authorities have completed and published the audit of IMF funds provided under the 2020 RFI.



Pact despite the temporary suspension of planned tariff adjustments in July 2022⁵ (following the first tariff adjustment in ten years in November 2021). Going forward, tariff adjustments—alongside targeted transfers to the most vulnerable—should be implemented to gradually eliminate regressive subsidies and treasury transfers to the sector. On governance, the government issued regulation to reduce red-tape in August 2022 and a revised Procurement Law is still with Congress. On the financial sector front, groundwork for reforms to bring frameworks in line with international standards has continued. The authorities are receiving Fund assistance to define a roadmap to bring prudential regulation in line with Basel III and IFRS and are also working on enhancing the macroprudential tool kit and stress testing framework. Staff have also recommended better coordination of similar micro-prudential requirements across the financial sector to reduce the risk of regulatory arbitrage and further strengthen the banking resolution and financial safety net.

7. 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, including through technical assistance on fiscal, monetary, financial and statistics areas. The next Article IV is planned for the spring of 2023.

⁵ The authorities have noted that the freeze on electricity tariffs is temporary though no announcements have been made about the date when tariff adjustments will resume. Staff's projections conservatively assume that tariff adjustments will resume by the middle of 2024 after the presidential elections.



Table 1. Dominican Republic: Selected Economic and Social Indicators, 2018–28

	2018	2019	2020	2021	Projection							
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Population (millions, 2021)			10.5									
Quota	477.4 millions SDRs / 0.10% of total											
Main exports	tourism, gold, tobacco											
Key export markets	U.S., Canada, Haiti											
					GDP per capita (2021, U.S. dollars)							8,986
					Poverty (2021, share of population)							23.9
					Unemployment rate (2021, percent)							7.7
					Adult literacy rate (percent, 2018)							93
Output					(Annual percentage change, unless otherwise stated)							
Real GDP	7.0	5.1	-6.7	12.3	5.0	4.2	5.0	5.0	5.0	5.0	5.0	
<i>Contributions to growth</i>												
Consumption	4.1	3.7	-1.9	5.0	4.8	3.9	3.8	3.9	3.9	3.9	3.9	
Investment	4.6	1.1	-4.4	7.7	-0.2	2.0	1.4	1.4	1.4	1.4	1.4	
Net exports	-0.9	-1.4	-3.2	0.1	-1.6	1.9	1.3	1.1	1.0	0.8	1.0	
Nominal GDP (RD\$ billion)	4,236	4,562	4,457	5,404	6,198	6,805	7,425	8,107	8,851	9,665	10,556	
Nominal GDP (US\$ billion)	85.6	89.0	78.9	94.6	112.7	...	...	...	...	...	...
Output gap (in percent of potential output)	-0.5	-0.6	-6.3	-1.9	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	
Prices												
Consumer price inflation (end of period)	1.2	3.7	5.6	8.5	7.8	4.9	4.0	4.0	4.0	4.0	4.0	
Exchange Rate												
Exchange rate (RD\$/US\$ - period average) 1/	49.5	51.2	56.5	57.1	55.0	...	...	...	...	...	...
Exchange rate (RD\$/US\$ - eop) 1/	50.2	52.9	58.2	57.3	56.2	...	...	...	...	...	...
Real effective exchange rate (eop, - depreciation) 1/	-1.9	-3.4	-8.2	5.8	2.6	-1.1	-0.1	0.0	0.0	0.0	0.0	
Government Finances					(in percent of GDP)							
Consolidated public sector debt 2/	50.1	53.3	71.1	62.1	56.8	56.6	56.6	56.1	55.6	54.8	53.9	
Consolidated public sector overall balance 2/	-3.4	-3.3	-9.0	-3.7	-4.4	-4.3	-4.0	-3.7	-3.6	-3.2	-3.2	
Consolidated public sector primary balance	0.3	0.5	-4.3	0.6	-0.3	0.2	0.5	0.7	0.9	1.0	0.9	
Central government balance	-2.2	-2.2	-7.9	-2.9	-3.5	-3.0	-2.9	-2.8	-2.7	-2.6	-2.6	
Revenues and grants	14.2	14.4	14.2	15.6	15.4	15.1	15.1	15.1	15.1	15.1	15.1	
Primary spending	13.8	13.8	18.9	15.4	15.8	14.9	14.6	14.4	14.2	14.1	14.1	
Interest expenditure	2.6	2.7	3.2	3.1	3.0	3.2	3.4	3.5	3.5	3.5	3.5	
Rest of NFPS	-0.1	-0.1	0.3	0.4	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)	7.0	11.7	20.8	13.3	13.3	10.2	9.4	9.3	9.5	9.5	9.5	
Credit to the private sector	11.1	11.8	5.3	11.6	14.7	9.8	9.1	9.2	9.2	9.2	9.2	
Net domestic assets of the banking system	5.5	8.6	2.5	11.5	18.1	10.1	8.4	8.6	9.4	8.9	9.2	
Policy interest rate (in percent) 1/	5.5	4.5	3.0	3.5	8.5	...	...	...	...	...	...
Average bank deposit rate (1-year; in percent) 1/	7.4	6.7	3.6	5.2	9.4	...	...	...	...	...	...
Average bank lending rate (1-year; in percent) 1/	12.1	12.4	8.9	11.7	11.2	...	...	...	...	...	...
Balance of Payments					(in percent of GDP)							
Current account	-1.5	-1.3	-1.7	-2.8	-5.8	-4.1	-3.8	-3.5	-3.4	-3.3	-3.1	
Goods, net	-11.2	-10.2	-8.6	-12.3	-15.4	-14.4	-13.8	-13.1	-12.7	-12.5	-12.4	
Services, net	6.4	5.7	1.8	3.9	5.3	6.4	6.6	6.6	6.5	6.5	6.5	
Income, net	3.2	3.2	5.2	5.6	4.3	3.9	3.4	3.0	2.7	2.7	2.8	
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/	3.6	3.6	5.3	5.7	7.3	4.6	4.3	4.1	4.1	4.0	3.9	
Foreign direct investment, net	3.0	3.4	3.2	3.3	3.6	3.3	3.3	3.3	3.3	3.3	3.3	
Portfolio investment, net	3.1	2.4	7.1	2.7	2.0	2.3	2.1	1.5	1.6	2.2	2.3	
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	-2.5	-2.3	-5.1	-0.3	1.6	-1.0	-1.0	-0.7	-0.8	-1.4	-1.7	
Change in reserves (-increase)	-1.0	-1.3	-2.5	-2.4	-1.3	-0.5	-0.6	-0.6	-0.7	-0.8	-0.8	
NIR (in millions of U.S. dollars)	7,627	8,781	10,098	12,289	13,787	14,594	15,652	16,625	17,628	18,873	20,218	
Total external debt (in percent of GDP)	40.2	41.9	57.2	49.9	43.8	43.0	42.2	40.8	39.9	39.6	39.4	
of which: Public sector	25.8	27.3	40.3	35.5	32.6	32.3	32.0	31.7	31.4	30.9	30.6	

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-2023-011645

18 de abril de 2023

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

Vía: Alexandria Valerio, Representante Residente en República Dominicana.

Asunto: Carta de Políticas de Desarrollo- Segunda Reforma del Sector Eléctrico para financiamiento de Política de Desarrollo para Crecimiento Sostenible.

Distinguido Sr. Presidente:

Cortésmente, nos dirigimos a usted en representación de la República Dominicana, con la finalidad de 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. Por esta razón, durante las últimas semanas y acompañados por el Banco Mundial, hemos preparado la Segunda Operación de una serie programática de dos para la Reforma del Sector Eléctrico para financiamiento de Política de Desarrollo para Crecimiento Sostenible por un monto de US\$400 millones.

El objetivo de esta segunda operación es sentar las bases para: (i) fortalecer la gobernanza del sector, (ii) potenciar la mitigación del clima y la sostenibilidad social y ambiental, y (iii) mejorar la sostenibilidad financiera y desempeño operativo del sector de electricidad.

- (i) El Sector Eléctrico aún enfrenta múltiples desafíos en la República Dominicana dada la alta dependencia de combustibles fósiles para la generación de energía, donde el 84 por ciento proviene de carbón, petróleo y gas, lo que la hace vulnerable a choques de precios adversos de los combustibles y contribuye a una alta correspondencia/coherencia de gas de efecto invernadero entre la sección macro y el programa gubernamental/acciones previas.



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- (ii) La alta exposición de la República Dominicana a desastres climáticos exige potenciar esfuerzos para promover crecimiento verde y resiliente. Al igual que otros países del Caribe, una mayor incidencia de desastres naturales a causa del cambio climático conlleva un riesgo significativo de pérdidas humanas y económicas, incluida la infraestructura de generación, transmisión y distribución de energía. Más recientemente, en setiembre de 2022, el Huracán Fiona trajo lluvias torrenciales y vientos potentes que obligaron a 12,500 personas a abandonar sus hogares y dejó a 709,000 personas sin energía eléctrica. Estos eventos ponen de relieve la vulnerabilidad del país al cambio climático y la necesidad de potenciar la resiliencia del sector energético.
- (iii) El GoRD sigue comprometido con la implementación de las reformas del Pacto Eléctrico y sentar las bases de un crecimiento a mediano plazo más verde, resiliente e inclusivo. A corto plazo, el Gobierno rápidamente respondió reduciendo los impactos de la crisis mediante la expansión de la red de seguridad social para proteger a los hogares vulnerables contra el incremento de los precios de alimentos y energía, a la vez de acelerar ciertas medidas de políticas en consonancia con el Pacto Eléctrico. Estas medidas incluyeron apoyar la autogeneración a partir de energías renovables, incentivar la descarbonización del sector de transporte promoviendo la infraestructura de carga de vehículos eléctricos, y establecer las normas de calidad de los servicios de distribución de electricidad. A mediano plazo, el Gobierno sigue comprometido con alinear las tarifas de electricidad a niveles de recuperación de costos, y se espera la reanudación de los incrementos tarifarios graduales introducidos al tenor del DPL1 cuando reduzca la inflación y las condiciones socioeconómicas lo permitan. Mientras tanto, el GoRD sigue comprometido con seguir compensando a las EDE por los ingresos no percibidos debido a los déficits en las tarifas, de acuerdo con la metodología de Régimen Tarifario de Referencia claramente establecido, para así lograr y mantener la viabilidad financiera del sector.

La operación propuesta es un componente clave de la participación del Banco Mundial en la recuperación post crisis de la República Dominicana, apoyando los esfuerzos de reforma cruciales en un sector que es vital para el continuo crecimiento económico del país.



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A continuación, se describe el contexto macroeconómico y 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

La crisis de COVID-19 tuvo impactos importantes económicos y sociales, pero el Producto Interno Bruto (PIB) repuntó 12.3 por ciento en 2021, con el respaldo de una respuesta integral gubernamental al COVID-19, incluidas reformas fiscales, macro prudenciales y supervisoras, junto con una flexibilización monetaria.

En el 2022, el Producto Interno Bruto (PIB)- registró un crecimiento de 4.9% en términos reales alimentado principalmente por el sector de servicios. El sector de hoteles, bares y restaurantes creció 24.0% durante este período. Los sectores de salud (11.3 por ciento a/a) y otros servicios (8.2 por ciento a/a) también contribuyeron a este crecimiento.

La inflación alcanzó 7.8 por ciento a/a en el 2022, muy por encima del rango objetivo de 4 ± 1 por ciento, impulsada por fuerzas externas conocidas (p.ej., cadenas de suministro, la guerra en Ucrania). Se espera que la inflación continúe un proceso de convergencia hacia el rango meta en la primera mitad de 2023, y se ubique a cierre de 2022 en torno a 4.5%. Dado el comportamiento de los precios y el crecimiento real pronosticado bajo este panorama, el PIB nominal crecería en 15.8% en 2022 y 10.8% en 2023.

- Finanzas Publicas

Del lado del gasto, el 2022 estuvo marcado por un aumento de las transferencias a fin de proteger la población de aumentos en los precios de energía y alimentos, que en total representaron recursos adicionales por 1.4% del PIB. De igual forma, durante 2022 se adicionaron gastos por concepto de atender las calamidades ocasionadas por el huracán Fiona y la vaguada que afecto la ciudad de Santo Domingo. El incremento de los ingresos por encima de lo estimado permitió cerrar el año con un déficit presupuestario de 3.5% del PIB, en línea con lo establecido en el presupuesto reformulado.



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En febrero de 2022 (antes del alza de la tasa de interés FED de EE. UU.), el Ministerio de Hacienda (MH) recompró varios bonos con vencimiento entre 2022 y 2024 a través de una nueva emisión de deuda que alcanzó US\$1.8 mil millones. Esto disminuyó la tasa de interés de la deuda pública de 7.3 a 6.6 por ciento entre diciembre 2019 y junio 2022. El MH también ha prolongado los vencimientos de 9.4 a 11.1 años durante el período de 2019-22. La deuda soberana externa ha sido calificada por Fitch and Moody's en tres puntos por debajo del grado de inversión (BB-), pero en diciembre 2022 Standard & Poor's aumentó su clasificación a BB como resultado de un mejor marco institucional en la administración pública (capacidad para mantener alto crecimiento y mejor planificación fiscal y gestión de la deuda).

Se prevé a mediano plazo una consolidación fiscal gradual, en vista de que los subsidios temporales de combustibles, la reducción de los derechos aduaneros que gravan los combustibles, y el incremento en transferencias de efectivo condicionadas en términos de recursos, contribuyeron todos a deteriorar el balance fiscal en 2022. En el curso del período de 2023-26, se proyecta una consolidación fiscal primaria gradual de 1.8 por ciento del PIB, impulsada por: 1) la eliminación gradual de los subsidios de combustibles; 2) una reducción gradual de las transferencias hacia empresas estatales en el sector de energía y agua posibilitadas por reformas para incrementar la productividad; y 3) medidas para lograr medidas de eficiencia en el gasto (p.ej., compras, consolidación de programas sociales).

Por último, se espera que los ingresos mejoren marginalmente en el período 2023-2026, manteniéndose alrededor de 15.1% del PIB al 2026, gracias a mayores ingresos fiscales fruto de una mejor administración fiscal y la lucha contra la evasión fiscal.

Programa de Política de Desarrollo para Crecimiento Sostenible.

El objetivo de Desarrollo es establecer las bases de las políticas para: (i) fortalecer la gobernanza del sector, (ii) mejorar la resiliencia climática y la sostenibilidad social y ambiental y (iii) mejorar la sostenibilidad financiera y el desempeño operativo del sector eléctrico.

La serie se articula en torno a tres pilares:

- **Pilar 1: Fortalecimiento de la gobernanza del sector:** Este pilar incluye medidas destinadas a actualizar el marco institucional y legal que rigen el sector energético y mejorar la gobernanza en el segmento de distribución de la electricidad.



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- Pilar 2: Potenciar la mitigación del cambio y la sostenibilidad social y medioambiental: Este pilar incluye reformas destinadas a aumentar la generación de energías renovables (ER), lo que contribuirá a reducir los costos de generación mediante la contratación competitiva de ER y reducir la dependencia de la generación de combustibles fósiles, mejorando así la resiliencia del sistema energético al cambio climático.
- Pilar 3: Mejorar la sostenibilidad financiera y el rendimiento operativo del sector eléctrico: Este pilar incluye medidas reglamentarias que mejorarán la calidad y fiabilidad de los servicios de electricidad, contribuyendo así a reducir el consumo de energía de las emisiones de Gases de Efecto Invernadero (GEI), así como normas y técnicas para mejorar la resiliencia del sistema eléctrico frente a desastres y fenómenos meteorológicos inducidos por el clima.

El Financiamiento de Política de Desarrollo correspondiente a la fase II apoya directamente componentes claves de la estrategia del gobierno, incluidas las agendas de desarrollo, clima y género:

1. Apoya directamente la implementación de la Estrategia Nacional de Desarrollo 2030, impulsando reformas en todas las acciones previstas. Un mejor desempeño de las empresas de distribución contribuirá a mejorar la fiabilidad del suministro eléctrico y a reducir las pérdidas, lo que aportará ingresos adicionales al sector y permitirá nuevas inversiones de mitigación y adaptación en la infraestructura eléctrica. Un buen diseño e implementación de un programa de subsidios reformado garantizará una mejor focalización e incentivará el pago de la factura eléctrica y el comportamiento de ahorro energético entre los consumidores.
2. Refuerza la estrategia climática del GoRD apoyando acciones reglamentarias sobre energías renovables y eficiencia energética que contribuirán a la reducción de las emisiones de GEI en el sector energético y más allá. Se espera que el Financiamiento para Políticas de Desarrollo (FPD) aporte 500MW adicionales de generación de electricidad a partir de fuentes de energía renovable que se contrataran a precios competitivos, lo que representa aproximadamente el 10 por ciento de la capacidad instalada existente.



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3. Se espera que el FPD lleve a la inclusión de los hogares encabezados por mujeres en la lista de las prioridades para la transferencia de Bonoluz y eventualmente conduzca a acciones focalizadas para mejorar la igualdad de género, contribuyendo a cumplir con el compromiso del GoRD en esta área.

Conclusión

Basado en lo anteriormente descrito, el Gobierno Dominicano viene realizando y continuará llevando a cabo importantes acciones con la finalidad de reiterar su compromiso para fortalecer la gestión y servicio del sector eléctrico. A pesar de los progresos y los avances macroeconómicos y fiscales que ha proyectado el Gobierno para este año fiscal, se es consciente de que el país aún tiene retos por enfrentar. En ese contexto, resulta de suma importancia 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 continuar concretizando las medidas acordadas en el Pacto Eléctrico.

A su vez y en cumplimiento a las acciones previas que conforman la Matriz de Políticas comprendida en los tres Pilares anteriormente citados, el Gobierno Dominicano, a través de las instituciones pertinentes, reitera el compromiso sobre la publicación anual de la auditoria de los Estados Financieros de cada EDE.

En virtud de lo manifestado, por medio de la presente el Gobierno Dominicano reitera su solicitud de aprobación de la segunda fase 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.

Atentamente,


JOSÉ MANUEL VICENTE
Ministro



MJM/lmm/mpr/dts



Letter of Development Policy (Unofficial Translation into English)



GOVERNMENT OF THE
DOMINICAN REPUBLIC
FINANCE

MH-2023-011645

April 18, 2023

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

Via: Alexandria Valerio, Resident Representative in the Dominican Republic.

Subject: Letter of Development Policy – Second Electricity Reform for Sustainable Growth
Development Policy Loan

Dear Mr. President,

On behalf of the Dominican Republic, we wish to respectfully reiterate the commitment of the Dominican Government to continue the changes to and increase the efficiency of the electricity sector through the implementation of measures and actions agreed upon in the Electricity Pact, which contribute to the strengthening of public policies for the reform of the sector. During the last several weeks we have therefore, together with the World Bank, prepared the second of two operations in a programmatic series for Electricity Sector Reform for Policy Development Financing for Sustainable Growth for an amount of US\$400 million.

The objective of this second operation is to lay the foundations for: (i) strengthening the governance of the sector, (ii) enhancing climate mitigation and social and environmental sustainability, and (iii) improving the financial sustainability and operational performance of the electricity sector.

- (i) The Electricity Sector still faces multiple challenges in the Dominican Republic due to its high dependence on fossil fuels for energy generation, where 84 percent comes from coal, oil, and gas, making it vulnerable to fuel price shocks and leading to a high correspondence with greenhouse gas emissions between the macro-economic situation and the government's programs and prior actions.

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- (ii) The Dominican Republic's high exposure to climate disasters demands efforts to promote green and resilient growth. Like other Caribbean countries, an increased incidence of natural disasters due to climate change carries significant risks of human and economic losses, including energy generation, transmission, and distribution infrastructure. More recently, in September 2022, Hurricane Fiona brought torrential rains and powerful winds that forced 12,500 people to evacuate their homes and left 709,000 people without electricity. These events highlight the country's vulnerability to climate change and the need to strengthen the energy sector's resilience.

- (iii) The GoDR remains committed to implementing the reforms of the Electricity Pact and laying the foundations for that a greener, more resilient, and inclusive medium-term growth. In the short term, the Government quickly responded by reducing the impact of the crisis by expanding the social safety net to protect vulnerable households against rising food and energy prices while accelerating certain policy measures in line with the Electricity Pact. These measures included supporting self-generation from renewable energy, incentivizing the decarbonization of the transport sector by promoting electric vehicle charging infrastructure, and establishing quality standards for electricity distribution services. In the medium term, the Government remains committed to aligning electricity tariffs with cost recovery levels, and the gradual tariff increases introduced under DPL1 are expected to resume when inflation and socio-economic conditions allow. In the meantime, the GoDR remains committed to compensating the electricity distribution companies for revenue not received due to tariff deficits, according to a clearly established Reference Tariff Regime methodology, to achieve and maintain the sector's financial viability.

The proposed operation is a key component of the World Bank's involvement in the post-crisis recovery of the Dominican Republic, supporting crucial reform efforts in a sector that is vital for the country's continued economic growth.

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The following describes the macroeconomic and fiscal context of the Dominican Republic under the current scenario, highlighting the measures prioritized by the Government as well as the program of actions and results promoted within the framework of this operation with the World Bank.

Macroeconomic Fiscal Situation

- National economic context

The COVID-19 crisis had significant economic and social impacts, but the Gross Domestic Product (GDP) rebounded 12.3 percent in 2021, supported by a comprehensive government response to COVID-19, including fiscal, macro-prudential, and supervisory reforms, along with quantitative easing.

In 2022, the Gross Domestic Product (GDP) registered a real growth of 4.9 percent, mainly fueled by the services sector. The hotel, bar, and restaurant sector grew 24.0 percent during this period. The health sector (11.3 percent year-on-year) and other services (8.2 percent year-on-year) also contributed to this growth.

Inflation reached 7.8 percent year-on-year in 2022, well above the target range of 4 ± 1 percent, driven by known external forces (e.g., supply chains, the war in Ukraine). Inflation is expected to continue a convergence process towards the target range in the first half of 2023 and is expected to be around 4.5 percent at the end of 2022. Given the behavior of prices and the real growth forecasted under this scenario, nominal GDP would grow by 15.8 percent in 2022 and 10.8 percent in 2023.

- Public finances

On the expenditure side, 2022 was marked by an increase in transfers to protect the population from increases in energy and food prices, which in total represented additional resources of 1.4 percent of GDP. Similarly, during 2022, additional expenses were incurred to address the calamities caused by Hurricane Fiona and the flooding that affected Santo Domingo. The increase in revenues above estimates allowed the year to end with a budget deficit of 3.5 percent of GDP, in line with the revised budget.

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In February 2022 (before the rise in the US Federal Reserve interest rate), the Ministry of Finance repurchased several bonds maturing between 2022 and 2024 through a new debt issue that reached US\$1.8 billion. This reduced the interest rate on public debt from 7.3 percent to 6.6 percent between December 2019 and June 2022. The Ministry of Finance has also extended maturities from 9.4 to 11.1 years during the period of 2019-22. External sovereign debt has been rated three notches below investment grade (BB-) by Fitch and Moody's, but in December 2022, Standard & Poor's increased its rating to BB as a result of an improved institutional framework in public administration (ability to maintain high growth and better fiscal planning and debt management).

A gradual fiscal consolidation is expected in the medium term, given that temporary fuel subsidies, the reduction of customs duties on fuels, and the increase in conditional cash transfers have all contributed to deteriorating the fiscal balance in 2022. Over the period of 2023-26, a gradual primary fiscal consolidation of 1.8 percent of GDP is projected, driven by: 1) the gradual elimination of fuel subsidies; 2) a gradual reduction in transfers to state-owned companies in the energy and water sector enabled by reforms to increase productivity; and 3) measures to achieve efficiency in spending (e.g., procurement, consolidation of social programs).

Finally, revenues are expected to marginally improve in the period of 2023-2026, remaining around 15.1 percent of GDP by 2026, thanks to higher tax revenues resulting from better fiscal administration and the fight against tax evasion.

Development Policy Program for Sustainable Growth

The goal of this Development Policy Program is to establish the basis for policies that will (i) strengthen sector governance, (ii) improve climate resilience and social and environmental sustainability, and (iii) enhance financial sustainability and operational performance of the electric sector.

The program is structured around three pillars:

- Pillar 1: Strengthening sector governance: This pillar includes measures to update the institutional and legal framework governing the energy sector and improve governance in the electricity distribution segment.

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- Pillar 2: Enhancing climate mitigation and social and environmental sustainability: This pillar includes reforms aimed at increasing renewable energy generation, which will contribute to reducing generation costs through competitive procurement of renewable energy and reducing dependence on fossil fuel generation, thereby improving the resilience of the energy system to climate change.
- Pillar 3: Improving financial sustainability and operational performance of the electric sector: This pillar includes regulatory measures that will improve the quality and reliability of electricity services, thereby contributing to reducing energy consumption and greenhouse gas emissions, as well as standards and techniques to improve the resilience of the electric system to climate-induced disasters and weather events.

The Development Policy Loan for Phase II directly supports key components of the government's strategy, including the development, climate, and gender agendas:

1. It directly supports the implementation of the National Development Strategy 2030, promoting reforms in all planned action areas. Improved performance of distribution companies will contribute to improving the reliability of electricity supply and reducing losses, which will bring additional revenues to the sector and enable new mitigation and adaptation investments in the electric infrastructure. A well-designed and -implemented subsidy program reform will ensure better targeting and incentivize payment of electricity bills and energy-saving behavior among consumers.
2. It strengthens the GoDR's climate strategy by supporting regulatory actions on renewable energy and energy efficiency that will contribute to reducing greenhouse gas emissions in the energy sector and beyond. The Development Policy Loan (DPL) is expected to add an additional 500 MW of electricity generation from renewable energy sources that will be competitively contracted, representing approximately 10 percent of existing installed capacity.

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3. The DPL is expected to lead to the inclusion of women-headed households in the priority list for the Bonoluz transfer and eventually lead to targeted actions to improve gender equality, contributing to fulfilling the GoDR's commitment in this area.

Conclusion

Based on the above-described actions, the Dominican Government has been carrying out and will continue to carry out important actions in order to reiterate its commitment to strengthen the management and service of the electricity sector. Despite the progress and macroeconomic and fiscal advances projected by the Government for this fiscal year, it is realized that the country still faces challenges. In this context, it is of utmost importance to have mechanisms and instruments that, within the framework of a policy of efficiency management and sustainable growth, allow for the expansion of the government's capacity to continue implementing the measures agreed upon in the Electricity Pact.

Likewise, in compliance with the previous actions that make up the Policy Matrix included in the three aforementioned pillars, the Dominican Government, through the relevant institutions, reiterates its commitment to the annual publication of the audits of the Financial Statements of each EDE.

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

Sincerely,

JOSE MANUEL VICENTE

Minister of Finance

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ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior Actions	Significant positive or negative environment effects	Significant poverty, social or distributional effects positive or negative
Pillar 1: Strengthening sector governance		
<p>Prior Action #1. The Borrower, in order to increase the transparency and improve the performance and efficiency of electricity sector entities, has (i) adopted measures to separate the policymaking, planning, and regulatory functions of governmental institutions in the energy sector, including and especially for the planning and integration of renewable energy; and (ii) established a process for the systematic use of indicative least-cost electricity generation planning to increase renewable energy deployment and reduce carbon emissions; as evidenced, respectively, by: (a) Government submission No. 30406, dated December 12, 2022, of the Harmonized Electric Sector Law proposal for the National Assembly to amend the General Electricity Law; and (b) Resolution R-MEM-ADM-031-2022, dated October 3, 2022, issued by the MEM.</p>	<p>No adverse effects on the environment are expected. Positive indirect environmental effects expected from this PA as strengthening governance, accountability, and transparency in the energy sector will improve the environmental governance and sustainability.</p>	<p>Indirect positive</p>
<p>Prior Action #2. The Borrower, in order to enhance the governance, efficiency and transparency of electricity distribution, has (i) derogated the legislation that created the state-owned CDEEE (<i>Corporación Dominicana de Empresas Eléctricas Estatales</i>); and, through the CUED (<i>Consejo Unificado de las Empresas Distribuidoras</i>), (ii) adopted industry best practices for the management of state-owned enterprises, strengthened the CUED supervision and oversight role over the Distribution Companies' operations, and proposed performance improvement targets for Distribution Companies for 2023 through 2026; as evidenced, respectively, by: (a) Law No. 365-22, dated November 29, 2022, and duly published in the Borrower's Official Gazette No. 11090, dated December 9, 2022; and (b) Resolution No. 1, dated February 10, 2023.</p>	<p>Positive indirect environmental effects are expected from reform of the EDEs and its subsequent strengthening of their governance and institutional performance including their capacity for environmental management and sustainability. Potential environmental negative effects may result from energy grid modernization related activities, will be managed through the existing national environmental legal framework.</p>	<p>Indirect positive</p>



Pillar 2: Enhancing climate mitigation and social and environmental sustainability

<p>Prior Action #3. The Borrower, through the Presidency, has mitigated the impact of the energy price increases on vulnerable consumers, including female-headed households, as evidenced by: (i) <i>Supérate</i> Program Administrative Resolution No. 003-2022, dated April 12, 2022, and published on the <i>Supérate</i> Program website, which expanded the number of beneficiaries of the <i>Aliméntate</i> and <i>Bonogás</i> subsidies; and (ii) <i>Supérate</i> Program Administrative Resolution No. 007-2022, dated August 15, 2022, and published on the <i>Supérate</i> Program website, which improved the targeting and coverage of the <i>Bonoluz</i> subsidy.</p>	<p>No environmental effects expected, neither positive nor negative.</p>	<p>Positive</p>
<p>Prior Action #4. The Borrower has updated the legal framework to enable the development of low-cost renewable energy generation by: (i) mandating the competitive procurement of renewable energy projects; and (ii) incentivizing the implementation of renewable energy in hybrid-systems, auto-generation systems, and community-based generation systems; as evidenced by Presidential Decree No. 65-23 dated February 20, 2023, duly published on the Borrower’s Official Gazette No. 11101 dated February 28, 2023.</p>	<p>Positive direct environmental effects are expected as the policy measure supported by this PA will incentivize renewable energy projects. Potential environmental negative effects resulting from the development of renewable energy projects will be managed through the existing national environmental legal framework.</p>	<p>Indirect positive</p>
<p>Prior Action #5. The Borrower, through the <i>Superintendencia de Electricidad</i>, has facilitated the decarbonization of the transport sector by adopting regulations for the development and operation of electric vehicle charging stations (“Charging Stations”), as evidenced by: (i) Resolution on Charging Stations’ technical standards No. SIE-137-2022-REG, dated December 19, 2022; and (ii) Resolution on tariffs applicable to Charging Stations No. SIE-138-2022-REG, dated December 19, 2022.</p>	<p>Positive direct environmental effects are expected. This policy will incentivize and promote the development and diversification of renewable energy projects which contributes to climate change mitigation by reducing fossil fuels exploitation and minimizing impacts related to oil and coal extraction. Potential environmental negative effects may result from the development of renewable energy projects which will be managed through the existing national environmental legal framework.</p>	<p>Indirect positive</p>
<p>Prior Action #6. The Borrower has incentivized energy efficiency in the public sector by requiring energy-efficient technologies, consumption habits, and alternatives to fossil fuels in the executive branch, including autonomous and decentralized entities, as evidenced by Presidential Decree No.</p>	<p>Positive direct environmental effects are expected from strengthening the legal framework for energy efficiency supporting the country’s alignment to its NDC commitments, promoting energy consumption, and reducing GHG emissions.</p>	<p>No distributional effects expected, neither positive nor negative.</p>



<p>158-23 dated April 13, 2023, and duly published in the Borrower’s Official Gazette No. 11105, dated April 14, 2023.</p>	<p>Potential environmental negative effects may result from the development of energy efficiency related projects, which will be managed through the existing national environmental legal framework.</p>	
<p>Pillar 3: Improving the financial sustainability and operational performance of the electricity sector</p>		
<p>Prior Action #7. The Borrower, through the <i>Superintendencia de Electricidad</i>, has introduced incentives for Distribution Companies to meet supply and distribution costs, enhance service quality, and reduce greenhouse gas emissions, by adopting a comprehensive regulatory framework setting forth the methodology to calculate, and periodically adjust, the technical tariff for regulated demand, as evidenced by Resolution No. SIE-065-2022-MEMI, dated June 30, 2022.</p>	<p>No environmental effects expected, neither positive nor negative.</p>	<p>To be determined if tariffs adjustments are applied in the future.</p>
<p>Prior Action #8. The Borrower, through the <i>Superintendencia de Electricidad</i>, has adopted a regulatory framework to improve the Distribution Companies’ service in terms of quality, resilience, and cost-of-service delivery, and allow for the greater integration of renewable energy into the grid, as evidenced by: (i) Resolution No. SIE-143-2022-MEMI, dated December 26, 2022, which updated the technical standards in terms of: (a) commercial service (e.g., maximum time allowed to attend to connection requests, maximum time for commercial service to consumers, billing errors, etc.); (b) technical product (e.g., variations in voltage levels and frequency); and (c) technical service (e.g., frequency and duration of failures, including those induced by climate change related weather events); and (ii) Resolution No. 004-2023-REG, dated January 11, 2023, which established design and construction standards for medium voltage/low voltage network to reduce the effects of climate events on such network and systems, as well as foster a greater integration of renewable energy into the grid.</p>	<p>Positive environmental effects expected from the enhancement of climate resilience and enhanced ability to integrated renewable energy into the power system.</p>	<p>To be determined if tariffs adjustments are applied in the future.</p>



ANNEX 5: POVERTY AND SOCIAL ANALYSIS

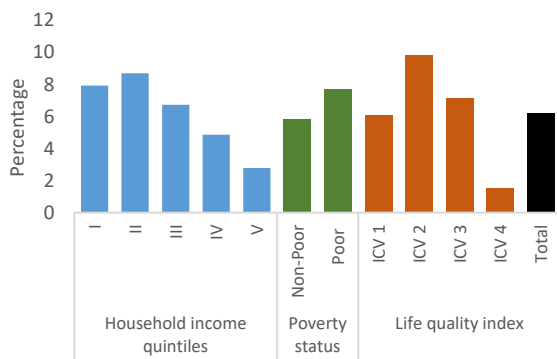
1. **A Poverty and Social Impact Analysis (PSIA) was conducted to assess the poverty and social impacts of the policies and institutional reforms supported by this DPL.**
2. **Policies supported under Pillar 1 are expected to have indirect positive impacts on social and poverty outcomes.** Policy reforms aimed at strengthening energy sector governance, operational performance of sector entities, are expected to have indirect positive impacts in the short to medium-term. Under Pillar 1, the benefits, and distributional impacts of the following 2 policies were analyzed:
 - (i) ***Measures to increase the transparency and improve the performance and efficiency of electricity sector entities.*** Good governance can promote transparency and accountability, reduce corruption, and improve the overall efficiency of the sector. Some studies have evidenced that corruption could reduce technical efficiency of the sector and constrain the efforts to increase access to electricity and national income. Independent regulatory agencies and privatization can mitigate these negative effects. Well-designed reforms can improve sector performance and reduce the negative effects of corruption on micro and macro performance indicators.⁵⁹ Improving governance in the energy sector can increase the access to reliable and affordable energy, which is essential for economic development and poverty reduction. Additionally, improved governance can help to ensure that the energy sector is sustainable and that it supports the transition to cleaner, low-carbon energy sources, which is important for addressing the adverse impacts of climate change.
 - (ii) ***Enhance the governance, efficiency, and transparency in electricity distribution, strengthening the control and supervision of the distribution companies.*** Strengthening the control and supervision of electricity distribution companies can lead to the following social and economic benefits: (i) increase the reliability and quality of the electricity supply, which can improve the overall living standards of individuals and communities; (ii) reduce the likelihood of power outages, which can be a major inconvenience for households and small businesses; and (iii) ensure that electricity distribution companies operate efficiently and effectively, which can lead to lower electricity prices for consumers.
3. **Prior Actions supported under Pillar 2 are expected to have a positive impact on social and poverty outcomes in the country.** Importantly, this pillar supports the implementation of the energy subsidy reform that would help to ensure the affordability of energy services to the poorest households. Also, the prior actions under this pillar would help reduce the carbon intensity and improve the climate resilience of the energy sector.
4. **Improving the targeting and coverage of *Bonoluz* and expanding the number of beneficiaries of *Alimentate* and *Bonogás* (PA 3) are expected to contribute to poverty alleviation and slightly reduce inequality.** Energy subsidies can contribute to more affordable energy for low-income households, reduce the risk of energy poverty and improve life quality. Energy consumption represents around 3.5 percent of

⁵⁹ Imam, M. I., Jamasb, T., & Llorca, M. (2019). Sector reforms and institutional corruption: Evidence from electricity industry in Sub-Saharan Africa. *Energy Policy*, 129, 532-545.



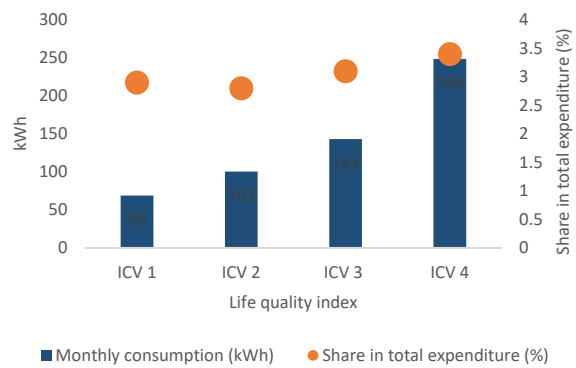
total expenditure of households across the income distribution (see Figure A.2.). Historically, the energy subsidies program in the DR has had room to improve its targeting towards the poorest households. In 2018, the *Bonoluz* program covered around 6 percent of the total population, but coverage was very similar between poor (7.7 percent) and non-poor (6 percent) households (See figure A.1). This reinforces the importance of restructuring its targeting mechanisms and strategy to reach the most vulnerable households. In 2021, DR CCT programs entered a new stage with the launch of *Supérate*, a comprehensive strategy to fight poverty. *Supérate* uses geographical and household level targeting to reach the poor and women, and gender considerations are a key component of the program’s prioritization criteria.

Figure A.1. *Bonoluz* coverage by household socioeconomic characteristics (2018)



Source: Authors calculation based on ENGIH 2018

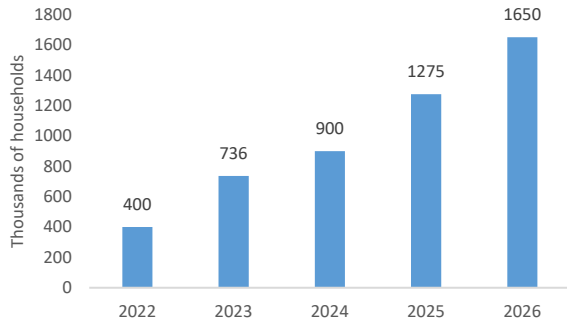
Figure A.2. Monthly electricity consumption and percentage of total household expenditure (2021)



5. **The expansion of the *Bonoluz* program coverage plus the subsequent targeting improvement could lead a poverty and extreme poverty reduction of 0.6 and 0.3 percent points respectively.** The *Bonoluz* program is expected to progressively increase the amount of the transfer amounts and the number of beneficiary households, starting from around 400 thousand in 2023 to 1.65 million in 2026 (see Figure A.3). Using a partial equilibrium microsimulation, we assessed the potential benefit on poverty reduction of the *Bonoluz* reform (see Box A.1). Results shown that in a ceteris paribus context where the program achieves its goal of covering 1.65 million households and its eligibility criteria are met satisfactorily, poverty could potentially drop from 23.9 to 23.2 percent and extreme poverty from 3.1 to 2.8 percent.

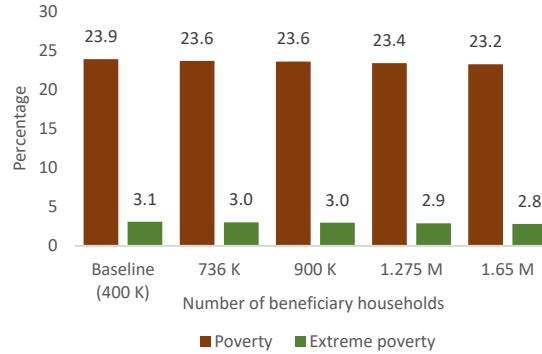


Figure A.3. Projected evolution of Bonoluz beneficiaries (2023 – 2026)



Source: CUED - BONOLUZ Technical Board

Figure A.4. Simulated poverty impacts of increasing the number of beneficiaries of the Bonoluz program.



Source: Authors calculations based on ECNFT 2021

Box A.1. Assessing the impact of the Bonoluz reform on poverty.

The method for assessing the effectiveness of the *Bonoluz* program in reducing poverty is based on a microsimulation using the Dominican Republic's labor force survey (ECNFT) 2021 as follows: (i) current beneficiaries are identified within the survey to validate correspondence with administrative records, resulting in an acceptable match, the ECNFT estimates around 390 thousand beneficiary households in 2021; (ii) identifying potential new beneficiaries using the ICV categorization; (iii) assigning to the current beneficiaries the updated amount of the cash transfer (692 Dominican pesos of 2023) and deflating the amount to 2021 prices using the official Consumer Price Index (CPI). ICV-1 and ICV-2 households are progressively and randomly selected to complete the coverage target presented in Figure A.3; (iv) assigning the *Bonoluz* benefit for potential new beneficiaries following the same pattern used in (ii); (v) re-estimating the household income per-capita considering the *Bonoluz* transfer; and (vi) calculating the new poverty numbers under the selected scenarios.

Note: These results must be interpreted as a partial equilibrium analysis not an attempt to forecast poverty levels across time but provide an understanding of the capacity of the reform to alleviate poverty in a given period. Other factors affecting poverty levels are treated as constant.

6. **The expansion of the *Bonogás* program would also contribute to improve households' welfare, reducing energy costs and promoting a cleaner energy source.** The *Bonogás* program aims to expand access to affordable and reliable energy to vulnerable households by providing energy subsidies to an additional 400,000 low-income beneficiaries under the *Supérate* umbrella. This will help to reduce energy poverty and free up disposable income that can be spent on other goods and services. Additionally, the program would promote the use of bottled gas which is a cleaner and more efficient source of energy than charcoal and biomass and can help to reduce household air pollution (HAP) and its associated negative health effects, such as respiratory problems⁶⁰, cardiovascular disease, and pregnancy complications. HAP disproportionately affects women and children, who spend more time inside home and closer to the source of pollution.⁶¹

7. **Other reforms supported under this pillar which aim at supporting renewable energy**

⁶⁰ Arif, M., & Parveen, S. (2021). Carcinogenic effects of indoor black carbon and particulate matters (PM2.5 and PM10) in rural households of India. *Environmental Science and Pollution Research*, 28(2), 2082-2096.

⁶¹ World Health Organization. (2016). *Burning opportunity: clean household energy for health, sustainable development, and wellbeing of women and children.*



deployment and reducing carbon emissions in the power sector (PAs 4 and 5) are expected to have indirect positive impacts on social and poverty outcomes. Reducing carbon emissions is critical to slow climate change and could prevent premature deaths due to air pollution.⁶² Additionally, a recent WB analysis⁶³ shows that vulnerable groups are disproportionately and negatively affected by climate change impacts due to the lack of access to resources, information, health services, infrastructure, financial resources, and decision-making processes. These factors make it more difficult for them to adapt to changing conditions such as droughts, floods, sea level rise, and extreme weather events. Consequently, the efforts to slow down climate change and mitigate its negative impacts is a key social development element. On the other hand, incentivizing small-scale solar and wind generation systems through distributed generation can also provide social benefits such as empowering communities and individuals, improving access to energy, creating jobs, and improving rural development and community building.

8. Increases in renewable electricity can enhance some additional benefits in labor demand, health, and economic growth. As renewable energy technologies (RETs) are labor intensive and thus capable of boosting job creation, cleaner air and water, improved health (by reducing the emissions of harmful pollutants), rural development, lower energy imports, diversification, and empowerment of women and marginalized groups. For example, a recent study⁶⁴ identified and removed gender-specific barriers that women in the sustainable energy sector face, alleviating energy-poverty, and increasing their participation and leadership in developing gender-responsive energy policies.

9. No significant distributional impacts are expected from PA 6 which aims to incentivize energy efficiency in government institutions and PA 7 which aims to set the technical standards and tariff for the development of electric vehicle charging stations.

10. Policies supported under Pillar 3 are expected to have indirect positive social impact. However, any impact on energy tariffs associated with those policies in the future must include an additional distributional impact analysis. Enabling the distribution companies to recover the full cost of efficient service adjusting the distribution companies' annual revenue and the optimization of the cost-of-service delivery would have a positive impact on energy provision and the quality of service. The impact of this measures on final user tariffs is not expected to apply in the short term, but adjustments are expected to resume when social and economic circumstances allow. Currently, DR households spend between 3 percent (lowest quintile) and 3.4 percent (highest quintile) of their total income on electricity, so changes in tariffs could reduce disposable family income and require proper mitigation measures.

11. Ensuring that electricity distributors cover the efficient cost of providing the electricity service (PA 8) could contribute to improve the welfare of Dominican households. Inclusive economic growth is the single most effective means of reducing poverty and boosting prosperity. Yet most economic activity is impossible without adequate, reliable, and competitively priced modern energy.⁶⁵ A reference technical tariff regime (*Tarifa Técnica de Referencia*), is important to ensure that electricity distributors cover the

⁶² Loomis, D., Grosse, Y., Lauby-Secretan, B., El Ghissassi, F., Bouvard, V., Benbrahim-Tallaa, L., & Straif, K. (2013). The carcinogenicity of outdoor air pollution. *Lancet Oncology*, 14(13), 1262.

⁶³ World Bank - Forthcoming Poverty Assessment for the Dominican Republic.

⁶⁴ Mahajan, R., & Bandyopadhyay, K. R. (2021). Women entrepreneurship and sustainable development: select case studies from the sustainable energy sector. *Journal of Enterprising Communities: People and Places in the Global Economy*.

⁶⁵ Chakravorty, U., Pelli, M., & Marchand, B. U. (2014). Does the quality of electricity matter? Evidence from rural India. *Journal of Economic Behavior & Organization*, 107, 228-247.



efficient cost of providing the electricity service to ensure their financial sustainability, create incentives for efficiency, allow for investments in infrastructure, which in sum can improve the reliability, resilience, and quality of service.

12. Issuing a resolution to set the norms for quality of service for the distribution of electricity (PA 8) is expected also to contribute to improve life conditions. The definition of technical standards of service quality of electricity is important for consumers as it helps to ensure the reliability, safety, innovation to develop more efficient technologies, cost-effectiveness, and fairness of the electricity service. According to the World Development Indicators (WDI), by 2016 in Dominican enterprises experienced around 7 monthly interruptions in the electricity service. The advancements proposed under PA 8 could thus impulse growth and productivity of small-business which has been proven as an effective tool on poverty alleviation^{66 67 68} and could also improve the quality of access to basic services such as education and healthcare.

⁶⁶ Beck, T., & Demirgüç-Kunt, A. (2004). SMEs, growth, and poverty. World Bank.

⁶⁷ Maksimov, V., Wang, S. L., & Luo, Y. (2017). Reducing poverty in the least developed countries: The role of small and medium enterprises. *Journal of World Business*, 52(2), 244-257.

⁶⁸ Abisuga-Oyekunle, O. A., Patra, S. K., & Muchie, M. (2020). SMEs in sustainable development: Their role in poverty reduction and employment generation in sub-Saharan Africa. *African Journal of Science, Technology, Innovation and Development*, 12(4), 405-419.

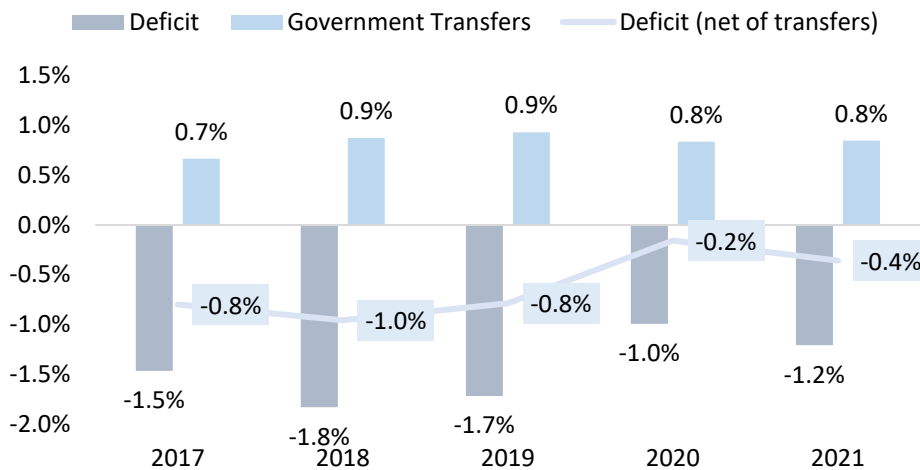


ANNEX 6: SIMPLIFIED FINANCIAL MODEL FOR THE EDEs

1. The Dominican Republic electricity sector is currently being transformed with World Bank support through this DPL series. Among others, the Dominican Electricity Corporation (CDE) was divided into three distinct business activities: generation, transmission, and distribution. Currently the distribution companies are known as the EDEs which are state-owned electricity companies: EDESUR, EDENORTE AND EDEESTE⁶⁹. These companies had represented a long-standing drag on the country’s fiscal resources, primarily due to below-cost tariffs, large distribution losses, weak oversight, and poor targeting of subsidies.⁷⁰ Consumption tariff were kept fixed between 2011 and 2020, increasing the sector’s dependence on fiscal resources. At the same time, the companies suffer from large technical and commercial losses.

2. In the past, the deficit of the electric sector has averaged between 1.5 and 1.8 percent of GDP, with government transfer subsidizing most of it, especially after 2020 (Annex X, figure 1). Even the gap shown below between the operational balance and the transfers would have ultimately ended-up in the government’s balance sheet (the sole shareholder and, thus, the single bearer of the sector’s risks) through bail outs, recapitalizations, below the line transfers or simply through loss of equity.

Annex 6, Figure 1 -- EDEs’ operational deficit and government transfers (In percent of GDP, EDEs – CDEEE – ETED – EGEHID)



Source: Staff elaboration based on data from Ministry of Energy and Mining (MEM) and DR Central Bank.

3. Between 2021 and 2022, the financial losses of the EDEs increased by US\$682 million, or from US\$740 to US\$1422 million. The cost of energy purchased due to the surge in international energy prices, account for more than the overall increase (US\$916million), but it was partially offset by the impact of tariff increases (US\$389 million) and a slight reduction in overall losses (US\$32 million). Other factors, including an increase in investment also contributed to a worsening of the overall financial imbalance (by

⁶⁹ There is a private distribution company called CEPM which is located in some tourist regions, but their share is minimal.

⁷⁰ Annex VIII. Electricity Sector Reforms – Dom. Rep. Article IV IMF July 2022



US\$188m). This simple calculation shows that the EDEs financial results are very volatile and variable depending on external and internal variables.

Annex 6, Table 1. EDEs increased in financial losses
(In US\$ MM)

	2021	2022	Change
Operational Losses	740	1,422	682
<i>Of which</i>			
Rev. lost (due to losses)	965	932	(32)
Gross tariff revenue	(2,463)	(2,852)	(389)
Purchases from generators	2,041	2,957	916
Other balance items	196	384	188
Memorandum items			
Losses, % of production	33.1%	32.0%	
US\$ Tariff Sell \$Cents/kWh	14.2	17.7	
US\$ Tariff Buy \$Cents/kWh	10.9	17.1	

Source: World bank staff calculations based on EDEs financial statements.

4. **Our simplified model to estimate the overall losses of the EDEs and, by proxy the required government subsidy, is based in the EDEs income and expenditure financial reports.** On the revenue side, this model focuses on: (1) the EDEs production, which are driven by real growth, (2) technical and commercial losses, and (3) actual vs allowed tariff allowed by the regulator⁷¹. On the expenditure side, the key variables are: (1) is the quantity and average price of fuel purchases (which reflect the payment from the EDEs to the generation sector), (2) the EDEs capital expenditures (CAPEX- currently directly subsidized by the authorities under a different budget line and that are key for lost reductions), and (3) debt service requirements (which are envisaged not to change significantly).

5. The average energy sale price (USCents/kWh) is assumed to evolved differently under each scenario (ranging from being constants in local currency, through adjustment by inflation and by 5 percent in real terms). To model fuel purchases, the model assumes the average fuel price (USCents/kWh) evolves with the price of natural gas, which is less volatile than crude oil. Natural gas prices are taken as a proxy given that more than 40% of the energy generation matrix corresponds to natural gas.

6. While the simplified model needs to be further improved through supervision efforts, five financial scenarios has been reasonably well calibrated for the following scenarios:

- A baseline scenario under which tariffs are held constant in DR’s currency (fall in dollar terms), losses are reduced from 36 percent to 28 percent between 2023 and 2025, respectively, as envisaged in the authorities Electricity Compact. Finally, the average price of the fuel needed for generation is kept constant at 2022 levels.
- A “lack of loss-reduction” scenario with similar assumptions to the baseline, but losses are kept

⁷¹ FETE: is a Special Tariff Attenuation Fund created under decree 302-03 to smooth fluctuations in the electricity rate due to fluctuations in hydrocarbon prices, CPI, and exchange rate for BTS1 (Tarifa Baja Tensión Simple Residencial, from Spanish abbreviation) clients. The objective is that it must be financed by funds from government revenue to cover the difference in revenue between the applied rate and the reference rate (which would cover the actual costs of the service).



constant at 36 percent over 2023-26.

- A “fuel-price fall” scenario with similar assumptions to the baseline, but fuel costs fall with the expected reduction in natural gas prices (a proxy for the price of the various fuels utilized in DR’s generation).
- A “tariff increase” scenario with similar assumptions to the baseline but: (1) tariffs are adjusted by a real increase of 5 percent per year, (2) fuel prices are constant at 2022 levels, and (3) losses are kept constant at 36 percent over 2023-26.
- A “combined” scenario in which all measures are combined the tariff increased, the loss reduction and the fuel price fall.

Annex 6, Table 2. Selected Model Assumptions

	2022	2023	2024	2025	2026
Real GDP Growth ^{2/}	5.3	4.8	5.0	5.0	5.0
Inflation ^{1/}	8.7	5.5	4.0	4.0	4.0
Nominal Exchange Rate ^{1/}	55	57	59	62	64
Nominal GDP in US\$ Billion ^{1/}	95	113	121	127	133
Crude Oil, Brent, \$/bbl ^{2/}	100	92	80	70	60
Energy collected, % of billed	91.4	94.5	94.5	94.5	94.5
Baseline Scenario					
Losses, % of production	32.0	36.0	32.0	28.0	28.0
US\$ Tariff in constant DR pesos of Oct 2022, \$Cents/kWh	17.7	16.9	16.3	15.6	15.0
Natural gas, U.S., \$/mmbtu	6.6	6.6	6.6	6.6	6.6
"Lack of Loss Reduction" Scenario					
Losses, % of production	32.0	36.0	36.0	36.0	36.0
US\$ Tariff in constant DR pesos of Oct 2022, \$Cents/kWh	17.7	16.9	16.3	15.6	15.0
Natural gas, U.S., \$/mmbtu	6.6	6.6	6.6	6.6	6.6
"Fuel Price Fall" Scenario					
Losses, % of production	32.0	36.0	32.0	28.0	28.0
US\$ Tariff in constant DR pesos of Oct 2022, \$Cents/kWh	17.7	16.9	16.3	15.6	15.0
Natural gas, U.S., \$/mmbtu ^{2/}	6.6	6.2	6.0	5.8	5.6
"Tariff Increase after 2023" Scenario					
Losses, % of production	32.0	36.0	36.0	36.0	36.0
US\$ Tariff increasing with inflation + 5 percent annual	17.7	16.9	17.7	18.6	19.5
Natural gas, U.S., \$/mmbtu ^{2/}	6.6	6.6	6.6	6.6	6.6
"Combined" Scenario					
Losses, % of production	32.0	36.0	32.0	28.0	28.0
US\$ Tariff increasing with inflation + 5 percent annual	17.7	16.9	17.7	18.6	19.5
Natural gas, U.S., \$/mmbtu ^{2/}	6.6	6.2	6.0	5.8	5.6
Memorandum items					
Bonoluz transfers as % of GDP	0.1	0.2	0.2	0.2	0.2
Dollar investment by EDEs in US\$ MM	134.0	304.6	233.3	233.3	233.3

Footnote: 1/ source: MEPyD 2/ source: World Bank

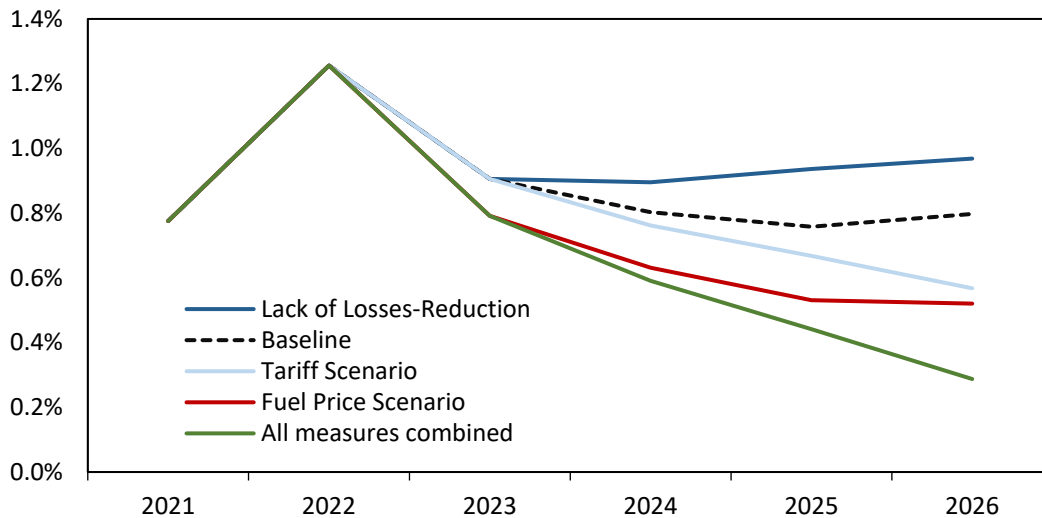
Source: GEP, MEPyD, MEM data and WB staff hypothetical assumptions.



7. As shown on the graph below the required subsidy to the EDEs will range between 0.3 and 1.0 percent of GDP by 2026, depending on the scenario. It is however expected to be lower than during the 2022 peak of 1.3 percent of GDP under all simulations.

8. **The path for the Bonoluz means-tested program expansion is fiscally neutral, i.e., increases in budget allocation should be funded by reallocating resources from untargeted programs.** However, the expansion in this program, estimated at a constant 0.2 percent of GDP, should be expected to contribute to reduce commercial losses in poorest regions/neighborhoods. As the transfers are not made directly to the EDEs, but to the identified poorest households this are rather interpreted as an increase in compliance by the poor and would then translate in less commercial losses. To avoid complicating the simulations, the model assumes equal EDE investment ratios under all scenarios.

Annex 6, Figure 2. EDEs Operational Losses
(In percent of GDP)



Source: WB staff elaboration.



Annex 6, Table 3. EDEs Summarize Balance Sheet in US\$ Billion (unless otherwise stated)

	2017	2018	2019	2020	2021	2022E	Baseline		
							2023P	2024P	2025P
Revenues	1.6	1.6	1.7	1.4	1.5	2.0	1.9	2.0	2.1
Expenditures	2.3	2.6	2.9	2.3	2.5	3.5	3.0	3.0	3.2
Purchase of Energy	1.6	2.0	2.1	1.7	2.0	3.0	2.3	2.4	2.5
Operating Expenses (Opex)	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4
Investments (CAPEX)	0.2	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.2
Other Expenditures	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Operational Balance with Investments	(0.7)	(1.0)	(1.3)	(0.9)	(1.0)	(1.5)	(1.1)	(1.0)	(1.0)
Financing	0.8	1.0	1.1	1.0	1.0	1.5	1.1	1.0	1.0
Government contributions	0.5	0.7	0.7	0.6	0.7	1.4	1.1	1.0	1.0
Cover Operational Deficit	0.2	0.3	0.3	0.4	0.7	1.4	1.1	1.0	1.0
Debt Acknowledgment and Payment Agreement	0.2	0.4	0.4	0.2	-	0.0	0.0	0.0	0.0
Other financing	0.3	0.4	0.4	0.4	0.3	0.0	-	-	-
Balance after Financing	0.1	0.0	(0.2)	0.1	0.0	-0.1	0.0	0.0	0.0
Memorandum items									
Total Government Transfers to Electric Sector	1.5	1.2	1.0	0.9	1.0				
Difference in total transfer with contribution to EDEEs	1.0	0.6	0.3	0.3	0.2				
Production (GWh)	13,546	13,749	14,303	15,150	15,677	17,394	18,229	19,141	20,098
Billed Energy (GWh)	9,278	9,644	10,240	11,059	10,484	11,733	11,667	13,016	14,470
Losses (GWh)	4,267	4,104	4,064	4,091	5,193	4,057	6,562	6,125	5,627
Losses (As a percentage of production)	31.5%	29.9%	28.4%	27.0%	33.1%	23.3%	36.0%	32.0%	28.0%

Source: WB staff elaboration.



ANNEX 7: EVOLUTION OF INDICATIVE TRIGGERS UNDER DPL1 TO PRIOR ACTIONS UNDER DPL2

Indicative Triggers for DPL2 under DPL1	Prior Actions under DPL2	Comments/Rationale for change
Pillar 1: Strengthening sector governance		
<p>IT1. 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>Corporación Dominicana de Empresas Eléctricas Estatales</i> and (ii) ensure a separation of policymaking, planning, and regulation functions of governmental institutions in the energy sector.</p>	<p>PA1. The Borrower, in order to increase the transparency and improve the performance and efficiency of electricity sector entities, has (i) adopted measures to separate the policymaking, planning, and regulatory functions of governmental institutions in the energy sector, including and especially for the planning and integration of renewable energy; and (ii) established a process for the systematic use of indicative least-cost electricity generation planning to increase renewable energy deployment and reduce carbon emissions; as evidenced, respectively, by: (a) Government submission No. 30406, dated December 12, 2022, of the Harmonized Electric Sector Law proposal for the National Assembly to amend the General Electricity Law; and (b) Resolution R-MEM-ADM-031-2022, dated October 3, 2022, issued by the MEM.</p>	<p>PA1 now consists of IT(i) and IT4, which is a re-grouping of the policy actions to give better coherence to the matrix while amplifying the policy content of the original ITs. A key component of PA(i) is improving the sector planning function and division of responsibilities among key sector entities as part of improving sector-side governance, as manifested in the integration of CNE under MEM, which improve the process for planning for and procurement of renewable energy. This aligns with the government’s plan to undertake least-cost generation planning which is expected to incentivize further integration of RE into the grid.</p>
<p>IT2. The DGAPP has taken measures to improve the governance and the performance in electricity distribution by declaring the PPP proposal from the <i>Consejo Unificado de la Empresas Distribuidoras de Electricidad</i> 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.</p>	<p>PA2. The Borrower, in order to enhance the governance, efficiency and transparency of electricity distribution, has (i) derogated the legislation that created the state-owned CDEEE (<i>Corporación Dominicana de Empresas Eléctricas Estatales</i>); and, through the CUED (<i>Consejo Unificado de las Empresas Distribuidoras</i>), (ii) adopted industry best practices for the management of state-owned enterprises, strengthened the CUED supervision and oversight role over the Distribution Companies’ operations, and proposed performance improvement targets for Distribution Companies for 2023 through 2026; as evidenced,</p>	<p>PA2 now consists of IT1(ii) and IT2, which is a re-grouping of the policy actions to give better coherence to the matrix while amplifying the policy content of the original ITs. The dissolution of CDEEE has already brought greater transparency to the functioning and operational efficiency of their former subsidiaries, including of the three companies in power distribution. This precedes and enables the subsequent complementary actions by</p>



	respectively, by: (a) Law No. 365-22, dated November 29, 2022, and duly published in the Borrower’s Official Gazette No. 11090, dated December 9, 2022; and (b) Resolution No. 1, dated February 10, 2023.	CUED to further enhance the transparency, efficiency, and governance of the EDEs as reflected in the CUED resolution. Together these two policy actions enhance and strengthen each other.
Pillar 2: Enhancing climate resilience and social and environmental sustainability		
IT3. 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.	PA3. The Borrower, through the Presidency, has mitigated the impact of the energy price increases on vulnerable consumers, including female-headed households, as evidenced by: (i) <i>Supérate</i> Program Administrative Resolution No. 003-2022, dated April 12, 2022, and published on the <i>Supérate</i> Program website, which expanded the number of beneficiaries of the <i>Aliméntate</i> and <i>Bonogás</i> subsidies; and (ii) <i>Supérate</i> Program Administrative Resolution No. 007-2022, dated August 15, 2022, and published on the <i>Supérate</i> Program website, which improved the targeting and coverage of the <i>Bonoluz</i> subsidy.	Trigger was upgraded to PA and strengthened to better reflect the policy changes. Slight edits of the wording to reflect the latest government policies and incorporation of additional social protection measures related to <i>Aliméntate</i> and <i>Bonogás</i> subsidies by <i>Supérate</i> in the Government’s efforts to mitigate the impacts of price increases on the most vulnerable households.
IT4. 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.		Merged with PA1
IT5. The Borrower has taken measures to enable the development of low-cost renewable energy generation by updating the legal framework to mandate	PA4. The Borrower has updated the legal framework to enable the development of low-cost renewable energy generation by: (i) mandating the competitive procurement of renewable energy projects; and (ii) incentivizing the implementation of renewable energy in	Trigger was upgraded to PA and strengthened to better reflect the policy changes. Slight edits of the wording to reflect the latest government policies and incorporation of additional social protection



<p>the competitive procurement of renewable energy projects and clarify the roles and responsibilities of sector entities in its implementation.</p>	<p>hybrid-systems, auto-generation systems, and community-based generation systems; as evidenced by Presidential Decree No. 65-23 dated February 20, 2023, duly published on the Borrower’s Official Gazette No. 11101 dated February 28, 2023.</p>	<p>measures related to <i>Alimentate</i> and <i>Bonogás</i> subsidies by <i>Supérate</i> in the Government’s efforts to mitigate the impacts of price increases on the most vulnerable households.</p>
	<p>PA5. The Borrower, through the <i>Superintendencia de Electricidad</i>, has facilitated the decarbonization of the transport sector by adopting regulations for the development and operation of electric vehicle charging stations (“Charging Stations”), as evidenced by: (i) Resolution on Charging Stations’ technical standards No. SIE-137-2022-REG, dated December 19, 2022; and (ii) Resolution on tariffs applicable to Charging Stations No. SIE-138-2022-REG, dated December 19, 2022.</p>	<p>New prior action. This captures additional policy actions by the regulator to facilitate the decarbonization the transport sector, which increases the electricity demand and reduces the country’s heightened reliance on fossil fuels for energy, but also requires actions to ensure that its rapid expansion does not negatively affect the grid.</p>
<p>IT6. 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.</p>	<p>PA6. The Borrower has incentivized energy efficiency in the public sector by requiring energy-efficient technologies, consumption habits, and alternatives to fossil fuels in the executive branch, including autonomous and decentralized entities, as evidenced by Presidential Decree No. 158-23 dated April 13, 2023, and duly published in the Borrower’s Official Gazette No. 11105, dated April 14, 2023.</p>	<p>Trigger was replaced with another policy action to capture an executive action that will have tremendous impacts on the energy efficiency in public sector, as the approval of the EE bill is expected to be forthcoming.</p>
<p>Pillar 3: Improving the financial self-sufficiency and operational performance of the electricity sector</p>		
<p>IT7. 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-</p>		<p>Dropped. See more detailed explanation in Section 4.1.</p>



2021-TF.		
<p>IT8. 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>PA7. The Borrower, through the <i>Superintendencia de Electricidad</i>, has introduced incentives for Distribution Companies to meet supply and distribution costs, enhance service quality, and reduce greenhouse gas emissions, by adopting a comprehensive regulatory framework setting forth the methodology to calculate, and periodically adjust, the technical tariff for regulated demand, as evidenced by Resolution No. SIE-065-2022-MEMI, dated June 30, 2022.</p>	<p>IT upgraded to PA and strengthened through the incorporation of considerations for actions and costs associated with GHG reduction activities.</p>
<p>IT9. 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>	<p>PA8. The Borrower, through the <i>Superintendencia de Electricidad</i>, has adopted a regulatory framework to improve the Distribution Companies' service in terms of quality, resilience, and cost-of-service delivery, and allow for the greater integration of renewable energy into the grid, as evidenced by: (i) Resolution No. SIE-143-2022-MEMI, dated December 26, 2022, which updated the technical standards in terms of: (a) commercial service (e.g., maximum time allowed to attend to connection requests, maximum time for commercial service to consumers, billing errors, etc.); (b) technical product (e.g., variations in voltage levels and frequency); and (c) technical service (e.g., frequency and duration of failures, including those induced by climate change related weather events); and (ii) Resolution No. 004-2023-REG, dated January 11, 2023, which established design and construction standards for medium voltage/low voltage network to reduce the effects of climate events on such network and systems, as well as foster a greater integration of renewable energy into the grid.</p>	<p>IT upgraded to PA and strengthened to capture quality of service regulations which is aimed at improving the quality and climate resilience of the distribution network and the ability of the grid to absorb RE-based distributed generation, which contributes to the country's mitigation efforts.</p>



ANNEX 8: EVOLUTION OF RESULTS INDICATORS

*The new indicators are to align with the final set of prior actions for DPL2 and reflect the results of these actions identified together with the Government.

Indicators under DPL1	Indicators under DPL2	Comments/Rationale for change
Pillar 1: Strengthening sector governance		
<p>DPL1 Indicator #1. Separate state-owned generation, transmission, and distribution companies regularly report and disclose information on key financial and operational performance indicators (binary)</p> <p>Baseline: No (end 2020) Target: Yes (end 2024)</p>	<p>DPL2 Indicator #1. New renewable energy capacity consistent with least-cost planning and contracted through competitive procurement by distribution companies (megawatt)***</p> <p>Baseline: 0 (2022) Target: 500 (end 2024)</p>	<p>Indicator 1 had to be dropped because it is not supported by any policy action.</p> <p>Given the re-grouping of the PAs, a previous Indicator 5 becomes indicator 1. Its phrasing is enhanced to capture the contributing policy actions to give the intended result.</p>
<p>DPL1 Indicator #2. Electricity Distribution Companies operating under a public private partnership arrangement (number)</p> <p>Baseline: 0 (end 2020) Target: 1 (end 2024)</p>	<p>DPL2 Indicator #2. Distribution companies that have signed performance agreements with Unified Council for the Distribution Companies (<i>Consejo Unificado de las Empresas Distribuidoras</i>, CUED) including a publicly disclosed list of Key Performance Indicators and published annual audited financial statements for calendar years 2020 to 2023 (number)***</p> <p>Baseline: 0 (2022) Target: 3 (end 2024)</p>	<p>New indicators 2-4 to illustrate the full impact of DPL2 PA2.</p>
	<p>DPL2 Indicator #3. Distribution companies that have data collection systems in place allowing them to effectively monitor progress on Key Performance Indicators (number)***</p> <p>Baseline: 0 (2022) Target: 3 (end 2024)</p>	



	<p>DPL2 Indicator #4. Distribution companies with all key management positions filled following competitive procurement using meritocratic criteria by 2024 (number)***</p> <p>Baseline: 0 (2022) Target: 3 (end 2024)</p>	
Pillar 2: Enhancing climate mitigation and social and environmental sustainability		
<p>DPL1 Indicator #3. Extremely poor and poor households* benefiting from <i>BonoLuz</i> (number)</p> <p>Baseline: 330,000 (end 2020) Target: 900,000 (end 2024)</p>	<p>DPL2 Indicator #5. Extremely poor and poor households* benefiting from <i>Bonoluz</i> (number)</p> <p>Baseline: 330,000 (end 2020) Target: 900,000 (end 2024)</p>	No change.
	<p>DPL2 Indicator #6. Female-headed households benefitting from <i>Bonoluz</i> (number)***</p> <p>Baseline: 231,000 (end 2020) Target: 549,000 (end 2024)</p>	DPL2 Indicator 6 has been added to illustrate the additional impacts of DPL2 PA3 and to achieve the gender tag for DPL2
<p>DPL1 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)</p> <p>Baseline: No (end 2020) Target: Yes (end 2024)</p>		DPL1 Indicator 4 was to achieve the gender tag for DPL1 and is not relevant for DPL2.
<p>DPL1 Indicator #5. New renewable energy capacity contracted by distribution companies (megawatt)</p> <p>Baseline: 0 (end 2020) Target: 500 MW (end 2024)</p>	<p>DPL2 Indicator #7. Distributed renewable energy capacity connected to grid (megawatt)***</p> <p>Baseline: 250 (2022) Target: 400 (end 2024)</p>	<p>DPL1 Indicator 5 is renumbered to DPL2 Indicator 1. See above.</p> <p>DPL2 Indicator 7 has been added to capture the result of a new policy action on distributed generation (DPL2 PA4) and grid code DPL2 PA8).</p>
	DPL2 Indicator #8. Charging	DPL2 Indicator 8 has been



	stations for electric vehicles installed nationwide (number)*** Baseline: 350 (end 2022) Target: 500 (end 2024)	added to capture the results of DPL2 PA 5.
DPL1 Indicator #6. National Energy Efficiency programs under implementation (number) Baseline: 0 (2020) Target: 1 (end 2024)	DPL2 Indicator #9. Reduction from baseline of energy use in public buildings (percentage)*** Baseline: 0 (2022) Target 2 (end 2024)	DPL2 Indicator 9 has been added to capture the result of DPL2 PA 6, which is a new prior action.
Pillar 3: Improving the financial sustainability and operational performance of the electricity sector		
DPL1 Indicator #7. Share of the cost of efficient service provision recovered by end-use electricity tariffs (percentage) Baseline: 60 (end 2020) Target: 80 (end 2024)	DPL2 Indicator #10. Number of distribution companies with a tariff shortfall**** (number)*** Baseline: 3 (end 2022) Target: 0 (end 2024)	DPL2 Indicator 9 has been added to capture the result of DPL2 PA 6, which is a new prior action. This is an indicator of the financial sustainability of the EDEs.
DPL1 Indicator #8. Electricity distribution losses (electricity invoiced/ electricity injected in the distribution network) (percent) Baseline: 33.5 (end 2020) Target: 21.1** (end 2024)		This indicator is not included because the timeline for achieving substantial losses is beyond the target date of end-2024. The first steps are to improve governance and build capacity. That is the impact of DPL2.

* Families classified under Life Quality Index (*Indice 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.

*** New Indicator.

**** Tariff shortfall is the difference between the revenue requirements for the distribution companies as defined in the tariff-setting methodology (set out in Prior Action 7) and the total of actual tariff revenues and subsidies from the Central Government budget.