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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A

PROPOSED LOAN

IN THE AMOUNT OF US$ 350 MILLION TO

REPUBLIC OF PANAMA
FOR THE

Panama Second Climate Resilience and Green Growth DPL
February 27, 2024

Environment, Natural Resources & The Blue Economy Global Practice
Latin America and Caribbean Region

Republic of Panama

GOVERNMENT FISCAL YEAR

January 1 – December, 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective of February 15, 2024)

Currency Unit = Panamanian Balboa (PAB)

PAB 1.00 = US$1.00

ABBREVIATIONS AND ACRONYMS

ASA	Advisory Services and Analytics
ASEP	Regulatory Authority of Public Services (*Autoridad Nacional de los Servicios Públicos*)
BOP	Balance of Payments
CPF	Country Partnership Framework
CPI	Consumer Price Index
DPL	Development Policy Loan
EIA	Environmental Impact Assessment
ENACU	National Strategy for Universal Access (*Estrategia Nacional de Acceso Universal*)
ETA	Energy Transition Agenda
FDI	Foreign Direct Investment
FY	Fiscal Year
GDP	Gross Domestic Product
GHG	Greenhouse gas
GoP	Government of Panama
GRS	Grievance Redress Service
IBRD	International Bank for Reconstruction and Development
ICE	Internal Combustion Engine
IMF	International Monetary Fund
INEC	National Institute of Statistics and Census (*Instituto Nacional de Estadística y Censo*)
LAC	Latin America and the Caribbean
LTS	Long-Term Low Greenhouse Gas Emission Development Strategy
MEF	Ministry of Economy and Finance (*Ministerio de Economía y Finanzas*)
MEPS	Minimum Energy Performance Standards
MIDA	Ministry of Agricultural Development (*Ministerio de Desarrollo Agropecuario*)
NCAP	National Climate Action Plan
NDC	Nationally Determined Contributions
NGO	Nongovernmental Organization
OIT	Original Indicative Trigger
PA	Prior Action
PDO	Project Development Objective
PEG	Strategic Government Plan 2019-2024 (*Plan Estratégico de Gobierno 2019-2024*)
PFM	Public Financial Management
PLL	Precautionary and Liquidity Line
RTCA	Central American Technical Regulations (*Reglamento Técnico Centroamericano*)
SEBD	Exclusive Defined Benefit Subsystem (Subsistema Exclusivo de Beneficio Definido).
SFRL	Social and Fiscal Responsibility Law
SICA	Central American Integration System (*Sistema de la Integración Centroamericana*)
SMR	Restoration Monitoring System (*Sistema de Monitoreo de Restauración)*
SNE	National Secretariat of Energy (*Secretaría Nacional de Energía*)
WB	World Bank

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REPUBLIC OF PANAMA

PANAMA SECOND CLIMATE RESILIENCE AND GREEN GROWTH DPL

TABLE OF CONTENTS

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SUMMARY OF PROPOSED FINANCING AND PROGRAM

BASIC INFORMATION

Project ID	Programmatic	If programmatic, position in series
P181306	Yes	2nd in a series of 2

Proposed Development Objective(s)

The development objective is to establish policy foundations to foster low-emission and sustainable economic growth and climate change resilience.

Organizations

Borrower:	REPUBLIC OF PANAMA
Implementing Agency:	Ministry of Economy and Finance (MEF)

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Financing	**350.00**

DETAILS

International Bank for Reconstruction and Development (IBRD)	350.00

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
Pillar I – Support reforms to implement energy transition and socially inclusive low-carbon growth		
Results Indicator #1: Number of charging stations per 100 km of the primary and secondary road network	2.2 [2022]	17.3 [2025]
Results Indicator #2: Percentage of electric buses of the Panama City public operator's fleet (*MiBus*) acquired or under procurement	0 [2022]	4 [2025]
Results Indicator #3: Estimated percentage of efficient air conditioners in the country	55 [2021]	91 [2025]
Results Indicator #4: Estimated percentage of efficient refrigerators in the country	19 [2021]	35 [2025]
Results Indicator #5: Capacity installed of solar energy for self-generation (MW)	94.2 [2023]	210 [2025]
Results Indicator #6: Number of rural households electrified through *Plan Colmena*	0 [2021]	2,000 [2025]
Results Indicator #7: Percentage of female-headed households electrified through *Plan Colmena*	0 [2021]	35 [2025]
Results Indicator #8: Percentage of population covered by 4G networks	73 [2021]	87 [2025]
Results Indicator #9: Annual growth of the number of rural households connected to internet via satellite	0 [2022]	20 [2025]
Pillar II – Establish policy foundations to sustain natural capital for resilient growth		
Results Indicator #10: Negative Carbon balance maintained[1]	Yes [2021]	Yes [2025]
Results Indicator #11: Sector programs and plans, as well as private sector chambers of commerce considering adaptation and mitigation measures based on climate scenarios	0 [2021]	10 [2025]
Results Indicator #12: Percentage of approved Environmental Impact Assessments (EIA) that integrate climate mitigation and resilience considerations	0 [2021]	100 [2025]
Results Indicator #13: Percentage of public sector projects considering climate change criteria	0 [2021][2]	100 [2025]
Results Indicator #14: Number of agritourism fincas certified	0 [2021]	480 [2025]
Results Indicator #15: Zero net deforestation of mangroves in National Protected Areas achieved	No [2021]	Yes [2025]
Results Indicator #16: Land area restored (ha)	0 [2021]	8,500 [2025]
Results Indicator #17: Percentage of marine area under conservation and sustainable management schemes	30.5 [2021]	50 [2025]

[1] Based on national Greenhouse Gas (GHG) inventory.
[2] Baseline value 0 as in absence of the public sector tag for climate a systematic analysis is not possible. Data is only available after 2021.

1. INTRODUCTION AND COUNTRY CONTEXT

1. **The development objective of the proposed operation is to establish policy foundations to foster low-emission and sustainable economic growth and climate change resilience**. The proposed US$350 million operation is the second in a series of two Development Policy Loans (DPLs). The DPL series underpins Panama's efforts toward long-term sustainable growth by promoting key institutional reforms for decarbonization and climate resilience. Pillar I supports reforms that foster a clean energy transition, socially inclusive low-carbon growth, and technological innovation for disaster preparedness. Pillar II supports climate and nature governance, enhanced institutional capacity to advance the country's climate change adaptation and mitigation agendas, while fostering resilience and social inclusion.

2. **This operation supports Panama's commitment to place sustainability and climate action at the center of economic management and social policy.** Climate change threatens economic growth and disproportionately affects the most vulnerable. Panama suffers from the impacts of both climate-induced natural hazards and altered weather patterns. The frequency and intensity of *El Niño* and *La Niña* events have increased, causing severe droughts and floods.[3] This puts the country's main assets and economic sectors at risk, including the Panama Canal and hydroelectric production, which accounted for nearly 63 percent of electricity generation over 2017-2021. In August 2023, a severe drought affected the levels of the Panama Canal, impacting vessel transit capacity. The Panama Canal Authority imposed restrictions on navigation, limiting the number of ships and the vessel draft, which resulted in restrictions not only in the number of ships but also their size. These restrictions have created delays which impact international trade and global supply chains. Indigenous peoples in coastal regions face additional climate-related challenges. For example, members of the Guna ethnic group are being relocated from their ancestral islands to the mainland due to rising sea levels and other climate hazards. The operation's focus on resilience is complemented by addressing sectors with high mitigation potential: energy, transport, and land use, land-use change, and forestry.

3. **Panama has made important efforts to sustain growth and reduce poverty, but climate change is adversely impacting the poor and vulnerable.** Panama has been one of the fastest-growing economies in the world, making it one of the few countries in Latin America and the Caribbean (LAC) to narrow the income per capita gap with more developed economies. However, Panama's income inequality is one of the highest in the region,[4] surpassed only by Brazil and Colombia. Poverty is highest in rural areas (28 percent) and indigenous districts (70 percent).[5] Changing climatic conditions and physical damage from floods and hurricanes pose a threat to rural and indigenous household income, food security, and human capital. Panama's indigenous communities rely heavily on agriculture, therefore, enhanced climate adaptation through sustainable agriculture, forest conservation and management, ecotourism and conservation of natural capital are important to tackle poverty. In addition, the provision of basic public services has improved over the last decade, but access and quality indicators still vary significantly across the country. Despite recent efforts to ensure universal access to electricity in indigenous districts, access remains low.

4. **This operation is consistent with IBRD guidance on countries with income above the Graduation Discussion Income level.** Strong formal and informal institutions are critical for advancing climate change adaptation and mitigation, and impact the vulnerability of individuals and communities, including their ability to access resources.[6] While Panama is a high-income country, with a real GDP per capita of US$ 15,700 in 2022, institutional capacity constraints exist and are exacerbated when multiple government agencies are involved in the implementation of policy actions, as it is the case for climate change. Therefore, the operation focuses on the strengthening of institutions as well as development of global

[3] IPCC (2021).
[4] The 2019 Gini index was 49.8. See: https://data.worldbank.org/indicator/SI.POV.GINI?locations=PA
[5] Panama - Systematic Country Diagnostics Update 2023 (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099092023102017335/BOSIB0764ca91c0bc087f700f00315dd88e
[6] Challenges ahead: climate change in the context of weak institutions; *https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/03/Ampaire-paper.pdf*.

public goods, knowledge, and best practices for the benefit of other developing countries. The focus on strengthening institutional resilience to climate change includes the Climate Change Policy (*Política Nacional de Cambio Climático al 2050*) that establishes clear roles and responsibilities of national institutions, incorporating a central role for the Ministry of Economy and Finance (MEF) in mainstreaming climate into economic policies, the budget process, public investment, and mobilizing finance. In addition, the Policy establishes objectives for the production and publication of risk and vulnerability information, indices and maps. Institutional strengthening also includes regulations to enhance the transparency and traceability of forest and fishery resource protection. The provision of global public goods includes the adoption of regional energy efficiency standards which will stimulate cross-border markets for efficient appliances and prevent the recycling of obsolete and inefficient cooling systems across borders. These elements directly link to strengthening Government of Panama (GoP) institutions at the regional level, and by fostering stronger regional collaboration. The operation also supports gender and inclusion-focused policies on rural electrification through renewable energy and digital connectivity, setting the model for peers in Central America and the region.

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

5. **Panama's economic growth exceeded that of its regional peers prior to the COVID-19 pandemic.** Panama's growth during 2001-2019, averaging 6.1 percent, was the highest in LAC and was more than twice the regional average. Average GDP growth decelerated from 7.8 percent to a still respectable 4.6 percent between 2010-2014 and 2015-2019. Construction's contribution to growth fell to close to zero by 2019, following the completion of infrastructure megaprojects, and re-exports from the Colon Free Trade Zone fell from 36 to 13 percent of GDP between 2012 and 2019, due to reduced demand from Venezuela, Colombia, and other LAC countries. The slowdown in growth also reflects a significant slowdown in Panama's total factor productivity.[7]

6. **Hit by a severe economic contraction during the COVID-19 pandemic, Panama's growth rebounded quickly over 2021-2023.** Panama experienced one of the sharpest economic contractions in the world during COVID-19 in 2020. In 2021, real GDP growth, however, reached 15.8 percent, setting the stage for a rebound. The employment rate increased from 54 to 58 percent between 2021 and 2023, and the unemployment rate dropped from 11 to 7 percent over the same period. Despite a substantial decline in growth in the last quarter of 2023, driven by a slowdown in Canal traffic and by protests against a copper mine contract, the economy still exhibited a solid year-on-year growth, estimated at 6 percent. This performance was supported by an uptick in activities, such as construction, transport and storage, wholesale and retail commerce, utility, business services, and the hospitality sector.

7. **Panama was on track to meet the Social and Fiscal Responsibility Law (SFRL) overall 2025 fiscal deficit target, with minor delays, but 2023 developments and the forthcoming elections are likely to further delay this objective.** The overall and primary deficits of Non-Financial Public Sector (NFPS) were 6.4 and 4.2 percent of GDP, respectively, in 2021, down from 9.7 and 7.2 percent of GDP a year earlier. Public finances improved further in 2022 with the overall and primary deficits improving by two 2 percentage points of GDP (i.e., 4.1 and 2.3 percent of GDP, respectively) through increased tax collection and contained wage bill spending. The public sector debt-to-GDP ratio, which jumped from 38 to 64 percent of GDP between 2018 and 2020 because of COVID-19, declined to 61 percent by 2023. The 2008 SFRL calls for the overall fiscal deficit to reach 1.5 percent of GDP by 2025, a path that was derailed by the increase in the overall deficit to 4.6 percent in 2023, which was driven by the preservation of subsidies for certain food, energy, and other products — a legacy of 2022 protest against inflation, and lower than expected revenue from *Cobre* Panama (See Box 1). Despite this temporary setback the GoP maintained its commitment to fiscal sustainability. Shortly after the Constitutional Court ruled that the contract with *Cobre* Panama was unconstitutional, which led to US$375 million (or 0.5 percent of GDP in 2023) revenue

[7] See: 2022 Systematic Country Diagnostic Update, P500142.

loss, the Ministry of Finance withdrew the draft 2024 budget from the National Assembly and replaced it by a new draft with across-the-board spending cuts.

8. **The current account deficit has been largely financed by Foreign Direct Investment (FDI).** The current account deficit remained around 3 to 4 percent of GDP between 2021 and 2022, driven by a surge in copper exports, exports from Colon Free Trade Zone, transport exports, and tourism. However, it increased to 4.7 percent in 2023 due to a decline in copper exports. FDI increased from 2.4 to 3.5 percent of GDP between 2021 and 2023, coming mainly to sectors, such as business and financial services, storage and telecommunication, commerce, tourism, transport, and other services. While FDI in extractive sectors is driven by resource-seeking factors that are different from those for mobile investments, the termination of the *Cobre* Panama contract has nonetheless increased country risks perceptions. Portfolio investment and government borrowing have contributed to closing the gap, preserving international reserves. In 2023, with US$11.2 billion in reserves (equivalent to 3.6 months of imports), Panama's gross international reserves continued to be sufficient.

9. **The financial sector is sound and the news that Panama exited the international Financial Action Task Force (FATF) grey list will revitalize financial flows, among other indirect benefits.** Non-performing loans (NPLs) increased slightly in 2021 as forbearance policies expired, but the banking sector remains well capitalized and liquid, with both indices doubling the regulatory minimum. By June 2023, NPLs stood at 2.5 percent, representing a small increase compared to the previous year but still at healthy levels. Additionally, these NPLs are adequately provisioned, with a coverage ratio of more than 100 percent. Financial sector assets totaled US$143 billion by June 2023, an increase of 4.1 percent or US$6 billion (y-o-y). The loan portfolio recorded a balance of US$60 billion, with a y-o-y increase of 5.3 percent. This highlights the confidence of both internal and external depositors in the country's macroeconomic stability. Panama's financial sector is exposed to physical risks stemming from extreme climate events and natural hazards, but transition risks to a greener, carbon-neutral economy are assumed to be low. After a firm policy effort to introduce a registry of Final Beneficiaries, a key recommendation emerging from the Anti-money Laundry and Combating the Financing of Terrorism Risk Evaluation conducted by the Panamanian authorities with World Bank (WB) support, Panama successfully exited the International Financial Action Task Force's (FATF) list of jurisdictions under increased monitoring in October 2023. The WB's DPL, Pandemic Response and Growth Recovery (P174107) played a key role in this achievement, through technical assistance and facilitation of coordinated action among key government institutions.

2.2 MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

10. **Growth is expected to sharply decline in 2024 to 2 percent as copper production comes to a halt; but commerce, tourism, financial, transport, and logistic services should help lift growth back over the medium term.** *Cobre* Panama accounted for about 4 percent of GDP, and the ruling of the Constitutional Court (*Suprema Corte de Justicia de Panamá*) calls for a full stop in production.[8] Private and public investment are also expected to decline in 2024, driven by high interest rates and a moderate fiscal consolidation effort. However, GDP is expected to gradually recover starting in 2025 onwards as Panama continues to be an attractive investment destination, supported by its robust services sector, as well as political and economic stability. Nevertheless, reputational risks associated with contract termination could temporarily moderate FDI flows.

11. **The SFRL overall deficit target of 1.5 percent of GDP is expected to be reached by 2030, although the new authorities' upfront efforts to reduce expenditure and enhance revenue could speed up the process.** Under a baseline of "no strong fiscal reforms" scenario, the overall and primary deficits are expected to rise from 4.6 and 2.8 percent of GDP in 2023 to 5 and 3.3 percent in 2024, before a gradual decline to 4.5 and 2.4 percent of GDP by 2027, respectively. This fiscal consolidation process relies on further containment of spending (including the phasing out of some subsidies provided to

[8] Although some minimum level of production might be necessary going forward to finance appropriate levels of care and maintenance and, eventually, also mining closure.

the population), and improvements in tax administration. Public debt is forecast to rise from 61 percent of GDP in 2023 to 62.5 percent by 2027 (Table 1).

12. **The current account deficit is expected to deteriorate through 2025, driven mainly by a sharp fall in copper exports, before improving slowly by 2027.** After reaching a peak of 5.3 percent in 2025, the current account deficit is projected to narrow to 3.5 percent by 2027. Merchandise exports will start a gradual recovery in 2026, whereas services exports are expected to resume their recovery in 2024, supported by air transport, logistics (including those associated with the distribution of pharmaceutical products to South America), tourist-related services, encompassing meetings, incentives, conferences, and exhibitions, and general tourism. FDI is expected to fall from 3.5 to 3.3 percent of GDP between 2023 and 2025, still financing the bulk of the Current Account Deficit (Table 1) and will be complemented by portfolio investment and the public sector's net capital inflows. International reserves are expected to remain around 13 percent of GDP during 2024-2027.

13. **The GoP's debt-to-GDP ratio is expected to remain around 63 percent over the medium term.** Debt dynamics are favorable to Panama, i.e., growth is expected to be above the average real interest on public debt – which is the key stability conditions for debt-to-GDP ratio if the primary deficit is moderate, as expected. The debt sustainability analysis (DSA) shows that public debt is sustainable under baseline scenarios throughout 2024-2029 and remains manageable under all standardized shocks in the medium term (Figure 1). In particular, under primary balance, interest rate and exchange rate shocks, public debt reaches a peak ranging from 66 to 77 percent in 2029, compared to the baseline at 62.5 percent, while gross financing requirement reaches a peak in 2029 ranging from 15 to 21 percent of GDP, compared to the baseline of 5.4. However, under a real GDP growth shock, both the debt and gross financing needs would exceed the country specific threshold. The materialization of any of Panama's contingent liabilities could worsen the situation, including natural disasters (which has cost Panama about 0.5 percent of GDP on average between 2000 and 2018), legal claims (including those from the termination of the contract with *Cobre* Panama, a process that may nonetheless take several years), and the imbalances in the country's Exclusive Defined Benefit Subsystem (*Subsistema Exclusivo de Beneficio Definido - SEBD*).

14. **As a small, open economy, Panama is highly vulnerable to internal and external shocks.** Persistent global inflationary pressures and tighter financing conditions could increase food and energy costs and put pressure on external and fiscal balances. Faster-than-expected monetary tightening in the US and weaker external demand could further slowdown Panama's growth. Fiscal pressures associated with these shocks, policies to mitigate their impacts and the elections in 2024 could slow the pace of consolidation. Internally there are also high contingencies associated with natural hazards that will intensify because of climate change, which add downside risks to the outlook. Potential medium-term fiscal risks include the design of pension reforms, needed to curb the actuarial deficit of the SEBD, inefficiencies in tax administration, resolution of the copper mining closure, and climate shocks, including drought in the Canal and increased frequency and intensity of other natural hazards.

15. **Panama's macroeconomic policy framework is deemed adequate.** The country's external position has strong underlying fundamentals, with a dollarized economy, healthy reserves and robust FDI and other capital inflows. Economic growth has rebounded strongly post-pandemic and is expected to be resilient to the setback during 2024-2025 due to mining and canal activities, supported by a broad-based services sector. The risks to FDI flows are tilted to the upside, since no major assumptions has been made about the country's potential success of attracting nearshoring investments, wholly or as part of a value-chain – anchored in Panama's free trade agreement with the US. The country's access to capital markets is expected to remain strong, which will provide a first line of response to macroeconomic shocks. On fiscal policy, the past several governments have all established a strong track record of prudent fiscal policy, anchored under the SFRL, and the remaining fiscal support due to the 2022 inflation are expected to be unwounded over the next few years. Both fiscal deficit and debt-to-GDP are at sustainable levels. Fiscal deficit has a downward projection from 2025 onwards and public debt is expected to peak around 63 percent during 2026-2027, with the expected recovery in global and domestic growth, fiscal

reforms, and prudent fiscal policy. The GoP is committed to fiscal consolidation and recognizes the necessity for comprehensive fiscal reforms in the medium term.

Table 1. Key macro indicators

Variable	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Real economy, annual percent change, unless indicated otherwise										
GDP (Nominal -- Local Currency)	8.2	3.6	-18.1	18.1	9.0	7.8	3.9	5.6	6.0	6.5
Real GDP	5.6	3.3	-17.7	15.8	10.8	6.0	2.0	3.6	3.9	4.4
GDP per capita (US$, nominal)	6.4	2.0	-19.3	16.5	7.5	6.4	2.6	4.3	4.7	5.2
Contributions to Real GDP Growth										
Private Consumption	2.7	5.0	-15.9	7.0	10.9	7.0	3.7	6.0	6.4	6.7
Gross Fixed Investment	7.6	-0.6	-49.3	29.6	20.1	11.9	3.6	7.1	6.6	6.8
Exports	5.0	1.2	-20.6	20.6	12.7	3.3	0.2	7.3	7.0	5.6
Imports	4.3	-2.5	-34.0	25.2	12.5	4.7	3.1	8.4	5.8	4.6
CPI (year-average)	0.8	-0.4	-1.6	1.6	2.9	1.5	1.9	2.0	2.0	2.0
Fiscal Account, percent of GDP unless indicated otherwise										
Expenditures	21.7	20.5	27.0	23.7	22.2	22.3	22.7	23.2	23.2	23.3
Revenues	19.0	17.8	17.3	17.3	18.1	17.7	17.6	18.4	18.6	18.8
General Government Balance	-2.8	-2.7	-9.7	-6.4	-4.1	-4.6	-5.0	-4.9	-4.6	-4.5
General Government Debt	38.2	44.5	64.7	60.1	60.3	61.0	62.9	62.9	62.8	62.5
Balance of Payments, percent of GDP unless indicated otherwise										
Current Account Balance	-7.4	-4.8	-0.3	-3.0	-4.1	-4.7	-4.7	-5.3	-4.5	-3.5
Imports, Goods and Services	42.9	39.6	30.9	36.2	48.6	47.7	47.8	49.7	50.2	49.9
Exports, Goods and Services	42.4	41.1	34.7	40.6	49.2	47.7	46.6	47.9	49.0	49.2
Net Foreign Direct Investment	-7.3	-5.3	-0.1	-2.4	-3.6	-3.5	-3.3	-3.4	-3.5	-3.5
Gross Reserves	6.2	4.2	14.8	14.3	14.5	14.1	14.3	14.2	14.1	13.9
External Government Debt	30.6	34.7	52.2	48.7	50.2	51.2	53.2	53.7	54.1	54.6
GDP nominal in US$ (millions)	67294	69722	57087	67407	73449	79211	82331	86965	92158	98133

Source: World Bank staff calculations based on official data from the National Institute of Statistics and Census (INEC) and MEF.

Variable	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BOP financing requirements and sources financing, percent of GDP unless otherwise indicated										
Financing Requirements	9.1	6.8	-1.0	1.6	9.5	4.7	4.7	5.3	4.5	3.5
Current Account Deficit	7.4	4.8	0.3	3.0	4.1	4.7	4.7	5.3	4.5	3.5
Net Errors and Omissions	1.8	2.0	-1.3	-1.5	5.4	0.0	0.0	0.0	0.0	0.0
Financing Sources	9.1	6.8	-1.0	1.6	9.5	4.4	3.5	4.1	4.3	4.7
Capital Account Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Foreign Direct Investment	-7.3	-5.3	-0.1	-2.4	-3.6	-3.5	-3.3	-3.4	-3.5	-3.5
Net Portfolio Investment	-0.5	-4.5	-3.5	5.6	-5.4	-1.6	-1.6	-1.7	-1.7	-1.5
Net Govt Foreign Borrowing	-3.4	-6.0	-9.7	-4.5	-5.5	-4.1	-4.2	-4.7	-4.7	-4.8
Net All Other Flows	3.1	7.3	4.6	1.4	7.6	4.0	4.9	4.9	4.9	4.5
Change in reserve assets	-0.9	1.8	9.7	-1.6	-2.6	0.7	0.7	0.7	0.7	0.6
External Financing Gap	0.0	0.0	0.0	0.0	0.0	-0.3	-1.2	-1.1	-0.3	1.2
Nominal GDP (US$) growth	8.2	3.6	-18.1	18.1	9.0	7.8	3.9	5.6	6.0	6.5

Source: World Bank staff calculations based on official data from the National Institute of Statistics and Census (INEC) and MEF.

Variable	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Key Fiscal Indicators, percent of GDP unless otherwise indicated										
Overall Balance	-2.8	-2.7	-9.7	-6.4	-4.1	-4.6	-5.0	-4.9	-4.6	-4.5
Primary Balance	-1.0	-0.9	-7.2	-4.2	-2.3	-2.8	-3.3	-3.1	-2.8	-2.4
Total Revenues and Grants	19.0	17.8	17.3	17.3	18.1	17.7	17.6	18.4	18.6	18.8
Tax Revenues	14.2	13.2	12.4	11.9	13.0	12.8	12.8	13.3	13.5	13.6
Taxes on Goods and Services	3.9	3.6	3.1	3.1	3.4	3.3	3.3	3.5	3.5	3.6
Direct Taxes	4.9	4.2	4.0	3.7	4.5	4.4	4.4	4.6	4.7	4.7
Social Security Contributions	5.4	5.3	5.4	5.1	5.1	5.1	5.1	5.2	5.3	5.2
Taxes on International Trade	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Tax Revenues	4.7	4.3	4.9	5.4	5.0	4.9	4.9	5.1	5.1	5.2
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditures	21.7	20.5	27.0	23.7	22.2	22.3	22.7	23.2	23.2	23.3
Current Expenditures	15.3	15.3	20.3	18.1	16.6	17.0	17.1	17.2	17.3	17.1
Wages and Compensation	4.6	4.6	6.1	5.6	5.3	5.5	5.4	5.5	5.5	5.3
Goods and Services	1.2	1.2	1.2	1.3	1.1	1.3	1.4	1.4	1.4	1.2
Interest Payments	1.7	1.8	2.5	2.3	1.8	1.8	1.7	1.8	1.7	2.1
Current Transfers	7.8	7.7	10.5	8.9	8.4	8.4	8.7	8.6	8.6	8.5
Pensions	5.0	5.0	6.6	5.8	5.4	5.5	5.5	5.4	5.5	5.5
Social Assistance	0.3	0.3	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5
Other Current Transfers	2.5	2.4	3.3	2.7	2.5	2.5	2.6	2.6	2.6	2.4
Capital Expenditures	6.4	5.2	6.7	5.7	5.5	5.3	5.5	5.9	5.9	5.9
Government Financing	3.6	6.6	9.7	5.2	5.2	4.3	4.5	5.2	4.7	4.8
External (Net)	3.4	6.0	9.7	4.5	5.5	4.1	4.2	4.7	4.7	4.8
Domestic (Net)	0.2	0.6	0.0	0.7	-0.3	0.2	0.3	0.5	0.0	0.0

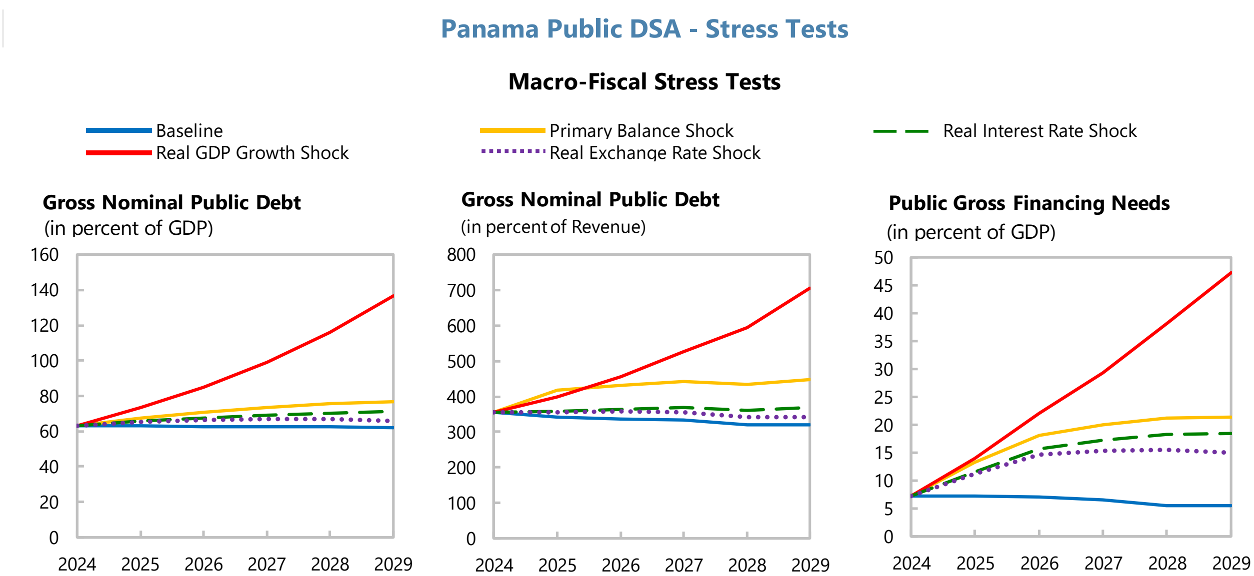
Source: World Bank staff calculations based on official data from the National Institute of Statistics and Census (INEC) and MEF.

Box 1: The macroeconomic impact of recent developments at the Panama Canal and the mining sector

Panama Canal - Lack of rain in 2023 due to *El Niño* contributed to low water levels in the Gatun and other reservoirs which provide water for the Panama Canal. The number of ship crossings dropped from an average of 38 per day to 25 during February to December 2023 and are expected to remain at this level through mid-2024. Canal revenues in nominal terms, however, rose (US$2.5 billion, Jan-Oct 2022 to US$2.9 billion, Jan-Oct 2023) as pricing policies more than compensated for lower volumes. The Canal administration is expected to start undertaking investments in 2024/2025 to enhance the Canal's resilience to lower rainfall. While the Canal's contribution to GDP and the external sector is not expected to be disrupted, its transfers to the Treasury might fall between 2025 and 2030 as profits are retained to partly fund these investments.

Mining Sector - *Cobre* Panama went on stream in 2019 and exported 1.2 and 4.0 percent of GDP in 2019 and 2022, respectively. According to Panama's mining association, proven mineral deposits would have allowed the mine to sustain these levels of exports for at least an additional 20 years. However, a renegotiated contract with *Cobre* Panama approved by Parliament on October 20, 2023, was declared unconstitutional by the Constitutional Court on November 28, 2023, following three-weeks of continued protests against its swift endorsement (the contract had already been declared unconstitutional previously in 2017). The ruling of the Court requires the termination of the contract with *Cobre* Panama but not necessarily the closure of the mine. To contain the protests, Congress passed Law 407, which provides a moratorium on all new exploration and exploitation licenses for metal mining activities. While it is unclear whether a future government would be willing to reopen this issue (perhaps in the context of a new social compact and after thorough consultations), over time Panama's diversified growth could compensate for the loss of mining activity, especially if further improvements to the business environment are carried out. The suspension of mining activities will have a short-term fiscal impact, although the expected revenues from the mine were relatively small, amounting to 0.5 percent of GDP in 2023. As compensatory measures, the GoP might also need to support regional development in and around the mining area.

Figure 1. Panama Public Debt Sustainability Analysis (DSA) – Stress Tests



Source: World Bank staff calculations.

2.3. IMF RELATIONS

16. **Since the outbreak of the pandemic, Panama has taken advantage of the resources made available by the International Monetary Fund (IMF).** It tapped US$515 million under the Rapid Financing Instrument (RFI) in April of 2020, and in January of 2021 it obtained a Precautionary and Liquidity Line (PLL), a precautionary facility that only disburses at the request of

the country, in the amount of US$2.7 billion, which expired on January 18, 2023. Panama treated the PLL as an insurance against extreme shocks arising from a deterioration in the COVID-19 crisis. Panama qualified for the PLL due to its sound economic fundamentals, strong institutional policy frameworks, long track record of good economic performance and policy implementation, and its commitment to maintain such policies in the future. The IMF Board meeting on Panama's Article IV 2022 took place on February 22, 2023, and an Assessment Letter updated on November 27, 2023 is presented in Annex 2. The IMF and WB staff meet regularly and closely coordinate activities in fiscal, Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) and on broader economic management issues and reforms. A joint Fund/Bank Financial Sector Assessment Program (FSAP) is ongoing to be completed in 2024. Also, the WB and IMF are providing support to build statistical capacity. The IMF is focusing on fostering statistical development and helping the country advance toward the Special Data Dissemination System (SDDS), while the WB has recently carried out a productivity assessment of the National Statistics of Panama.

3. GOVERNMENT PROGRAM

17. **The proposed operation aligns with three of the five long-term objectives established by the National Strategic Plan with State Vision 2030 (PEN in Spanish) and supports three of the five strategic pillars included in the Strategic Government Plan 2019-2024** (*Plan Estratégico de Gobierno* - PEG). PEG pillars on "governance", "competitiveness and job creation", and "poverty and inequality reduction", are supported through regulatory frameworks in favor of a sustainable and inclusive energy transition. This includes support for the most vulnerable populations on energy and digital access; as well as maintaining the country's natural capital, and the ecosystem services they provide, through policy reforms to promote the sustainable use of natural resources, while enhancing adaptation and resilience to the impacts of climate change.

4. PROPOSED OPERATION

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

18. **This DPL is aligned with Panama's PEG by supporting policy foundations towards an inclusive energy transition and promoting climate change resilience.** Pillar I supports reforms towards a clean energy transition and inclusive low-carbon development by: (i) scaling up electric mobility; (ii) promoting energy efficiency; (iii) increasing electricity access through solar power; and (iv) enhancing digital connectivity. Pillar II supports natural capital, climate and nature governance, and social inclusion by: (i) enhancing climate adaptation planning; (ii) strengthening the climate governance framework; (iii) tracking the progress of land use sector climate actions; and (iv) strengthening marine and coastal ecosystems. In addition, the policy reforms under this operation aim to operationalize Panama's 2030 climate commitments under the Paris Agreement, as articulated in its NDCs, and will inform the country's long term climate commitments for 2050. Thus, the operation aims at establishing cross-sector and multi-agency enabling elements for Panama's mitigation and adaptation.

19. **The operation builds on the program achieved by DPL 1 and reflects strong ongoing GoP commitment.** One of the original indicative triggers (OIT #2) identified in DPL 1 has been upgraded to prior action (PA) for DPL 2. A further three of the OITs (#1, #3, and #4) have been adjusted to better showcase the GoP's reform agenda and reflect specific technical aspects required to implement the program. On the other hand, two of the OITs (#5 and #7) have been substituted due to the policies' approval timeframe exceeding the current operation's timeline. The Long-Term Climate Change Strategy, currently under public consultation is expected to be released in April 2024, and the submission of the updated Forest Law to the National Assembly is expected by the end of 2024. Two OITs from DPL 1 (#6 and #8) were met in a timely manner, showcasing their high relevance to the GoP. The timely implementation of these triggers allowed the Bank to collaborate with the GoP to deepen the reform program. The OITs were substituted with ambitious policy actions focused on enabling economic growth (PA 8) and mainstreaming climate change considerations into the country's policies (PA 6). Finally, the indicators remain relevant and allow measurement of the impact under the cumulative policy reforms for both operations.

Table 1 in Annex 6 compares the OITs proposed in DPL1 with PAs in DPL 2, explaining changes where relevant.

20. **The DPL incorporates lessons learned from the Bank's engagement in Panama.**[9] Lessons incorporated into the design of this operation include: (i) ensuring strong GoP ownership of the reform agenda by targeting high-priority issues (strengthening institutions and the regulatory framework, energy transition, and natural capital for economic inclusion and enhancing climate change resilience); (ii) building on previous reforms supported by the WB (under the previous DPL series Panama Growth Recovery and Pandemic Response Development Policy Operation 1 (P174107) and DPL2 (P175930) that reinforced the GoP's progress in strengthening its institutional and regulatory framework for climate change and decarbonization);[10] and (iii) complementing lending with technical assistance supporting the implementation of the broader reform agenda and responding to client needs in a context of high uncertainty.

21. **This operation is aligned with the goals of the Paris Agreement**. First, the program is consistent with the country's climate commitments under its NDCs and directly supports the formulation of strategic climate change instruments such as Panama's Climate Change scenarios and Climate Change Policy. Second, none of the PAs are likely to cause a significant increase in greenhouse gas (GHG) emissions or any persistent barriers to transition to low-GHG emissions. In fact, most of the reforms are either universally aligned and/or expected to contribute towards emissions reductions (i.e., e-mobility, solar electricity, digital connectivity). All PAs are aligned with the mitigation goals of the Paris Agreement. Third, risks from climate hazards are not likely to have an adverse effect on the PAs' contribution to the Project Development Objective (PDO) for PA 2, PA 3, PA 4, PA 5, PA 6, PA 7, and PA 8. The contributions of PA 1 to the PDO are likely to be at risk from climate hazards. However, the design of this PA reduces these risks to an acceptable level in the country context by integrating climate risk management into the decision-making process of the institutions involved. In addition, the scope of the PAs is continuously assessed to further enhance resilience aspects. A detailed review is presented in Annex 5. All PAs are aligned with the adaptation and resilience goals of the Paris Agreement.

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

Pillar I – Support reforms to implement energy transition and socially inclusive low-carbon growth

22. **Pillar I focuses on the clean energy transition to achieve the country's NDC commitments, a resilient and inclusive economy and green growth.** This pillar strengthens governance to fulfill climate change and long-term sustainable development goals. Supported reforms include new regulatory and policy instruments that tackle emissions from energy (including transport) sector (PA 1 – PA 2 – PA 3) and promote inclusion and gender equity through access to energy and digital services (PA 3 – PA 4).

DPL2 Prior Action 1 – E-mobility: PA #1. The Borrower's Regulatory Authority of Public Services has regulated e-mobility infrastructure standards by approving the requirements for the installation and operation of electric vehicles charging stations.

23. **Rationale.** Transport is the highest energy consuming sector, accounting for 47.4 percent of national energy consumption, and land transport is the largest contributor to GHG emissions accounting for 23 percent of Panama's total.[11] Decarbonization of transport is essential for meeting the country's climate change commitments and will foster green investments in the sector. The National E-mobility Strategy[12] covers public and private transport, battery disposal and recycling, and technical capacity development. The Strategy prioritizes infrastructure standards and regulations, marketing, and operations, as well as electrification of the public transport fleet. Charging station regulation is important to open the

[9] The 2021 Implementation Completion and Results Report (ICR) on Panama Programmatic Shared Prosperity Development Policy Loan Series (P151804/P154819/P166159) included the following lessons: (i) Strong analytical groundwork and complementary technical assistance proved to be essential to ensure adequate program implementation, (ii) DPLs require Government ownership and leadership of reforms to ensure sustainability.
[10] PA 8 of DPL 2 included provisions regarding the approval of incentives for electric mobility for land transportation (evidenced by Law No. 295).
[11] National Inventory Report 2020. See: https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/0596231_Panama-BUR2-1-2020_IIN_PA.pdf
[12] National E-mobility Strategy *(ENME)*. See: https://www.gacetaoficial.gob.pa/pdfTemp/28891_C/75494.pdf

e-mobility market and provide fair and transparent competition between vehicle makers. Even where the electric grid is not fully decarbonized, electric vehicles are more advantageous in terms of carbon emission than Internal Combustion Engine (ICE) cars.[13] A 30 percent target for vehicle electrification by 2030 requires a one percent increase in electricity demand, which could be absorbed by the national power system.

24. **Reform implementation.** The WB's Panama Pandemic Response and Growth Recovery DPL Operation (P175930) supported e-mobility incentives for ground transportation, as evidenced by Law No. 295 from April 25th of 2022[14], which establishes a regulatory framework for the development and operation of e-mobility and mandating electrification implementation targets for public transportation. Under the first Panama Climate Resilience and Green Growth DPL (P179817), the GoP approved Executive Decree 51 to implement Law No. 295, defining the technical and institutional regulatory framework for the implementation of e-mobility projects. Under this operation, the GoP approved regulations on the installation and operation of charging stations. Additionally, the GoP also confirmed the need of developing an inspection manual for e-vehicles is essential to establish the minimum technical conditions for safe circulation and charging, which is currently being prepared and expected to be approved through Executive Decree in the coming months.

25. **Substance of the Prior Action.** The National Authority for Public Service's Resolution AN No. 18465-Elec establishes the procedure to operate charging stations. This procedure establishes: the requirement for all charging stations to follow safety and technical standards as established by the Electric Installation Regulation; the definition of three types of charging stations, with respective duties and responsibilities; a grievance mechanism to manage claims between users, suppliers of charging stations and energy distribution companies; and the information that suppliers of charging stations must submit to the ASEP and the National Secretariat of Energy (*Secretaría Nacional de Energía*).

26. **Expected Results.** The elements of the indicators established in DPL1 remain relevant and will be further monitored and analyzed in DPL2– Result Indicator (*RI) #1: Number of charging stations per 100 km of the primary and secondary road network*, and *RI#2: Percentage of electric buses of the Panama City public operator's fleet (MiBus) acquired or under procurement*. The procedure will incentivize the installation of charging stations from the private sector (the sole developer of this infrastructure in the country), by promoting competition and fair conditions for those who want to participate. The RI#1 is expected to reach 17.3 by 2025 as result of the expansion to 1,056 charging stations[15], making Panama one of the leading countries in the LAC region. In terms of public transport, the implementation of both the e-mobility Law and Strategy, sets targets to advance in the electrification of public transport fleet. *MiBus* are expected to have 55 e-buses by 2025, that would result in a 4 percent fleet transition in two years, with a target of reaching 15 percent by 2030. This pace of deployment is well in line with the ambition of regional peers like Costa Rica.

***DPL2 Prior Action 2 – Energy Efficiency*:** The Borrower has taken measures to promote energy efficiency by adopting and publishing the Central American Technical Regulations (RTCA) technical standards and energy efficiency specifications for refrigerators and freezers.

27. **Rationale.** Panama has taken significant steps to promote energy efficiency, driven by the Rational and Efficient Use of Energy (UREE) Law,[16] and its subsequent regulation.[17] The National Energy Plan (PEN 2015-2050) identifies energy efficiency actions, including the development of standards for air conditioners and refrigeration equipment. Refrigeration appliances account for approximately 33 percent of electricity consumption in the residential sector, constituting around 10 percent of the country's total electricity usage.[18] The promotion of energy efficiency measures will reduce the burden on the

[13] World Bank (2022). Economics of Electric Vehicles for Passenger Transportation. See: *https://documents1.worldbank.org/curated/en/099330011042228036/pdf/P172382084bde40090817d0db756670bd3b.pdf*.
[14] Law No. 295 from April 25th, 2022; published in the Official Gazette on April 25th, 2022.
[15] See: https://portalmovilidad.com/como-impactara-en-panama-que-privados-comercialicen-energia-para-autos-electricos/
[16] Law No. 69 from October 12th, 2012. See: https://www.gacetaoficial.gob.pa/pdfTemp/27145_A/GacetaNo_27145a_20121018.pdf
[17] Executive Decree No. 398 from June 19th, 2013. See: https://www.gacetaoficial.gob.pa/pdfTemp/27313_A/GacetaNo_27313a_20130620.pdf
[18] Assessment on Energy Efficiency Potential and Demand-Side Management Opportunities in Panama (P169052).

electricity supply, bolstering adaptability, especially during periods of diminished hydropower capacity due to limited water availability from climate change. Reducing electricity demand will have a positive impact on both electricity prices and energy imports, enhancing energy security by reducing exposure to volatile international energy commodity prices. Additionally, more efficient cooling appliances will contribute to phasing out hydrofluorocarbon refrigerants found in inefficient equipment, thus reducing between 76-93 percent CO_2 emissions originated from refrigerant leakage. Panama's involvement in the Central American Integration System (*Sistema de la Integración Centroamericana,* SICA) facilitates regional harmonization of technical regulations, fosters larger markets by promoting regional trade of efficient equipment and reduces imports of inefficient appliances. Through this PA, the GoP has adopted regional technical standards to ensure that commercially available equipment meets minimum levels of energy efficiency.

28. **Reform implementation.** Under PA 2 of DPL1, the GoP approved the resolution[19] adopting the regional energy efficiency technical standards for air-conditioning equipment (RTCA 23.01.78:20). This Resolution establishes the minimum energy efficiency requirements, test method, the compliance assessment procedure, and labeling for air conditioners manufactured, imported or marketed in the SICA Member States. Under DPL2, the GoP has approved the equivalent regional energy efficiency technical standards for refrigerators.

29. **Substance of the Prior Action.** By adopting the Central American Technical Regulation for refrigerators,[20] the GoP has established minimum energy efficiency and labeling standards in line with those across the SICA Member States, increasing the current standard by approximately 20 percent of electricity consumption. With the expected increase in temperature and more intense use of refrigerators, the regional adoption of energy efficiency standards is crucial in curbing energy consumption as countries adapt to climate change. This initiative also fosters a larger market for refrigeration units, extending from Panama to the broader SICA region. The increase in the market size will not only improve the regional efficiency of refrigerators and reduce GHG emissions, but it will also facilitate region-specific energy efficient designs of appliances by manufacturers, lowering the costs of these equipment and thereby the prices for the consumers.

30. **Expected Results**. The elements of the indicators established in DPL1 remain relevant and will be further monitored and analyzed in DPL2 - *RI#3: Estimated percentage of efficient air conditioners in the country*; and *RI#4: Estimated percentage of efficient refrigerators in the country*[21]. Panama's adoption of enhanced Minimum Energy Performance Standards (MEPS) for refrigerators is projected to yield substantial efficiency gains. Efficient refrigerators in use throughout the country are forecasted to increase from 19 percent in 2021 to 35 percent by 2025, while efficient air conditioners in use are expected to rise from 55 to 91 percent. Overall, the proliferation of efficient appliances is projected to yield a substantial decrease in electricity consumption for refrigeration and air conditioning, estimated at nearly 1,152 GWh accumulated by 2050, along with a corresponding reduction in GHG emissions close to 0.51 Mt CO_2.

***DPL2 Prior Action 3 – Improvement of Energy Access*:** The Borrower has provided additional fiscal incentives for the construction, operation and maintenance of solar plants or installations to increase renewable generation and accelerate energy access.

31. **Rationale.** The scale up of renewable energy generation at the distribution level will contribute to reduce emissions of the electricity sector and increase adaptation to climate change due to the improved resilience of the electricity network. The expansion in solar generation will reduce of hydropower generation and therefore the water usage, contributing to ease the hardship of the drought. Despite high levels of access to electricity nationally (94 percent), the promotion of rural electrification is a GoP's priority due to low access to electricity rates in rural and indigenous areas are lagging (68 percent access rate in the indigenous territories). Firewood use in Panama is more common in rural areas and among poorer

[19] MICIs Resolution No. 23, published in the Official Gazette on February 9th, 2022. See: https://www.gacetaoficial.gob.pa/pdfTemp/29473/89958.pdf
[20] MICI's Resolution No. 59, published in the Official Gazette on October 3rd, 2023. See: https://www.gacetaoficial.gob.pa/pdfTemp/29881_A/100683.pdf
[21] Estimation of stock of efficient air conditioners refrigerators based on existing appliances and customs data of new efficient equipment.

households. Women spend more time than men (29.9 vs 14.2 hours) on caregiving and household responsibilities[22] and are therefore (along with children - especially girls), more exposed to high levels of contamination from the combustion of firewood and other traditional fuels inside homes. Women and girls also devote significant time to collecting firewood. The GoP, through *Plan Colmena* Law[23], has a comprehensive strategy to eradicate poverty and inequality in 300 villages (*corregimientos*[24]). A key aspect of *Plan Colmena* is rural electrification for underserved communities through grid extension and off-grid solar systems, prioritizing 105 *corregimientos*. The implementation of *Plan Colmena* will provide electricity to 12 percent of the unelectrified households in these *corregimientos*. This recognizes the importance of clean energy for poverty reduction, gender equality, improved health by mitigating indoor air pollution, and reduced GHG emissions. The National Strategy for Universal Access (*Estrategia Nacional de Acceso Universal*, ENACU) aims to achieve universal coverage by 2030.[25] ENACU promotes the use of solar energy in rural and indigenous areas as a catalyst for employment. ENACU also seeks to empower indigenous women with the technical skills to install, operate, and maintain photovoltaic systems. Indigenous women living in the most populated indigenous districts primarily work in agriculture and craft sales, holding precarious, poorly paid, and low-skill jobs.[26] These women often face barriers in accessing education and training that would enable them to seize productive opportunities in the energy sector. The approach ensures that knowledge is established within the community, and provides tools to address local needs. Continuing the efforts initiated in DPL1, this PA provides additional fiscal incentives[27] for installing solar photovoltaic systems, directly contributing to easing access to energy in remote areas.

32. **Reform implementation.** Under PA 3 of DPL1, the GoP enacted the *Plan Colmena* Law and nine provinces[28] have plans to reduce societal disparities and improve well-being. 194 rural electrification interventions are contained in these plans, including network extension, acquisition of solar panels, and network inspection. The GoP has implemented the vocational training program on installation and maintenance of solar photovoltaics systems for indigenous women. Under this initiative, the WB, through the Energy Sector Management Assistance Program (ESMAP) funding (P178163), is currently supporting a new cohort, where thirty indigenous women will receive the relevant skills to participate in the green transition. Between 2021 to 2024, this program has benefited 200 indigenous women, expanding the reach of solar systems in rural areas and empowering indigenous women as active agents in the green transition.

33. **Substance of the Prior Action.** Law 417 of 2023 modifies the incentive framework for the promotion, construction, operation, and maintenance of solar plants and installations. This amendment includes the exemption of the selective consumption tax (5 percent) for necessary equipment, machines, materials, and spare parts. This exemption addresses a major barrier to increasing distributed generation, easing the burden of electricity supply, while bolstering adaptability, especially during periods of diminished hydropower capacity due to limited water availability from climate change.[29] These incentives for the promotion of solar energy also play a crucial role in reducing GHG emissions, increasing resilience to climate events, enhancing electricity efficiency and quality, fostering economic reactivation and competitiveness, and creating green jobs. In addition, this accelerates interventions associated with solar energy under *Plan Colmena*, leading to reduced intervention costs, as well as creating an opportunity for indigenous women to play a key role in the installation of solar systems.

34. **Expected Results.** The price reduction on solar systems resulting from this PA is expected to facilitate household investments in solar systems, increasing the *Capacity installed of solar energy for self-generation* (RI#5) in nearly 123

[22] IDB et al. Initial Diagnosis of Gender Equality in the Energy Sector of Panama, 2021. See: https://www.undp.org/sites/g/files/zskgke326/files/migration/pa/UNDP-PA-Diagnostico-Igualdad-Genero-Sector-Energetico.pdf. Access on: Jan. 12th, 2023.
[23] See: https://www.gacetaoficial.gob.pa/pdfTemp/29526_C/GacetaNo_29526c_20220428.pdf
[24] A *corregimiento* is the smallest administrative division level in the country.
[25] See: https://www.gacetaoficial.gob.pa/pdfTemp/29493_A/90606.pdf
[26] PNUD (2019). Diagnosis of the Situation of the Indigenous Women of Panama.
[27] Amends the Law No. 37 of 2013 (and its amendment by the Law No. 38 of 2016) providing fiscal incentives to the installation of solar systems.
[28] See: https://www.gabinetesocial.gob.pa/planes-colmena/
[29] See: ***https://www.gacetaoficial.gob.pa/pdfTemp/29451_A/89387.pdf***, and https://www.gacetaoficial.gob.pa/pdfTemp/29451_B/ae/8866.pdf

percent in two years. The coordinated implementation of rural electrification initiatives from *Plan Colmena* and ENACU programs is expected to yield significant outcomes in the *Corregimientos Colmena.* Particularly in a scenario with lower solar photovoltaic system prices, it will increase the number of isolated solar systems for rural electrification. Therefore, the current PA continues efforts towards energy access, gender equality in access and women's empowerment (*RI#6: Number of rural households electrified through Plan Colmena* and *RI#7: Percentage of female-headed households electrified through Plan Colmena*). This collaborative effort aims to reduce poverty and inequality within these regions, addressing household air pollution. The electrification of nearly 700 female-headed households (RI#7) by 2025 through grid extension and off-grid solar systems has the potential to alleviate the reliance on firewood for lighting and cooking, thus reducing mortality and morbidity rates related to indoor air quality, especially among women and children. Moreover, forest degradation might improve as the targeted *corregimientos Colmena* transition to cleaner technologies. Reducing firewood collection will give women more time for income-generating activities. Rural electrification also supports digital access for vulnerable rural communities, fostering enhanced opportunities and connectivity within these regions. This PA contributes to socially inclusive low carbon resilient growth by providing climate-related affirmative actions for indigenous peoples and local communities, women, and youth in Panama's development policies.

***DPL2 Prior Action 4 – Digital Connectivity*:** The Borrower's Regulatory Authority of Public Services has updated the legal framework that regulates satellite operations, including the costs of the radio spectrum, to increase the coverage of telecommunications services in rural areas.

35. **Rationale.** Four percent of rural residents are outside the existing mobile network, and 73 percent of rural households lack internet at home. Incorporating this population into mobile and fixed networks through traditional channels is challenging due to geographical constraints. Innovations in satellite technology provide an effective and low-cost alternative to address this digital divide. Therefore, the update of the regulatory framework for digital operators to include satellite operations will reduce digital connectivity costs. Improving connectivity would reduce transportation to urban areas, reduce GHG emissions, improve air quality, and enhance access to essential services such as education and health.[30] Furthermore, digital coverage boosts productivity in professions that involve travel and working outdoors, reduces working time losses and enables precision agriculture by allowing greenhouses to be controlled and managed remotely. Satellite technologies also significantly reduce the targeting problem of selecting prior unserved geographical areas because they provide full coverage across the country. To achieve this, it requires a simplified regulatory framework that benefits both providers and users.

36. **Reform implementation.** Under PA 4 of DPL1, the GoP enacted Cabinet Resolution No. 41 of 2022, setting a new tariff scheme for the advanced wireless services (AWS) radioelectric spectrum band to be used by mobile operators, thus ensuring connectivity and increased competition for broadband access, as well as boosting the adoption and increasing the quality of mobile telephony in underserved areas. PA 4 will further extend the connectivity by allowing satellite operators accessing radioelectric spectrum bands at more competitive tariffs and facilitating alliances with mobile operators. This will improve the sector business environment and promote competition.

37. **Substance of the Prior Action.** Regulation of satellite operations in Panama has remained unchanged for more than 20 years. Law 31 of 1996 governs the telecommunications sector for satellite services and is managed by the ASEP. The ASEP has taken steps to reform the regulatory framework for National Frequency Allocation. The regulatory reform adopts provisions on the use of the radioelectric spectrum for satellite telecommunications services and spectrum sharing by mobile cellular operators. The reform also allows bilateral agreements by which mobile concessionaires can access satellite infrastructure to expand their internet services to rural areas. The policy reform aims to close the digital divide by facilitating access to mobile and fixed bandwidth, as well as voice and message services, in rural areas not reached by traditional networks, or where service quality has been poor. In addition, the policy reform will address the country's

[30] OECD (2016), Digital Government Strategies for Transforming Public Services in the Welfare Areas.

disaster preparedness and response capacity by assuring alternative communication and connectivity channels in the case of natural hazards, which in Panama are mostly climate induced including hurricanes, floods, heavy rains and storm surge. This is especially important for remote rural and coastal areas that are highly vulnerable to climate induced extreme events and can enhance their responsive and adaptative capacity.

38. **Expected Results**. The elements of the indicators established in DPL1 remain relevant and will be further monitored and analyzed in DPL2 – *RI#8: Percentage of population covered by 4G networks; RI#9: Annual growth of the number of rural households connected to internet via satellite.* The number of rural households with internet access will increase by expanding coverage using satellite technologies. The expansion of low-cost internet infrastructure, as well as the reduction of sunk costs such as spectrum fees, should impact operator strategies to establish more competitive prices for citizens in rural areas. Less populated areas and low-income regions can be covered by using less expensive technologies. As a result, the digital divide will be reduced, enhancing access to information, and inclusion for a just transition. Enhanced access and connectivity will allow marginalized communities to better respond to climate-induced natural hazards. 4G investment would facilitate the expansion of mobile networks to enhance speed and reliability of the service. The regulation approved will facilitate access to spectrum to existing players in the private sector, it also allows expansion of mobile internet supplied by private operators to the previously underserved rural/poor areas. Meanwhile, this regulation that makes flexible the range of spectrum usually used by satellites technologies would pave the way for the entry of new players in the Panamanian market.

Pillar II – Establish policy foundations to sustain natural capital for resilient growth

39. **Pillar II focuses on conservation and sustainable management of natural capital for resilient growth.** Supported reforms include instruments that enhance climate planning and governance (PA 5 – 6), enhance transparency (PA 7) and strengthen the management of marine and coastal ecosystems (PA 8).

DPL2 Prior Action 5 – Climate Change Legal and Regulatory Framework: The Borrower has mandated the Climate Change Directorate to develop climate change scenarios every two years to inform the population, economic sectors, and decision makers about future impacts caused by climate change and facilitate the implementation of essential mitigation and adaptation measures.

40. **Rationale.** Adaptation should be based on the best available science and increasingly requires diversified and specialized data, as well as tailor-made projections for the specific aspects of individual countries.[31] In the absence of a clear understanding of future climate impacts, countries are unable to clearly determine the adaptation finance needed. Panama has developed policies and regulations for climate change adaptation,[32] but needs to better integrate long term vulnerability and adaptation scenarios into development planning. Panama aims to develop the National Climate Change Adaptation Data System and climate change scenarios. These scenarios will inform public and private investment planning, which will improve the quality of investments and long-term climate resilience.

41. **Reform Implementation.** Under PA 5 of DPL1, the GoP submitted a Climate Change Framework Bill (initiative No. 942, submitted on January 24, 2023)[33] to the National Assembly. The Bill establishes long-term climate targets, accelerates climate-smart development, and strengthens the climate change institutional architecture. A draft long-term strategy has also been prepared and is undergoing consultation.

42. **Substance of the Prior Action.** Through Resolution No. DM-0151-2023, Panama has further strengthened climate adaptation planning by establishing the policy that governs the mandatory production of climate change information. The

[31] See: *https://unfccc.int/sites/default/files/resource/AC%20adaptation%20data%20full.pdf*.
[32] E.g., Executive Decree No. 135, dated April 30, 2021, has regulated the provisions of the Chapter I- *Adaptation of Global Climate Change* of Title V of the Single Text of the General Environmental Law (GLE) supported by Panama Pandemic Response and Growth Recovery DPL (P175930).
[33] At the time of this document, the bill was still discussed in the national assembly. Approval is expected before the operation's board date.

PA governs the scope and quality of climate change scenarios and mandates their production and publication every two years. Climate change scenarios are an adaptation tool established under the Climate Change Framework Bill.[34] The scenarios will inform the private sector, households and public decision-making. The scenarios will allow decision makers to better anticipate the potential impacts of climate change (including core national assets such as the Canal), guide national and local planning (including updates to the long-term strategy), and integrate resilience into the country's development agenda. The scenarios will also enable enhanced climate action by building the base for prioritizing investments, including cost-benefit analyses.[35] [36] The scenarios are also a tool to provide citizens with a better understanding of the future state of Panama's climate.

43. **Expected Results.** The indicator established in DPL1 remains relevant – *RI#10: Negative carbon balance maintained*. The indicator tracks whether the country absorbs more GHG than it emits. To retain a negative carbon balance, Panama needs to limit emissions growth and protect it extensive existing natural sinks. The scenarios will indicate the ways in which these natural sinks are at risk from changes in the climate (e.g., dryer conditions for forests), as well as ways in which emissions may rise (e.g., greater need for cooling due to increases in extreme heat). Based on the most likely scenarios policy makers could take preventive actions. Therefore, an additional indicator has been included to measure sector programs and plans, as well as private sector chambers of commerce considering adaptation and mitigation measures based on climate scenarios (RI#11: *Sector programs and plans, as well as private sector chambers of commerce considering adaptation and mitigation measures based on climate scenarios*). This policy and investment agenda will support the cost-effective achievement of the country's mitigation goal (i.e., negative carbon balance), but in fact the primary benefits will be to improve adaptation and resilience (e.g., by supporting restoration in terrestrial and marine areas, including the recharge of aquifers and surface water bodies, and providing protection from storm surges). The climate scenarios will therefore inform investments in natural resilience which will also support the achievement of national GHG emission targets.

DPL2 Prior Action #6 – Climate Smart Investments: The Borrower has approved a national climate change policy to promote climate-change adaptation and mitigation actions and established it as a mandatory strategic management instrument for the Borrower's authorities, including the Ministry of Economy and Finance's mandate to mainstream climate change in public investments across all sectors.

44. **Rationale.** Almost all public finance decisions have a direct or indirect climate impact.[37] Significant impacts should be carefully considered to align revenue and expenditure policies with climate objectives. Since the ratification of the Paris Agreement,[38] the GoP has strengthened the enabling environment for a decarbonized and climate-resilient economy through. However, the measures set out in the 2007 National Climate Change Policy were outdated and insufficient. A key gap was the definition of the role of MEF in mainstreaming climate change in budget formulation, public investment, and access to international finance, including debt.

45. **Reform Implementation.** Through PA 6 under DPL 1, the GoP enhanced the climate-responsiveness of its public investment portfolio by tagging climate-related expenditures. Adaptation and mitigation tagging through the public investment management system supports Panama to integrate climate change considerations into economic and financial decision-making. Further, the Borrower has mandated climate change assessment considerations as part of the country's environmental impact assessment process. As a result, 100 percent of approved category Environmental Impact Assessment (EIA) will integrate climate mitigation and resilience considerations. Both reforms will lead to better planning and enhance the long-term sustainability of investments.

[34] Title V, Chapter II, Articles 95-96
[35] Title IV, Chapter III, Articles 76-79
[36] See: https://openknowledge.worldbank.org/handle/10986/33958.
[37] IMF, 2021. Climate-Sensitive Management of Public Finances "Green PFM"
[38] Panama ratified the Paris Agreement on 21 Sep 2016.

46. **Substance of the Prior Action**. Through Executive Decree No.3, published on June 12, 2023, Panama updated its National Climate Change Policy. The Policy broadens the country's approach to climate change and reinforces its commitment to the Paris Agreement. The Policy establishes clear roles and responsibilities of national institutions, and a central role for MEF is an important new feature. The Policy highlights the role of MEF in mainstreaming climate into economic policies, the budget process, public investment, and mobilizing finance. In addition, the Policy establishes objectives for the production and publication of risk and vulnerability information, indices and maps. Such information is critical to guide investment decisions of national and subnational governments, the private sector and households.

47. **Expected Results.** The indicator established in DPL1 remains relevant and will be further advanced through the reform prog–am - *RI#12: Percentage of approved Environmental Impact Assessments (EIA)*[39] *that integrate climate mitigation and resilience considerations.* Integrating climate resilience and mitigation in the environmental impact assessment process supports better investments. The PA under this operation advances the reform program through consideration of climate impacts in broader government decision making. When expected climate impacts might be significant, these impacts will be considered upstream under the EIA process. At the same time, the direct impact of the policy reform will be measured through an additional indicator *RI#13: Percentage of public sector projects considering climate change criteria.* The PA will contribute to achieving the DPL's PDO of low carbon, sustainable and resilient growth by enabling and fostering low carbon and resilient investments across all sectors. Thus, the policy reforms and expected results are direct enablers of the country's effort to sustain natural capital for resilient growth.

DPL2 Prior Action #7 – Enhanced conservation of integrated landscapes and resilience**:** The Borrower has approved a restoration monitoring system to enhance transparency and track the progress of forest landscape restoration actions in the Borrower's territory.

48. **Rationale.** Panama is a net GHG sink as its forests absorb more than it emits.[40] Landscape restoration plays a crucial role in maintaining carbon negative status. Despite an increase in overall forest cover over the last decade, cattle ranching and commercial agriculture continue to drive deforestation, with associated losses in ecosystem services, including carbon sequestration. Panama's NDCs[41] aim to restore 50,000 hectares of forest by 2050, contributing to the absorption of 2.6 million tons of CO2eq and contributing to Panama's Global Biodiversity Framework goals. They will also contribute to the country's adaptation agenda as protection and restoration increase resilience via increased ecosystem services (i.e., water regulation, erosion and flood control). To harmonize forest conservation with development goals, Panama needs to promote integrated forest and landscape management by reducing deforestation, promoting conservation, restoring degraded lands, expanding agroforestry and creating sustainable forest value chains.

49. **Reform implementation.** Under PA 7 of DPL1, the GoP implemented measures to enhance forest conservation, create opportunities to develop nature-based tourism, generate jobs, and sustain livelihoods through the expansion of the Iguana Island Wildlife Refuge protected area[42] and the regulation of the Agritourism Law (*Ley de agroturismo*).[43] Through the expansion of protected areas and the promotion of nature-based tourism (agrotourism and ecotourism), the GoP enhanced the protection and conservation of terrestrial and marine ecosystems, ensuring the protection of carbon stocks and contributing to the resilience of coastal ecosystems and communities.

50. **Substance of the Prior Action.** The Borrower has mandated the monitoring and reporting of restoration activities through

[39] This provision applies to category II and III only. Category II EIA requires mitigation and prevention measures. In Category II EIAs, a Citizen Participation Plan, and a formal citizen consultation is required so that any observations or objections deemed necessary can be raised during the EIA review stage. Category III EIA requires an Environmental Management Plan. In Category III EIAs, in addition to the citizen participation plan, the citizen consultation, a public forum must be held during the evaluation phase and before the EIA decision phase.
[40] Panama Biennial update report (2021) BUR2 National inventory report. https://unfccc.int/documents/279123.
[41] Panama First NDC (Updated submission): *https://unfccc.int/documents/499571/*
[42] Executive Decree No. 1, published in the Official Gazette on February 2, 2022
[43] Executive Decree No. 11, published in the Official Gazette on May 9, 2022

the Restoration Monitoring System (*Sistema de Monitoreo de Restauración,* SMR). This will enhance transparency and information accuracy, provide information to oversee activities implemented in the field (including remote areas), allow reporting on the country's progress towards achieving the NDC land use sector target and permit submission of complete information in the Biennial Transparency Report for reporting commitments under the United Nations Framework Convention on Climate Change (UNFCCC).

51. **Expected Results.** The indicators established in DPL1 remain relevant for the program - *RI#14: Number of agritourism fincas certified; RI#15: Zero net deforestation of mangroves in National Protected Areas achieved*. Restoration activities will be implemented on agritourism *fincas*. For these *fincas* to be certified, agricultural farm management plans need to be prepared. In 2022, the Ministry of Agriculture Development (MIDA in Spanish) approved the Guide for Agricultural Farm Management Plans to improve agricultural, forestry and agroforestry production systems (including silvopastoral).[44] The plans promote social, economic, and environmental sustainability, and support innovation of key elements in traditional production systems. They further motivate producer families to generate new and better jobs, products, and income in rural areas. Indicator RI#15 remains relevant as mangrove restoration in natural protected areas part of the National Forest Restoration Program to contribute to the NDC target of restoring 50,000 hectares by 2050. Conserving mangroves will support the country's adaptative capacities and will help reduce the country's vulnerability to natural disasters. Mangroves are essential carbon sinks. The conservation of mangroves and the expansion of mixed land uses (combining conservation and productive uses for income generation, i.e., *agrofincas*) avoids deforestation and land degradation and induces restoration of degraded and deforested lands. While both aspects are linked to PA 7 an additional indicator is proposed to directly measure the results of the restoration monitoring system, namely: RI#16: *Land area (ha) restored*[45]. By 2025 a total of 8500ha is expected with the country's long-term objective to restore 50,000 ha by 2050. This PA will enhance the country's capacity to manage its forests and other landscapes and the system will be used to account for the achievement of the NDC mitigation and adaptation targets.

DPL2 Prior Action #8 – Scale up Marine Protection: The Borrower's Aquatic Resources Authority has mandated the use of the e-Catch Platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008.

52. **Rationale.** The conservation and management of marine and coastal ecosystems is essential for ecological and human resilience, providing climate benefits, as well as jobs and food security for coastal communities. From 1995 to 2018 much of the global value of marine fisheries was lost due to poor management and overfishing. Panama is the largest fishing nation in Central America and the 3rd largest exporter of fishery products.[46] As ocean conditions change, fisheries production and fish catchability are expected to be affected, impacting livelihoods and local economies. In 2019, the European Union assigned a "yellow card" to Panama due to risks related to illegal, unreported and unregulated fishing.[47] The country has been implementing a series of actions to strengthen compliance with international fishing standards, combat illegal fishing and improve management of marine and coastal areas. These include enacting the Fisheries law,[48] creating the Monitoring Center to avoid illegal, unreported and unregulated fishing and foster marine preservation,[49] and establishing the National Commission for Responsible Fishing.

53. **Reform implementation.** Under PA 8 of DPL 1, Panama approved the National Ocean Policy, recognizing the importance of marine and coastal ecosystems to its economic growth and enhanced climate resilience. The Policy aims to develop a sustainable blue economy. Enhanced resilience is achieved through the incorporation of coastal areas under protected,

[44] Resolution No. OAL-039-ADM -2022, March 30, 2022
[45] As per registry in the restoration system.
[46] Based on catch volume. In 2020 188,705 tonnes. FAO. 2022. The State of World Fisheries and Aquaculture 2022. Towards Blue Transformation. Rome, FAO.
[47] See: https://ec.europa.eu/commission/presscorner/detail/en/qanda_19_6756
[48] The law regulates fishing and aquaculture and dictates other provisions, updating the 1959 law. Published in March 2021.
[49] Created by Executive Decree No. 15 of December 19th, 2022.

sustainable management schemes, the restoration of critical ecosystems and the safeguarding of food security.

54. **Substance of the Prior Action.** Through Resolution ADM/ARAP No.050, published in the Official Gazette on September 13, 2023, the GoP mandates the use of the e-Catch platform for the validation and issuance of catch certificates. The platform establishes a control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008. This regulation improves coastal and marine governance and supports Panama's compliance with international commitments[50] and sustainable management of marine resources.

55. **Expected Results.** The indicator established in DPL1 remains relevant and will be further advanced through the gradual reform program under this operation: *RI#17: Percentage of marine area under conservation and sustainable management schemes.* Panama is one of the few nations in the world to protect more than 50 percent of its marine area. In March 2023, the GoP strengthened the sustainable management and conservation of the country's marine and coastal ecosystems by issuing a decree to increase the size of the "Banco Volcan Managed Resource Area" from approximately 14,200 km^2 to over 90,000 km^2.[51] The extension of this marine protected area ensures biological connectivity with other protected areas in the Wider Caribbean Region, with a view to establishing the Southwestern Caribbean Transboundary Biosphere Reserve. With the expansion of this protected area, 52.4 percent of Panama's total marine area is under conservation (an increase from 98,230 km^2 to 177,597 km^2). The expansion of the marine protected area promoted by the GoP in the last year represents an important boost to improve fishing and provides benefits for the prevention of natural hazards and climate adaptation. The indicator remains relevant, as improved fisheries management, and specifically the certification process through e-catch, and protection of key habitats could help restore the productivity of the ocean, while ensuring future growth, food security and jobs for coastal communities.[52] As such, the provisions under this policy reform are an instrument for sustainable management schemes in National Protected Areas, and hereby enhance the quality and effectiveness of conserving natural capital. E-catch complements Panama's conservation efforts by also including better management of fisheries in high seas, including through regional fisheries management organizations. Also, it enhances the previous catch registration method by enforcing the key traceability elements to reduce the risks related to illegal and unregulated fishing. Therefore, this policy reform is a necessary provision if Panama catches were to be exported to the EU, hereby enabling for additional income sources and access to markets. In addition, climate change could impact fisheries and might further affect resources by creating incentives for overfishing, if climate change is perceived or expected to cause fish stocks to migrate out of a country's exclusive economic zone or a community fishing ground. The adoption of enhanced regulation and therefore the improvement of the ocean management framework will therefore create greater economic, social and environmental sustainability and resilience.

Table 2: DPL Prior Actions (PA) and Analytical Underpinnings

PA	Analytical Underpinnings
Pillar I – Support reforms to implement energy transition and socially inclusive low-carbon growth	
PA #1	*World Bank (2021): Decarbonization of the Energy Sector in Panama (Programmatic ASA: P169052).* Addresses regulatory and technical aspects of a long-term e-mobility strategy; reveals a link between bus travel distance and charging technology; notes opportunity charging suited distances over 200 km, while plug-in charging was optimal for shorter trips; underlines that despite significant capital needed for deploying electric buses, costs could be lowered via mechanisms like cost transmission and operational efficiency. / *World Bank (2022): The Economics of Electric Vehicles for Passenger Transportation (ASA: P172382).* Identifies entry points for electric mobility in developing countries; highlights low-emission nations, like Panama, enjoy co-benefits such as improved air quality and reduced reliance on imported fuel; finds that electric vehicles are more efficient than ICEs, even if the grid isn't fully decarbonized. Additionally, it finds that in most countries, as Panama, overall energy demand associated with adopting electric mobility, is not large relative to the scale of the power system.
PA #2	*World Bank (2021): Assessment on Energy Efficiency Potential and Demand Management in Central America (Programmatic ASA: P169052).* Analyzes electricity consumption by sectors, end uses, and regions; and prioritizes energy efficiency measures for Panama. / *World Bank (2021): Technology and Business Strategy Assessment to Replace Inefficient Cooling Appliances (Programmatic ASA: P178163).* Evaluates

[50] Among the international commitments are UN Fish Stocks Agreement and the FAO Compliance Agreement
[51] Executive Decree No. 2 published on March 06, 2023.
[52] World Bank. 2017. The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries. Washington, DC: World Bank.

	Panama's cooling equipment market to bolster energy efficiency and recommends strategies aligned with international trends and policies, including labeling, MEPS, and low-GWP refrigerants in line with the Kigali amendment.
PA #3	*World Bank (2021): Behavioral Change Communications Campaign (Programmatic ASA: P169052).* Reveals women are household energy efficiency decision makers, unaware of measures and notes citizens challenges in understanding long-term gains compared to upfront costs.
PA #4	*World Bank (2021). Spectrum Management for Digital Development Report (Programmatic ASA: P177684).* Reviews global spectrum management models, covering allocation, bidding processes, pricing, and obligations; analyzes spectrum management context and formulates efficient spectrum management recommendations for Panama. / *World Bank (2020) Central America Digital Economy (Programmatic ASA P171654).* Highlights the need to make progress towards better management of spectrum in Central America; suggests allocating more frequency bands for mobile services to boost quality and competition; notes that improved spectrum management can propel advanced mobile broadband services; and highlights low spectrum availability for International Mobile Telecommunications (IMT) services in Central America compared to peers like Brazil, Mexico, and Peru.
Pillar II – Establish policy foundations to sustain natural capital for resilient growth	
PA #5	*World Bank (2011) Gender and Climate Change: Three Things You Should Know.* Highlights how low-emissions development pathways can be more effective and more equitable when they are designed using a gender-informed approach. / *Mukhi, Neha; Rana, Suneira; Mills-Knapp, Sara; Gessesse, Eskedar. (2020). World Bank Outlook 2050 Strategic Directions Note: Supporting Countries to Meet Long-Term Goals of Decarbonization.* Examines how the World Bank can help countries plan for and achieve long-term decarbonization.
PA #6	*World Bank. (2020). World Bank Reference Guide to Climate Change Framework Legislation.* Explains how national legislation establishes long-term commitment to climate action, creates the architecture for strategies, plans and policies, defines the competencies of public institutions and enhances accountability. / *IMF (2021). Climate-Sensitive Management of Public Finances "Green PFM".* Identifies the need for a strong stewardship located within the ministry of finance to enable an integrated government strategy to tackle climate change.
PA #7	*Panama Biennial Update Report (2021). BUR2 National inventory report.* Submitted to UNFCCC and presents the country's emissions per sector and highlights the importance of the Land-use, land use change and Forestry (LULUCF) sector as an important source of CO2 removals in the country. / *World Bank (2023). Green Resilient and Inclusive Landscapes in Central America (ASA P176670).* Analyzes incentives schemes for Panama's integrated landscape management, using a landscape lens.
PA #8	*FAO (2023). The world's mangroves 2000–2020.* Estimates mangrove trends by region and concludes that mangrove restoration should be given priority in global, regional and national restoration initiatives in view of their crucial benefits for livelihoods, coastal resilience and biodiversity conservation. / *World Bank/PROBLUE (2023). Panama's Blue Gender Gap Analysis. (ASA-P176323).* Informs Panama's efforts to advance an inclusive blue economy strategy under the country's climate commitments. / *World Bank. (2023). Unlocking Blue Carbon Development: Investment Readiness Framework for Governments.* Provides a practical framework to guide governments in catalyzing and scaling up public and private investment in Blue Carbon as part of their blue economy development.

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

56. **The proposed operation is fully aligned with the objectives of the Country Partnership Framework (CPF) FY24-28[53] that includes specific focus areas around climate change adaptation and mitigation.** Specifically, the DPL supports Objective 3 on enhanced climate resilience and mitigation. In addition, the reforms supported through this operation are aligned with three out of five priorities identified in the 2023 Systematic Country Diagnostic (SCD): (i) ensuring inclusion of vulnerable groups, (ii) promoting environmental sustainability and resilience to natural disasters, and (iii) strengthening public sector institutions. This DPL series builds upon operations supporting the country's reform agenda over a sustained period of time, the latest of which is the Panama Pandemic Response and Growth Recovery DPL series (P174107 and P175930).[54] This operation has been prepared under the Bank's vision to create a world free of poverty on a livable planet and it aligns with four of the six Global Challenge Programs: (i) Fast-Track Water Security and Climate Adaptation; (ii) Energy Transition, Efficiency and Access; (iii) Accelerating Digitalization; and (iv) Forests for Development, Climate and Biodiversity. The DPL is also aligned with the WB Group's Gender Strategy (2016-23), particularly on ownership and control of assets and more and better jobs, and supports achievement of outcomes under the draft Gender Strategy 2024-30, *Accelerate Gender Equality for a Sustainable, Resilient and Inclusive Future*.

57. **The DPL series is aligned with the dimensions of the WB Development Committee paper "From COVID-19 Crisis Response to Resilient Recovery – Saving Lives and Livelihoods while Supporting Green, Resilient and Inclusive**

[53] Expected to be discussed by the World Bank Group´s Board of Directors in February 27, 2024.
[54] PA 8 of DPL 2 included provisions regarding the approval of incentives for electric mobility for land transportation (evidenced by Law No. 295).

Development (2021). *Green*, to promote environmental sustainability by supporting policies aimed to implement energy transition and low-carbon development; *Resilient*, by supporting the country's efforts to improve climate change governance and connect the climate adaptation agenda to broader policy efforts on improving environmental and pollution management capacities; and *Inclusive*, by ensuring that energy access and gender dimensions are included within the supported policies. Additionally, the proposed operation is aligned with the WBG's Maximizing Finance for Development approach by enabling private capital leverage in key economic sectors, specifically transport, energy, and digital development (such as companies investing in charging stations, solar systems, efficient cooling appliances and internet providers). The DPL is in line with the WB's 2021-2025 Climate Change Action Plan, and the Roadmap for Climate Action in Latin America and the Caribbean, 2021-2025[55], by integrating climate change, green growth and resilience considerations into policy and institutional strengthening and climate-responsive investments. In addition, the International Finance Corporation has signed a two-year climate change advisory engagement to assist the Panama Canal Authority in the development of a climate change strategy for the canal.

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

58. **The GoP's reform program is the result of a transparent and participatory process.** The approval of presidential decrees and other reforms is informed by public and private sector stakeholder participation. Reforms on climate change policy and environmental management are the result of a comprehensive and participatory process.[56] The country's climate regulatory and policy framework is being advanced considering comprehensive sectoral assessments (including a structured evaluation of interactions between sectors), and an extensive participatory process, including workshops and sectoral discussion rounds. In addition, the climate scenarios under PA 5 are the result of extensive collaboration with international and national academics. The Climate Policy was subject to public consultation.[57] The drafting and subsequent approval of the Energy Transition Agenda and National Strategies (ENME[58], ENUREE[59], and ENACU[60]) occurred through an open and participatory dialogue with key stakeholders such as utilities, private sector, academia and local communities. PA 1 was subject to public consultation and written comments from eight companies.[61] *Plan Colmena* is built upon citizen participation, enlisting the support of various stakeholders including the affected communities, civil society, academia, private sector, and diverse social organizations. The GoP has been strengthening its mechanisms to consult with indigenous peoples since 2018. Decree 203 created the National Council for the Integral Development of Indigenous Peoples, a consultation and deliberative platform between the twelve indigenous authorities and the GoP. While the Council has been functioning well over the past years, there is space for strengthening the engagement in the green agenda and the platform could help strengthen stakeholder engagement and sustainability of the programs. In addition, the GoP is currently advancing the regulation of Law 37 on free, prior and informed consultations and prior consent for indigenous peoples. This regulation could enhance operationalization and effectiveness of the law, and hereby enhance voice and agency of indigenous peoples.

59. **The program is also aligned with the support of other development partners, and benefits from a close collaboration with the IMF.** Several multilaterals expect to continue supporting Panama's decarbonization and climate adaptation efforts, such as the National Climate Action Plan (NCAP) and Panama's LTS. The WB maintains a close dialogue and collaboration with the Central American Bank for Economic Integration (CABEI) and the Inter-American Development Bank

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[55] See: *https://openknowledge.worldbank.org/handle/10986/38001*.
[56] In accordance with the international obligations acquired by the Panamanian State after the ratification of the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement), approved by Law 125 of 2020
[57]Three public consultation notices were published in a national newspaper from January 23 to 25, 2023. See: *https://www.miambiente.gob.pa/consulta-publica-5/*
[58] Public and private sector participants included the Panama Canal Authority (ACP), ADAP, the Municipality of Panama, *MiBus*, ENSA, the Technological University of Panama (UTP), ASEP, BYD, ABB Panama, INADEH, TRASERVI, Banco General, ASSA, Bavarian Motor, Honda Panama, Celsia, Casa de las Baterías, Naturgy, PGBC, Electrobike and the Instituto Técnico Superior Avanzado.
[59] Refers to the National Strategy for Rational and Efficient Use of Energy (*Estrategia Nacional de Uso Racional y Eficiente de la Energía*). Four workshops were held, with a total of 100 people representing 40 public and private entities.
[60] Interviews were held with key players, a workshop with the participation of nearly 100 people, and three thematic worktables attended by between 13 and 15 participants each.
[61] From September 19th to October 27th of 2022. Comments were received from: AGRANDEL, INTERAGENCY, S.A, CELSIA, ENEL, AES, ENSA, EDECHI, and EDEMET.

(IDB) on lending, technical assistance and enhanced delivery. The program complements other donors. On forestry and land use change, the WB has collaborated with the United Nation's Program for Food and Agriculture Organization. In addition, the WB exchanges views and information and collaborates closely with the IMF on macroeconomic and structural issues. Additionally, the WB has recently completed extensive consultations with the GoP, development partners, private sector, NGOs, and broader public on the Systematic Country Diagnostic (SCD) Update. Throughout 2022/2023, the WB held over 20 in-person and 18 virtual consultation sessions on Panama's priorities, including semi-structured interviews, roundtable discussions, town-hall meetings, and site visits. Over 22 representatives of the public sector – including central and local government—as well as 16 representatives of the private sector, academia, donors, civil society organizations, International Financial Institutions, and United Nations agencies participated in consultations.

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1. POVERTY AND SOCIAL IMPACT

60. **The PAs in DPL2 are expected to positively contribute to poverty reduction and shared prosperity.** PAs under Pillar I support reforms to implement Panama's Energy Transition Agenda (ETA), which helps reduce poverty and increase shared prosperity. The ETA is expected to positively impact social and welfare outcomes in the long term, especially PA 3 on fiscal incentives for the construction, operation, and maintenance of solar systems to transition to universal, renewable-based rural electrification in the vulnerable municipalities of *Plan Colmena*. PAs 1 and 2 support the creation of the legal framework and guidance for the ETA. They are not expected to have negative impacts on poverty and lead to positive health impacts in the short run (PA 1), and a more efficient and rational use of energy by promoting the use of energy-efficient appliances if a broad promotion and dissemination of the benefits of their use on electricity consumption, as well as financial incentives are in place to boost their adoption (PA 2). PA 1 is expected to have direct health benefits for vulnerable populations by preventing the premature death of more than 400 people from respiratory diseases associated with air quality. Furthermore, the energy efficiency policy supported by PA 2 enables broader access to energy-efficient appliances. The GoP will explore ways to encourage the adoption of systems by lower-income households (see Annex 3). By 2030, the effective implementation of fiscal incentives to ensure universal energy access (PA 3) is expected to benefit 90,000 rural households currently without electricity access. These are expected to reduce poverty, and improve equity and health, as electricity has positive impacts on employment, productivity, and education. Similarly, new households using improved energy for cooking are likely to see improvements in health (especially for women and children). Lastly, PA 4 will increase the coverage of telecommunications services in rural areas and is expected to have positive impacts on poverty reduction and shared prosperity. This is expected to improve service access, quality and digital literacy allowing vulnerable populations' access to educational resources, easier transport planning, emergency response and potential new markets.

61. **The PAs in Pillar II are not expected to affect poverty or income distribution negatively and can have direct (PA 7, PA 8) and indirect (PA 5 and PA 6) positive welfare effects if effectively implemented.** PA 5 - Climate change scenarios - can help prioritize climate adaptation related investments, that will benefit poor populations shown to be more vulnerable to climate change, especially in rural areas. PA 6 has the potential to enhance public spending on climate change and mainstream climate into economic policies by enhancing the role of MEF (and other national institutions) in alignment with the Paris Agreement. Strengthened climate governance could positively impact poverty and equity through increased mobilization of climate finance, better public spending and improved government efficiency. Climate-informed policies, investment, and spending can address poverty and inclusion as vulnerable households are more exposed to climate-related adverse events in Panama. PAs 7 and 8 have the potential to promote equity and reduce poverty in the long run by generating jobs and sustainable livelihoods in rural and coastal regions. These PAs mandate the monitoring and reporting of restoration activities and promote the sustainable management of Panama's forests, ocean and coastal resources. Agritourism-fincas, forest management and reforestation can provide ecologically sound economic activity with social benefits, generating employment opportunities for rural populations. Enhancing and regulating coastal ecosystems can reduce flooding and erosion, and enhance storm protection, food security, and livelihoods for women and indigenous

groups. The implementation of the e-catch platform can foster multiple local sectors, including tourism, and fisheries and reduce poverty.

5.2. ENVIRONMENTAL, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

62. **The measures supported under DPL2 are expected to have an overall positive impact on the environment, forests, and other natural resources.** The proposed policy reforms foster better policy making, enhanced environmental management, reduced emissions, and improved climate resilience. Seven out of eight PAs are expected to positively impact Panama's environment with the remaining PA (PA 4 on digital connectivity) has a likely neutral impact. Three PAs (PA 1, PA 2 and PA 3) also pose environmental risks which Panama's regulatory systems are well placed to manage. Annex 4 includes the environmental assessment for each PA.

63. **Seven PAs have the potential to deliver significant positive environmental outcomes over the long-term, particularly for low-carbon and climate-resilient development.** PAs 1 and 2 directly contribute to mitigating GHG emissions and thereby support the GoP's ambition to remain climate negative. PA 3 is expected to achieve significant positive environmental outcomes from reduced emissions from the increased use of solar energy, increased electricity efficiency, and by reduced air pollution from firewood and charcoal. PA 5 will further strengthen the country's climate change adaptation response through information on different scenarios. PA 6 aligns the nation's climate commitments with its governance structure and enhances MEF's role as a central player. PA 7 will enhance the country's conservation framework, promote monitoring and reporting of restoration activities. PA 8 will promote control and traceability to prevent, deter, and eliminate illegal, unreported and unregulated fishing, enhancing conservation efforts, and their sustainable management.

64. **Three PAs (PA 1, PA 2 and PA 3) could have potentially negative impacts if not managed adequately, though Panama has a regulatory and enforcement system in place to mitigate risks.** Potential negative impacts from the installation of the charging stations (PA 1) are expected to be addressed through the application of the Electrical Installation Regulations (Art. 10), which sets mandatory compliance with the international standard of the National Fire Protection Association (NFPA, number 70 edition 2014 corresponding to the National Electric Code).[62] In addition, connections should follow measures established in the Regulation for Distributing and Commercializing Electrical Energy (Res. N.1231/2007), which requires a certificate from the environmental authority if located in protected areas. A potential indirect negative environmental impact of PA 2 arises from inadequate waste management and disposal of old refrigerators, and old air conditioners. Both are considered electric waste and categorized as "hazardous waste" (*residuo peligroso*) under Art. 3.30 of the Waste Management Law (Law N.33/2018). This risk is mitigated by Panama's regulatory and enforcement system, particularly through the General Environment Law (Law N.41/1998), the Solid Waste Law (Law N.276/2021), and the Waste Management Law (Law N.33/2018). The latter establishes that hazardous waste shall be separated for collection, use, and differentiated disposal (Art.11) and establishes infringements for unauthorized disposal (Art.37). The Solid Waste Law gives control competence to the Minister of Health in hazardous waste management (Art. 8). Lastly, the National Plan of Integrated Management of Waste (PNGR 2017-2027) foresees the creation of specific regulation for hazardous waste (Section 2.2), thus further strengthening is expected in the medium term. In addition, the environmental authority, along with the Food and Agriculture Organization (FAO), has created a platform to foster electronic recycling.[63] Potential negative effects from the installation of isolated photovoltaic systems (PA 3) will be managed by the Environmental Impact Assessment license required by the General Environmental Law Decree (N. 123/ 2009). Further, an EIA will be required if the planned work is located within an environmentally fragile area, affects any environmental protection criteria, or generates cumulative, indirect, or synergistic impacts.

[62] The RIE regulates electric installations, and it is composed of the NFPA 70 (National Fire Protection Association) Spanish Edition Standard and the NFPA 70 NEC 99 (National Electric Code), Spanish Edition, which was adopted by Resolution JTIA No. 537 of July 24, 2002.
[63] See: Programa Nodo de Usuarios para el Beneficio de Eco desarrollo-NUBE https://www.fao.org/faolex/results/details/fr/c/LEX-FAOC164847/

65. **The Ministry of Environment has the capacity to manage potential negative impacts on the environment, forests, or natural resources.** The Ministry was created in 2015, building on the strong foundations laid by the former National Environmental Authority (ANAM), and elevating environmental protection to the ministerial level. The creation of the Ministry addressed some prior budgetary and human resource constraints that historically impeded full application and enforcement of environmental regulation. The Ministry of Environment's mandate includes key elements recognized internationally for good environmental policy, including environmental assessment, enforcement, and compliance, as well as mainstreaming environmental policies and ensuring public participation and environmental education in decision-making.

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

66. **Panama's Public Financial Management (PFM) system is characterized by a timely approval of the annual budget by the National Assembly, good and timely public debt management and reporting, publicly accessible information on government expenditure and effective controls of government payroll.** The approved budget is published in the Official Gazette and made available online.[64] Panama has implemented recent reforms to improve PFM,[65] including a new Integrated Financial Management System that integrates accounting, budgetary, and treasury functionalities and allows the preparation of annual financial statements for the central government. However, these are still not audited or made publicly available, as recommended by international best practices. In addition, budget credibility is affected by significant and numerous budget modifications throughout the year; and there is little information on the capacity of the Supreme Audit Institution (the Comptroller General of the Republic, CGR), the quality of its audit standards, or even the type of audits performed.

67. **Procurement processes in Panama are largely competitive and transparent and have been improving over time.** All procurement transactions use the publicly accessible *PanamaCompra* system for advertising and contract awards. Panama is gradually improving its procurement processes. In this regard, a new law was approved, which includes, among other, rolling out a new version of the e-procurement system, and conducting analyses of procurement outcomes. Additionally, the National Procurement Entity (*Dirección General de Contrataciones Públicas*) has conducted market research to establish new procurement frameworks and has introduced a dynamic tool to execute low-cost, low-risk procurement processes called Online Quotations (*Cotización en Línea)*. In 2023 alone, the GoP spent over US$3 billion on procurement of goods, works and services in around 89 thousand processes. Of those contracts awarded, 75% of the processes are under US$10,000 and are now being executed through *Cotización en Línea*, resulting in lower costs and increased participation. 0.1% of the processes (105) representing 28% of the total contract amount was awarded through the application of bidding based on Value for Money (*Mejor Valor)* selection method. This selection method applies rated criteria. Around 2% of the processes representing 49% of the amounts applied traditional bidding processes; and less than 1% of processes representing 0.4% of the amounts were awarded through framework contracts. The remaining processes are low risk, low-cost procurement activities.[66]

68. **The FOREX internal control environment does not pose major risks to the achievement of PDO, based on the last IMF Safeguards Assessment[67] of Banco Nacional de Panama (BNP), and the 2023 IMF Article IV Consultation Report.[68]** The operation's overall fiduciary risk is moderate based on Panama's PFM system, its FOREX internal control, and its public procurement system, and no additional fiduciary risk mitigation measure is required.

[64] See: https://www.gacetaoficial.gob.pa/Busqueda-Avanzada
[65] The WB has assisted the GoP in producing consolidated financial statements for the central government and improved procurement processes through the implementation of a series of DPLs: Panama Pandemic Response and Growth Recovery I (P174107) DPL I and DPL II (P175930) and just-in-time technical assistance.
[66] See: www.panamacompraencifras.gob.pa/#/2023
[67] IMF Safeguards Assessment Final Report, September 29, 2020.
[68] See: https://www.imf.org/en/Publications/CR/Issues/2023/03/24/Panama-2022-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-531352

69. **The proposed loan will follow the WB's standard disbursement procedures for development policy support.** Upon effectiveness of the Loan Agreement, and the submission of a signed withdrawal application, the proceeds of the loan will be disbursed into the MEF Treasury Single Account, which will form part of the country's foreign exchange reserves. This account is denominated in US dollars, which is legal tender in the country. It is held at the *Banco Nacional de Panamá*, a state-owned bank and the GoP's financial agent (as Panama has no Central Bank). Within thirty (30) days of the withdrawal of the DPL proceeds, the Borrower shall report to the Bank: (a) the exact sum received; (b) the details of the account to which the local currency equivalent of the loan proceeds was credited; and (c) confirm that an equivalent amount has been accounted for in the Borrower's budget management systems. The financial support provided under this operation is not intended to finance goods or services on the list of Excluded Expenditures.[69] If any portion of the loan is used to finance Excluded Expenditures as so defined in the General Conditions, the Bank shall require the Borrower to refund the amount and such payments made for Excluded Expenditures will be cancelled.

5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

70. **MEF will be the main agency responsible for the monitoring, evaluation, and results framework and will coordinate actions across relevant ministries and agencies involved in the operation.** The agencies responsible for the implementation of the PAs include: (i) Pillar I: Ministry of Social Development (MIDES), National Secretariat of Energy (SNE), Public Services National Authority (ASEP), the Transit and Land Transport Authority (ATTT), and *MiBus*; and (ii) Pillar II: Ministry of Agricultural Development (MIDA), and Ministry of Environment (*MiAmbiente*). The WB will monitor implementation of the DPL through regular supervision missions, including virtual missions. The WB will maintain close dialogue with counterparts throughout preparation and implementation and will collaborate with MEF on the monitoring of indicators.

71. **The administrative data needed to monitor the operation is acceptable.** The registration, maintenance, and availability of data in Panama is below the practices of countries with a similar income level. National statistics and administrative data are released with longer lags and more limited coverage compared to peer countries. Nonetheless, this will not compromise the ability to assess the results of this operation, which will be monitored using administrative data maintained by the ministries and agencies involved.

72. ***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 WB 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 Mechanism. The Accountability Mechanism 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 WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the WB'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.

[69] *General Conditions for DPL*: "Excluded Expenditure" for DPL covers items such as alcoholic beverages; tobacco; radioactive and associated materials; nuclear reactors and parts thereof; jewelry of gold, silver, or platinum; goods intended for a military or paramilitary purpose or for luxury consumption; or expenditures for environmentally hazardous goods.

6. SUMMARY OF RISKS AND MITIGATION

73. **The overall risk of the operation is moderate.** Yet, three risk categories are assessed as Substantial, with the remaining assessed as moderate (Table 3): i) The *political and governance* risk is impacted by national elections to be held in May 2024. Political priorities and interinstitutional coordination are likely to be affected by the transition. The WB is closely working with the GoP to provide technical assistance. ii) The *institutional capacity for implementation and sustainability* risk arises from the low technical capacity of public institutions, combined with a complex reform program that requires good coordination across agencies. This risk is mitigated by a consistent and strong engagement in the implementing sectors led by the MEF; the strengthening of interagency collaboration and participatory processes with academia and Civil Society Organizations, specifically for climate-related policy changes. In addition, as part of the CPF FY24-28 process and an entry dialogue with the new government, the risk could be mitigated through a continuous WB engagement supporting the climate policy agenda and providing targeted technical assistance and projects. Iii) The *stakeholder engagement* risk arises from increasing public attention to natural resource management and decarbonization policies. This will be mitigated through enhanced efforts by the GoP in consultation and engagement processes. Despite moderate risk ratings for all other categories, some additional mitigation measures are in place. These include cooperation with other development partners and stakeholders (*stakeholder risk*) and a strong joint dialogue with the IMF on macroeconomic policy (*macroeconomic risk*), specifically ahead of the upcoming Article IV consultation planned for February 19 – March 1, 2024.

Table 3: Summary Risk Ratings[70]

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	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Substantial
9. Other	
Overall	Moderate

[70] There are allegations of forced labor in the production of solar panels and components. This DPL focuses on policies and institutional reforms in Panama. DPL proceeds are not earmarked to any specific purpose, including the manufacture or procurement of solar panels or components.

ANNEX 1: POLICY AND RESULTS MATRIX

Prior actions and Triggers		Results		
Prior Actions for DPL 1	**Prior Actions for DPL 2**	**Indicator Name**	**Baseline**	**Target**
Pillar I – Support reforms to implement energy transition and socially inclusive low-carbon growth.				
Prior Action #1 – E-mobility. The Borrower has issued a decree pursuant to the E-mobility Law to further advance the decarbonization agenda by promoting e-mobility for ground transportation. **Legal Evidence:** *Executive Decree No. 51*, published in the Official Gazette on February 15, 2023.	**Prior Action #1.** The Borrower's Regulatory Authority of Public Services has regulated e-mobility infrastructure standards by approving the requirements for the installation and operation of electric vehicles charging stations, as evidenced by ASEP's Resolution AN No. 18465-Elec, published in the Official Gazette on June 22, 2023.	**Results Indicator #1:** Number of charging stations per 100 km of the primary and secondary road network. **Results Indicator #2:** Percentage of electric buses of the Panama City public operator's fleet (*MiBus*) acquired or under procurement.	2.2 (2022) 0 (2022)	17.3 (2025) 4 (2025)
Prior Action #2 – Energy Efficiency. The Borrower has strengthened its energy efficiency regulatory framework by adopting and publishing the Central American Technical Regulations (RTCA) technical standards for energy efficiency for air-conditioning equipment. **Legal Evidence:** *Ministry of Industry and Commerce's Resolution No. 23* and its annexes: Resolution No. 451-2021 (COMIECO-XCVIII) and RTCA 23.01.78:20, published in the Official Gazette on February 9, 2022.	**Prior Action #2.** The Borrower has taken measures to promote energy efficiency by adopting and publishing the Central American Technical Regulations (RTCA) technical standards and energy efficiency specifications for refrigerators and freezers, es evidenced by the Ministry of Industry and Commerce's Resolution No. 59 and its annexes. Resolution No. 475-2023 (COMIECO-EX) and RTCA 97.01.81:22, published in the Official Gazette on October 3, 2023.	**Results Indicator #3:** Estimated percentage of efficient air conditioners in the country. **Results Indicator #4:** Estimated percentage of efficient refrigerators in the country.	55 (2021) 19 (2021)	91 (2025) 35 (2025)
Prior Action #3 – Improvement of Energy Access. The Borrower has promoted rural electrification and lighting for service	**Prior Action #3.** The Borrower has provided additional fiscal incentives for the construction, operation and maintenance of solar plants or	**Results Indicator #5:** Capacity installed of solar energy for self-generation (MW).	94.2 (2023)	210 (2025)

Prior actions and Triggers		Results		
provision support under the *Plan Colmena* Law for eradication of poverty and inequality. **Legal Evidence:** *Article 14 (11) of Law No. 297*, published in the Official Gazette on April 28, 2022.	installations to increase renewable generation and accelerate energy access, as evidenced by Law No. 417, published in the Official Gazette on December 27, 2023.	**Results Indicator #6:** Number of rural households electrified through *Plan Colmena*. **Results Indicator #7:** Percentage of female-headed households electrified through *Plan Colmena*.	0 (2021) 0 (2021)	2,000 (2025) 35 (2025)
Prior Action #4 – Digital Connectivity. The Borrower has taken measures to ensure connectivity, increase competition for broadband access, boosting the adoption and increasing quality of mobile telephony in underserved areas by setting a new tariff scheme for the advanced wireless services (AWS) radioelectric spectrum band to be used by mobile operators. **Legal Evidence:** *Cabinet Resolution No. 41,* published in the Official Gazette on April 13, 2022.	**Prior Action #4.** The Borrower's Regulatory Authority of Public Services has updated the legal framework that regulates satellite operations, including the costs of the radio spectrum, to increase the coverage of telecommunications services in rural areas, as evidenced by ASEP's Resolution AN No. 19022-Telco, published in the Official Gazette on February 26, 2024.	**Results Indicator #8:** Percentage of population covered by 4G networks. **Results Indicator #9:** Annual growth of the number of rural households connected to internet via satellite.	73 (2021) 0 (2022)	87 (2025) 20 (2025)
Pillar II – Establish policy foundations to sustain natural capital for resilient growth				
Prior Action #5 – Climate Change Legal and Regulatory Framework. The Borrower has taken measures to promote long-term national climate targets and accelerate the inclusive dimensions of climate smart development by submitting to the National	**Prior Action #5.** The Borrower has mandated the Climate Change Directorate to develop climate change scenarios every two years to inform the population, economic sectors, and decision makers about future impacts caused by climate change and facilitate the implementation of essential	**Results Indicator #10:** Negative Carbon balance maintained[71]. **Results Indicator #11:** Sector programs and plans, as well as private sector chambers of commerce considering	Yes (2021)	Yes (2025)

[71] Based on national GHG inventory.

Prior actions and Triggers		Results		
Assembly a climate change framework bill. **Legal Evidence:** Bill submitted on January 24, 2023, to the National Assembly as initiative No. 942 and published in the National Assembly's website.	mitigation and adaptation measures, as evidenced by the Ministry of Environment's Resolution No. DM-0151-2023, published in the Official Gazette on September 27, 2023.	adaptation and mitigation measures based on climate scenarios.	0 (2021)	10 (2025)
Prior Action #6 – Climate Smart Investments. The Borrower has taken measures for improving the quality of public expenditures, including for the tagging of climate-related expenditures, by: (a) mandating public entities to implement technical guidelines for ensuring efficient and transparent quality in service provision; and (b) issuing guidelines for the formulation and evaluation of public investment projects with specific provisions on climate-change tagging. **Legal Evidence:** Article 361 of Law No. 336, published in the Official Gazette on November 14, 2022[72]. Methodological General Guidelines for the Formulation and Evaluation of Public Investment Projects 2022 published in the Ministry of Finance's website[73].	**Prior Action #6.** The Borrower has approved a national climate change policy to promote climate-change adaptation and mitigation actions and established it as a mandatory strategic management instrument for the Borrower's authorities, including the Ministry of Economy and Finance's mandate to mainstream climate change in public investments across all sectors, as evidenced by Executive Decree No. 3, published in the Official Gazette on June 12, 2023.	**Results Indicator #12:** Percentage of approved Environmental Impact Assessments (EIA) that integrate climate mitigation and resilience considerations. **Results Indicator #13:** Percentage of public sector projects considering climate change criteria.	0 (2021) 0[74] (2021)	100 (2025) 100 (2025)
Prior Action #7 – Enhanced conservation of rural, coastal and marine areas for	**Prior Action #7.** The Borrower has approved a restoration monitoring system to enhance	**Results Indicator #14:** Number of agritourism fincas certified.	0[75] (2021)	480 (2025)

[72] See: https://www.gacetaoficial.gob.pa/pdfTemp/29662_A/GacetaNo_29662a_20221114.pdf
[73] See: https://www.mef.gob.pa/wp-content/uploads/2022/02/2022-Guia-Metodologica-General-Panama_MEF.pdf
[74] Baseline value 0 as in absence of the public sector tag for climate a systematic analysis is not possible. Data is only available after 2021.
[75] By December 2021 there were 220 agritourism fincas but they were not certified by ATP and MIDA.

Prior actions and Triggers		Results		
resilience. The Borrower has taken measures to enhance forest conservation, create opportunities to develop nature-based tourism, generate jobs and sustain livelihoods through the expansion of the protected area of Iguana Island Wildlife Refuge as part of the Borrower's national protected areas and the regulation of the Agritourism Law. **Legal Evidence:** Executive Decree No. 1, published in the Official Gazette on February 2, 2022. Executive Decree No. 11, published in the Official Gazette on May 9, 2022.	transparency and track the progress of forest landscape restoration actions in the Borrower's territory, as evidenced by the Ministry of Environment's Resolution DM-0226-2023, published in the Official Gazette on December 12, 2023.	**Results Indicator #15:** Zero net deforestation of mangroves in National Protected Areas achieved. **Results Indicator #16:** Land area restored (ha).	No (2021) 0 (2021)	Yes (2025) 8,500 (2025)
Prior Action #8 – Scale up Marine Protection. The Borrower has approved a National Oceans Policy to boost low carbon and resilient growth based on marine natural resources. **Legal Evidence:** Executive Decree No. 27, published on the Official Gazette on March 21st, 2022.	**Prior Action #8.** The Borrower's Aquatic Resources Authority has mandated the use of the e-Catch Platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008, as evidenced by ARAP's Resolution ADM/ARAP No. 050, published in the Official Gazette on September 13, 2023.	**Results Indicator #17:** Percentage of marine area under conservation and sustainable management schemes.	30.5 (2021)	50 (2025)

ANNEX 2: FUND RELATIONS ANNEX

Panama—Assessment Letter for the World Bank

November 27, 2023

This letter updates the assessment included in the 2022 Article IV Consultation staff report for Panama (published on March 24, 2023).

1. **Growth remains strong and inflation has declined.** GDP expanded by 10.8 percent in 2022 and is projected to grow by 6 percent in 2023. Inflation has come down to 2 percent from its peak of 5.2 percent in mid-2022, helped by fuel and food subsidies introduced after last year's protests. The output gap is projected to close in 2023. The current account deficit deteriorated to 3.9 percent in 2022 and a projected 3.6 percent for 2023 due to a strong recovery and rising global food and fuel prices, but strong capital inflows continue to support the deficit. The external position of Panama is assessed to be broadly consistent with the level implied by fundamentals and desirable policies. Although the standard ARA metric does not apply to Panama's dollarized economy, its reserve level is adequate, supported by ample government deposits in commercial banks, a sizable Sovereign Wealth Fund, and a banking sector liquidity buffer significantly exceeding statutory requirements.

2. **The banking sector remains broadly resilient, with liquidity and solvency buffers well above regulatory minima, healthy profitability, and low levels of NPLs.** The regulatory and supervisory framework is largely aligned with Basel III, although no formal capital buffer framework has been implemented yet. The Superintendency of Banks of Panama (SBP) plans to introduce a capital conservation buffer and a surcharge for domestic systemically important banks. Liquidity requirements are also not fully aligned with Basel III, but banks comply with a Liquidity Coverage Ratio introduced in 2022. Panama has significantly strengthened its institutional framework and instruments for macroprudential policymaking. However, the macroprudential toolkit needs to be expanded further, including with additional borrower-based instruments.

3. **The Government aims to reduce the budget deficit to 3 percent of GDP in 2023, in line with the Social and Fiscal Responsibility Law (SFRL).** The deficit in the first six months of 2023 amounted to 1.9 percent of full-year GDP. Tax revenues declined compared with the same period in 2022 and expenditure growth was strong. The sale of land to the Panama Canal and payments from Minera should boost revenues in the second half of the year, but spending growth needs to slow as well to meet the SFRL target. For 2024, a further reduction of the deficit to 2 percent of GDP is envisaged. The budget proposal for next year foresees an 18.7 percent increase in spending compared to the 2023 budget. A "budgeted adjustment" amounting to 4.7 percent of GDP is included in the proposed budget, which should bring the deficit to the target, but it is not clear at this stage how this will be filled in. To meet the 2024 deficit target, the government will need to keep spending well below the level in the proposed budget. Planned further reductions in the deficit beyond 2024 will also necessitate a strengthening of the revenue base.

4. **Growth is expected to slow to 4 percent in 2024 and subsequent years and risks are titled to the downside.** Key risks include a continued slow global recovery, renewed increases in global food and energy prices due to the intensification of regional conflicts, rising global interest

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rates, reduced Canal traffic due to low water levels, and dislocations in global capital markets that could put pressures on the rollover of external corporate and sovereign debts. Setbacks in fiscal consolidation, which could trigger downgrades by rating agencies, and continued domestic civil unrest may also derail the otherwise robust recovery. Elections are scheduled for May 5, 2024, with the new Government due to take office on July 1, 2024.

5. **In October 2023, Panama was removed from the Financial Action Task Force (FATF) grey list.** However, Panama remains on the EU lists of high-risk third countries and non-cooperative jurisdictions for tax purposes.

6. **Parliamentary discussion of a new contract with copper mine operator Minera has triggered public unrest.** In March of this year, the government reached an agreement with Minera about a new contract to replace the contract that had been annulled by the Supreme Court in 2021. The contract guaranteed a minimum payment of USD 375 million per year, nearly 0.5 percent of GDP. However, protests erupted in August as the National Assembly started considering the new contract, with activists, civil society groups, and unions demanding further renegotiation. After agreeing to several amendments to controversial clauses, the contract was expedited through the National Assembly and passed on October 20, sparking new mass protests and strikes. In response to the unrest, the National Assembly approved in early-November a ban on new mining activities but did not repeal the contract. However, eight lawsuits have been filed with the Supreme Court challenging the new contract's constitutionality. Minera contributes, directly and indirectly, almost 5 percent to GDP.

7. **Panama currently does not have an arrangement with the Fund.** The two-year SDR 1.88 billion (500 percent of quota) PLL arrangement approved by the IMF Board in January 2021 expired in January 2023 without the authorities having drawn on it. The authorities treated the arrangement as precautionary, aimed at strengthening macroeconomic and financial stability and serving as insurance against extreme adverse risks related to the pandemic. While performance under the PLL was satisfactory and the Executive Board gave a generally positive assessment of Panama's policies in the context of the First Review, the Second Review was delayed by half a year due to delays in the strengthening of the AML/CFT framework.

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Table 1. Panama: Selected Economic and Social Indicators, 2020–28

Population (millions, 2022)	4.4	Poverty line (percent, 2019)	21.5
Population growth rate (percent, 2022)	1.3	Adult literacy rate (percent, 2019)	95.7
Life expectancy at birth (years, 2022)	79.1	GDP per capita (US$, 2022)	17,411
Total unemployment rate (April, 2022)	9.9	IMF Quota (SDR, million)	376.8

				Est.	Projections				
	2020	2021	2022	2023	2024	2025	2026	2027	2028
		(Percent change)							
Production and Prices									
Real GDP (2007 prices)	-17.7	15.8	10.8	6.0	4.0	4.0	4.0	4.0	4.0
Consumer price index (average)	-1.6	1.6	2.9	1.5	1.9	2.0	2.0	2.0	2.0
Consumer price index (end-of-year)	-1.6	2.6	2.1	2.2	2.2	2.0	2.0	2.0	2.0
Output gap (% of potential)	-17.9	-7.1	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Demand Components (at constant prices)									
Public consumption	11.9	6.0	-8.6	16.5	0.4	2.8	2.5	3.2	1.5
Private consumption	-10.1	5.3	21.0	1.0	5.3	3.5	3.8	4.0	4.1
Public investment 1/	-65.9	38.9	2.0	30.1	-21.2	-6.6	5.1	7.3	10.2
Private investment	-44.7	30.1	28.7	7.7	8.5	6.4	5.3	5.0	4.6
Exports	-21.6	29.6	15.5	7.2	7.4	5.6	4.2	4.3	4.2
Imports	-31.8	34.0	28.6	1.5	11.3	5.5	4.5	5.1	4.8
Financial Sector									
Private sector credit	-2.6	1.5	6.4	6.5	5.7	6.1	6.1	6.1	6.1
Broad money	9.5	4.1	-1.9	7.6	5.9	6.1	6.1	6.1	6.1
Average deposit rate (Percent)	1.8	1.4	1.8						
Average lending rate (Percent)	7.7	7.6	7.7						
		(In percent of GDP)							
Saving-Investment Balance									
Gross domestic investment	24.8	32.4	34.3	34.7	34.8	34.8	34.9	35.0	35.0
Public sector	2.4	3.0	2.8	3.2	2.5	2.2	2.2	2.3	2.4
Private sector	22.4	29.4	31.5	31.5	32.3	32.6	32.7	32.7	32.6
Gross national saving	24.5	29.3	30.4	31.1	31.5	31.9	32.1	32.3	32.5
Public sector	-2.2	-0.1	1.9	2.6	2.3	2.7	3.2	3.3	3.7
Private sector	26.7	29.4	28.5	28.5	29.2	29.1	28.9	29.0	28.8
Public Finances 1/									
Revenue and grants	20.3	20.2	19.7	21.9	21.1	21.3	21.4	21.5	21.6
Expenditure	29.2	25.4	22.9	24.5	22.9	22.3	22.2	22.3	22.4
Current primary expenditure	19.5	17.2	15.6	15.4	15.1	14.9	14.9	15.0	15.0
Interest	2.6	2.3	1.8	2.7	3.0	3.0	2.9	2.8	2.6
Capital	7.2	5.9	5.5	6.4	4.8	4.3	4.4	4.5	4.8
Overall balance, including ACP	-8.9	-5.2	-3.2	-2.6	-1.7	-1.0	-0.8	-0.8	-0.8
Overall balance, excluding ACP	-10.0	-6.4	-3.9	-2.9	-2.0	-1.5	-1.5	-1.5	-1.5
Total Public Debt									
Debt of Non-Financial Public Sector 2/	62.0	55.6	53.7	52.8	52.3	51.4	50.5	49.7	48.8
External	51.1	48.7	47.7	47.8	47.8	46.6	45.6	44.2	42.8
Domestic	10.9	6.9	6.0	5.1	4.5	4.8	4.9	5.4	6.1
Debt of ACP	4.0	3.1	2.4	1.9	1.6	1.2	0.9	0.7	0.4
Other 3/	4.8	4.7	4.3	4.0	3.8	3.6	3.4	3.2	3.0
External Sector									
Current account	-0.3	-3.0	-3.9	-3.6	-3.2	-3.0	-2.8	-2.7	-2.5
Net exports from Colon Free Zone	3.0	2.4	-1.5	0.0	0.6	1.4	2.1	2.0	2.0
Net oil imports	1.6	2.9	4.2	3.4	3.3	3.1	2.9	2.8	2.6
Net foreign direct investment inflows	0.1	2.4	3.5	3.6	3.6	3.6	3.6	3.5	3.4
External Debt	197.1	177.0	167.8	159.6	160.0	160.3	160.7	159.8	158.5
Memorandum Items									
GDP (in millions of US$)	57,087	67,407	76,523	82,348	87,242	92,569	98,197	104,167	110,500

Sources: Comptroller General; Superintendency of Banks; and IMF staff calculations.
1/ Includes Panama Canal Authority (ACP). Includes Staff adjustment to account for the accrual of previously unrecorded expenditure for 2015-18. These estimates are preliminary.
2/ Non-Financial Public Sector according to the definition in Law 31 of 2011.
3/ Includes debt of public enterprises outside the national definition of NFPS (ENA, ETESA, and AITSA) and non-consolidated agencies.

ANNEX 3: LETTER OF DEVELOPMENT POLICY

REPÚBLICA DE PANAMÁ
— GOBIERNO NACIONAL —

MINISTERIO DE ECONOMÍA Y FINANZAS
Despacho del Viceministro de Economía

8 de febrero de 2024
MEF-2024-6524

Mr. Ajay Banga
President
International Bank for Reconstruction
and Development
Panama

Dear Mr. Banga:

We are writing on behalf of the Government of Panama, to submit to the consideration of the Bank, the provision of financial resources to support the General State Budget for fiscal year 2024 and other fiscal periods; for an amount of up to three hundred and fifty million dollars from the United States of America with 00/100 (USD350,000,000.00), through the preparation of a Program based on Development Policy Reforms that support the foundations of economic impulse called second Loan for the Development of Climate Resilience and Green Growth Development Policies Panama.

This Development Policy Loan is an effective tool for the Government to anchor key policies and institutional reform measures towards climate resilience and green growth in the country. The Government continues to pursue a medium- and long-term reform agenda for which the International Bank for Reconstruction and Development (IBRD) has been a key, effective and strong relationship partner; aspect that we value and appreciate for the collaboration of the Bank since 1946.

The Republic of Panama has been taking the necessary measures with the purpose of maintaining a sustainable and stable growth, after the fall in the Gross Domestic Product (GDP) of 2020, as a result of the COVID-19 Pandemic Crisis; therefore, the growth trend is reflected in the period ended December 31, 2023, in which GDP growth was 6.0%, compared to 10.8 % in 2022.

At the same time, within the framework of economic stability, other aspects that are reflective as such and have contributed to these variations include inflation, measured by the average CPI with base year 2013, which was 1.9% in 2023.
In this sense, we detail a summary of the key aspects of the program and complementary activities, which the Government of Panama undertakes to support through this Ministry, and organized into two Pillars, comprised of eight priority policy actions, which are detailed below:

Pillar I - Support reforms to implement energy transition and socially inclusive low-carbon growth.

Pillar I supports reforms that foster a clean energy transition, socially inclusive

low-carbon growth, and technological innovation for disaster preparedness.
The first prior action supports the legal reforms taken by the Government of Panama to further advance the decarbonization agenda by promoting e-mobility for land transportation through: (i) the adoption of the technical standards for the inspection of electric vehicles; and (ii) the approval of the regulation on the installation and operation of electric vehicles charging stations. The expected results are to incentivize the installation of charging stations by promoting competition and fair conditions for those who want to participate, and to contribute to scaling up a safe e-mobility in the country.

The second prior action supports the measures taken by the Ministry of Industry and Commerce to promote energy efficiency by adopting the Minimum Energy Performance Standards (MEPS) for refrigerators and aligning its regulations with the energy efficiency standards for refrigerators published in the RTCA. It is expected that the adoption of enhanced MEPS for refrigerators will result in significant energy efficiency gains. It will contribute to achieving low-carbon growth by enforcing enhanced regulations to promote the use of more efficient cooling appliances. The Government will explore ways to encourage the adoption of these efficient cooling systems, aimed at lower-income households, in order to ensure that they access the efficiency improvements supported by this prior action.

The third prior action promotes an increased generation of renewable energy and the rapid expansion of energy access by providing incentives to encourage the construction, operation and maintenance of solar plants or installations. The exemptions outlined in the prior action address a major barrier to increasing distributed generation in the country, as identified in the National Distributed Generation Strategy (ENGED).
The fourth prior action supports the measures taken by the National Authority for Public Services (ASEP) to update the cost of the radio spectrum for satellite operators and develop provisions for infrastructure sharing to extend services to rural areas. The proposal aims to close the digital divide by facilitating access to mobile and fixed bandwidth, as well as voice and messaging services, in rural areas not reached by traditional networks, or where service quality has been poor. The reform will facilitate access to digital services in rural and remote areas.

Pillar II – Establish policy foundations to sustain natural capital for resilient growth

Pillar II supports climate and nature governance, enhanced institutional capacity for advancing the country' s climate change adaptation and mitigation agendas, while fostering resilience and social inclusion.
The fifth prior action mandates the Ministry of Environment' s Climate Change Directorate to develop climate change scenarios every two years to alert the population, economic sectors, and decision makers about future impacts

REPÚBLICA DE PANAMÁ
— GOBIERNO NACIONAL —

MINISTERIO DE ECONOMÍA Y FINANZAS
Despacho del Viceministro de Economía

caused by climate change and to facilitate the implementation of essential mitigation and adaptation measures. The scenarios will also enable climate investments by building the base for a prioritization of climate adaptation related investments, sustain potential cost-benefit analysis, and ultimately provide the necessary justifications for enhanced climate action. This policy prior action is a central element of the country' s commitment to define long term climate adaptation and mitigation objectives. As such, Panama is also moving forward the elaboration of its Long Term Climate Strategy (LTS) through a participatory process, which will be informed by the updated climate scenario (DPL2). The regular development of climate scenarios will periodically inform the LTS projections.

The sixth prior action adopts the National Climate Change Policy to promote climate change adaptation and mitigation actions. The policy establishes clear roles and responsibilities of national institutions. It highlights the role of the MEF in mainstreaming climate change into economic policies, the budget process, public investment, and mobilizing finance. The policy sets a goal that by 2050 all public investments will include climate criteria. The Policy also sets important objectives around the production and publication of risk and vulnerability information, indices and maps. The policy enables and promotes low-carbon and resilient investments across all sectors.

The seventh prior action supports measures to enhance transparency and information accuracy through the monitoring and reporting of restoration activities through the Restoration Monitoring System (SMR). Enhanced monitoring of landscape restoration activities will provide the government with information to oversee activities implemented on the ground, report on the country' s progress towards achieving the NDC' s land use sector target and submit complete and transparent information in the Biennial Transparency Report (BTR) to fulfill the reporting commitments under the UNFCCC.

The eighth prior action mandates the use of the e-Catch platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008. This policy along with, the expansion of the marine protected areas promoted by the government the last year, represents an important signal of the country' s commitment to strengthening the sustainable management and conservation of the country' s marine and coastal ecosystems, while ensuring future growth, food security and jobs for coastal communities.

The Government of Panama is committed to each of the policy actions taken, aimed at supporting the country' s efforts towards decarbonization and long-term sustainable growth by promoting social inclusion within the country' s green, resilient and sustainable growth objectives.

REPÚBLICA DE PANAMÁ
— GOBIERNO NACIONAL —

MINISTERIO DE
ECONOMÍA Y FINANZAS
Despacho del Viceministro de Economía

Panama underscores its strong commitment to meeting our sustainable development goals and achieving its climate change mitigation, adaptation, and finance flow consistency objectives under the Paris Agreement by advancing our reform agenda, important aspects of which are supported by this DPL. By moving forward with this reform agenda, Panama reiterates its commitment to comply with the sustainable development goals and the Paris Agreement.

We inform you of our firm decision to continue working on the fulfillment and development of the Program. In this regard, we reiterate our gratitude for the support provided by the Bank and we look forward to the pertinent steps to carry out this operation.

We are confident that our request will receive the endorsement of the World Bank' s Board of Directors,

Sincerely,

Carlos E. González M.
Vice Minister of Economy

CGM/JMM/VDLR/JVR/jg

República de Panamá
Despacho del Viceministro de Economía
Ministerio de Economía y Finanzas

Documento oficial firmado en el Sistema de Transparencia Documental - TRANSDOC del Ministerio de Economía y Finanzas.
Utilice el Código QR para verificar la autenticidad del presente documento.

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
Operation Pillar 1: Objective		
Prior Action #1. The Borrower's Regulatory Authority of Public Services has regulated e-mobility infrastructure standards by approving the requirements for the installation and operation of electric vehicles charging stations.	**Positive impacts.** This PA will reduce GHG emissions in the transport sector, therefore minimizing effects on climate change. It also promotes the reduction of atmospheric pollutant emissions, reducing negative impacts on human health. **Potential negative impacts** in relation to the installation of the charging stations are expected to be addressed through the application of the Electrical Installation Regulations of Panama, which sets mandatory compliance with the international standard of the National Fire Protection Association (NFPA, number 70 edition 2014) corresponding to the National Electric Code (NEC), approved by Resolution No.537, 2002. In addition, in the case of new clients, the connection should follow measures established in the Regulation for Distributing and Commercializing Electrical Energy, approved by Resolution No.1231, 2007 which requires a certificate from the Environmental Authority in the case located in Protected Areas.	**Potential positive impacts** on health by averting respiratory diseases, especially among those with health vulnerabilities. **Neutral impacts** on poverty and the bottom 40 percent in the short term, with **potentially positive impacts** in the medium run as the PA incentivizes improved transportation, including public transport (through electrification), which tends to be used more by poor and vulnerable groups. Additionally, while upfront cost of e-buses is higher than diesel ones, when operational and maintenance costs are considered, the total cost of ownership is expected to reach parity in two to three years, hence the risk of any pricing increase for final users due to the fleet renewal is very low.
Prior Action #2. The Borrower has taken measures to promote energy efficiency by adopting and publishing the Central American Technical Regulations (RTCA) technical standards and energy efficiency specifications for refrigerators and	**Likely positive** impacts through enhanced efficient use of energy. **Potential negative effects** from inadequate waste management and disposal of old refrigerators, and old air conditioners, considered "hazardous waste" under Art. 3.30 of	**Neutral to small positive economic impacts** in the long run. Small businesses, low-income households, and vulnerable groups could be negatively affected by regulations dictating adoption of new energy-efficient equipment or exhibit low

freezers.	the Waste Management Law (Law N.33/2018).However, this risk is expected to be mitigated by Panama's regulatory and enforcement system, particularly through the General Law of the Environment Law (Law N.41/1998), the Solid Waste Law (Law N.276/2021), and the Waste Management Law (Law N.33/2018). The latter establishes that hazardous waste shall be separated for collection, use, and differentiated disposal (Art.11) and establishes infringements for unauthorized disposal (Art.37). The Solid Waste Law gives control competence to the Minister of Health in hazardous waste management (Art. 8). Lastly, the National Plan of Integrated Management of Waste (PNGR 2017-2027) foresees the creation of a specific regulation for hazardous waste (Section 2.2), thus further strengthening is expected in the medium term. .	take-up. However, the GoP will explore ways to encourage the adoption of these efficient cooling systems, aimed at lower-income households, in order to ensure that they access the efficiency improvements supported by this prior action. The PA is also expected to increase market size and lower prices. In the long run, adoption of energy-saving technologies and behaviors would generate savings.
Prior Action #3. The Borrower has provided additional fiscal incentives for the construction, operation and maintenance of solar plants or installations to increase renewable generation and accelerate energy access.	**Positive impacts** on reduced air pollutants and emissions due to the increased use of solar energy and fewer emissions from firewood and charcoal **Potential negative effects** from installation of solar photovoltaic systems will be managed by the Environmental Impact Assessment license required by the General Environmental Law Decree (Article 16 of Executive Decree 123/ 2009).	**Positive impacts** on poverty reduction and equity, in the long run, as vulnerable households with access to electricity for the first time might see positive impacts in employment, productivity, health, and education, and ultimately in incomes and poverty. In addition, the integration of a gender strategy in the PA would increase access to labor markets for women. As the PA would lower firewood consumption, positive health effects are expected too.
Prior Action #4. The Borrower's Regulatory Authority of Public Services has updated the legal framework that regulates satellite operations, including the costs of the radio spectrum, to increase the coverage of telecommunications	This PA is likely to have **neutral impacts** on the environment as it focuses on developing regulatory instruments that enable mobile operators to reduce their spectrum costs.	**Neutral impacts** in the short run with **likely positive impacts** on poverty reduction and shared prosperity in the long run if broadband access reaches low-income households and enhances access to better economic opportunities and basic services.

services in rural areas.		
Operation Pillar 2: Objective		
Prior Action #5. The Borrower has mandated the Climate Change Directorate to develop climate change scenarios every two years to inform the population, economic sectors, and decision makers about future impacts caused by climate change and facilitate the implementation of essential mitigation and adaptation measures.	**Positive impacts.** This PA is expected to strengthen the country's climate change adaptation response as it will provide information on different scenarios. This information will likely have positive long terms impacts on the environment as it would better inform the decision-making process towards the reduction of atmospheric pollutants, and negative impacts on human health.	**Neutral impacts** in the short run with expected **positive impacts** in the long run on poverty reduction, shared prosperity, and gender equity; although impact sizes would depend on the specific actions implemented.
Prior Action #6. The Borrower has approved a national climate change policy to promote climate-change adaptation and mitigation actions and established it as a mandatory strategic management instrument for the Borrower's authorities, including the Ministry of Economy and Finance's mandate to mainstream climate change in public investments across all sectors.	**Positive impacts** expected through the restoration and protection of key ecosystems, circular economy and the integration of climate considerations into critical economic decisions and processes, facilitating progress toward a sustainable transition pathway, and resulting in a reduction of atmospheric pollutants.	**Neutral impacts** in the short run with potentially positive impacts on poverty reduction and shared prosperity in the long run if investments increase resilience of poor households in areas vulnerable to climate change.
Prior Action #7. The Borrower has approved a restoration monitoring system to enhance transparency and track the progress of forest landscape restoration actions in the Borrower's territory.	**Positive impacts** as expected to enhance the country's conservation framework and promote monitoring and reporting of restoration activities of rural, coastal areas.	**Neutral impacts** in the short run with potentially **positive impacts** on poverty reduction and shared prosperity in local areas in the long run as forest conservation, agriculture, and ecotourism materialize into economic opportunities for rural households.
Prior Action #8. The Borrower's Aquatic Resources Authority has mandated the use of the e-Catch Platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008.	**Positive impact.** The e-Catch platform for the validation and issuance of capture certificates is expected to result in an increase control and traceability to prevent, deter and eliminate illegal, unreported and unregulated fishing, enhancing conservation efforts.	**Neutral impacts** in the short run with potentially **positive impacts** on poverty reduction and shared prosperity in the long run as the PA materializes into a sustainable management of marine and coastal areas, climate resilience, and better livelihoods.

ANNEX 5: PARIS ALIGNMENT ASSESSMENT TABLE

Program Development Objective(s): The development objective is to establish policy foundations to foster low-emission and sustainable economic growth and climate change resilience.	
Taking into account our climate analysis (e.g., Country Climate and Development Reports or CCDRs), is the operation consistent with the country climate commitments, including for instance, the NDC, NAP, LTS, and other relevant strategies?	Yes, the operation is directly aligned with Panama's Updated Nationally Determined Contribution (NDC) submitted in December 2020 to maintain its carbon negative status. It focuses on the two key sectors with the largest mitigation potential: Energy and land use, land-use change, and forestry (LULUCF). It is also aligned with current climate change commitments established in policy instruments such as the National Climate Action Plan (NCAP), namely energy transition and nature-based solutions. It is also aligned with Panama's LTS currently under public consultation and with the main objective of the National Adaptation Plan (NAP) currently under development through a GCF grant. This operation directly supports the formulation of strategic planning climate change instruments such as Panama's Climate Change Scenarios and Panama's Climate Change Policy. A CCDR for Panama is not yet available.
Mitigation goals: assessing and reducing the risks	
Pillar 1: Support reforms to implement energy transition and socially inclusive low-carbon growth	
Prior Action 1: The Borrower's Regulatory Authority of Public Services has regulated e-mobility infrastructure standards by approving the requirements for the installation and operation of electric vehicles charging stations.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No **Explanation**: This prior action is not likely to cause a significant increase in GHG emissions, in fact it contributes to the expansion of electric mobility through the promotion of charging infrastructure. Activities related to electric transportation, including passengers and freight, are universally aligned.
Conclusion for PA 1: The measure supported by the prior action is intended to reduce GHG emissions, consequently, it can be considered aligned on mitigation.	
Prior Action 2: The Borrower has taken measures to promote energy efficiency by adopting and publishing the Central American Technical Regulations (RTCA) technical standards and energy efficiency specifications for refrigerators and freezers.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No. **Explanation**: The prior action intends to reduce GHG emissions through the adoption of efficient energy standards for refrigerators.
Conclusion for PA 2: The measures supported by the prior action are intended to reduce GHG emissions, consequently, it can be considered aligned on mitigation.	
Prior Action 3: The Borrower has provided additional fiscal incentives for the construction, operation and maintenance of solar plants or installations to increase renewable generation and accelerate energy access.	

Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No. **Explanation**: This prior action promotes the use of solar panels by providing tax incentives. Solar energy generation has negligible lifecycle GHG emissions, and therefore electricity generated from this source is considered universally aligned.
Conclusion for PA 3: The measure supported by the prior action is not likely to have any direct mitigation or emissions generating impacts, consequently, it can be considered aligned on mitigation.	
Prior Action 4: The Borrower's Regulatory Authority of Public Services has updated the legal framework that regulates satellite operations, including the costs of the radio spectrum, to increase the coverage of telecommunications services in rural areas.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No. **Explanation**: This prior action does not increase GHG emissions and does not introduce or reinforce persistent barriers to the country's ability to pursue a low- emissions development pathway, and hence is considered universally aligned.
Conclusion for PA 4: The measure supported by the prior action is not likely to have any direct mitigation or emissions generating impacts, consequently, it can be considered aligned on mitigation.	
Pillar 2: Establish policy foundations to sustain natural capital for resilient growth.	
Prior Action 5. The Borrower has mandated the Climate Change Directorate to develop climate change scenarios every two years to inform the population, economic sectors, and decision makers about future impacts caused by climate change and facilitate the implementation of essential mitigation and adaptation measures.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No. **Explanation**: The development of climate change scenarios every two years mandated through the Resolution supported by this prior action has a neutral impact and is not likely to result in a significant increase in GHG emissions.
Conclusion for PA 5: The measure supported by the prior action can be considered aligned on mitigation.	
Prior Action 6: The Borrower has approved a national climate change policy to promote climate-change adaptation and mitigation actions and established it as a mandatory strategic management instrument for the Borrower's authorities, including the Ministry of Economy and Finance's mandate to mainstream climate change in public investments across all sectors.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No. **Explanation**: The 2050 National Policy on Climate Change is a strategic management instrument to promote actions to encourage decarbonization of all economic sectors and human activities that produce GHG emissions in order to maintain Panama's status as a carbon negative country, reinforcing the country's commitment to the Paris Agreement. The reform supported through this prior action recognizes the central role of MEF and aims to increase transparency of the integration of climate change considerations into planning and budgeting processes.
Conclusion for PA 6: The measure supported by the prior action is intended to reduce GHG emissions, consequently, it can be considered aligned on mitigation.	

Prior Action 7: The Borrower has approved a restoration monitoring system to enhance transparency and track the progress of forest landscape restoration actions in the Borrower's territory.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer**: No. **Explanation**: The measure supported by the prior action aims to enhance forest restoration management and hence is not likely to increase GHG emissions but rather reduce them. The Restoration Monitoring System (SMR in Spanish) will track progress of the land use sector climate commitments contributing to the achievement of its mitigation targets. The activities tracked by the system support landscape and forest restoration which generally increase carbon sinks through improved natural resource management.
Conclusion for PA 7: The measure supported by the prior action is intended to reduce GHG emissions, consequently, it can be considered aligned on mitigation.	
Prior Action 8: The Borrower's Aquatic Resources Authority has mandated the use of the e-Catch Platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008.	
Step M2.1: Is the prior action likely to cause a significant increase in GHG emissions?	**Answer:** No. **Explanation**: The prior action supports the GoP efforts towards an effective fisheries management. This prior action is at low risk of contributing to a significant increase in GHG emissions.
Conclusion for PA 8: The measures supported by the prior action is not likely to have any direct mitigation or emissions generating impacts, consequently, it can be considered aligned on mitigation.	
Mitigation goals: *All prior actions are aligned on mitigation.*	
Adaptation and resilience goals: assessing and managing the risks	
Pillar 1: Support reforms to implement energy transition and socially inclusive low-carbon growth	
Prior Action 1: The Borrower's Regulatory Authority of Public Services has regulated e-mobility infrastructure standards by approving the requirements for the installation and operation of electric vehicles charging stations.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: Yes**. **Explanation**: This prior action's development impact is expected to be threatened by climate risks.
Step A3: Does the design of the prior action reduce the risk from climate hazards to an acceptable level, considering climate adaptation good practices applicable to the country context.	**Answer: Yes. Explanation:** The regulation on the installation and operation of electric vehicles charging stations includes provisions that all charging stations must comply with the Regulation of Electrical Installations of Panama (*Reglamento de Instalaciones Eléctiricas de Panama*, RIE), with security criteria established by the fire department and ASEP, as well as with the national council of meteorology. These regulations include climate risks considerations. Also, the constant update of Panama's climate change scenarios, supported by PA 5 of this operation, will provide accurate

	information on the climate risks.
Conclusion for Prior Action 1: The prior action's development impact could be threatened by climate risks, but the policy design reduces these risks to an acceptable level. Consequently, it can be considered aligned on adaptation.	
Prior Action 2: The Borrower has taken measures to promote energy efficiency by adopting and publishing the Central American Technical Regulations (RTCA) technical standards and energy efficiency specifications for refrigerators and freezers.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No. Explanation**: This prior action's development impact is not expected to be threatened by climate risks. The measure is constrained to the formulation of the energy efficiency regulation and the constitution of a financial instrument, hence material and physical climatic risks are not expected to hinder its execution.
Conclusion for Prior Action 2: This prior action's development impact is not expected to be threatened by climate risks.	
Prior Action 3: The Borrower has provided additional fiscal incentives for the construction, operation and maintenance of solar plants or installations to increase renewable generation and accelerate energy access.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No**. **Explanation**: This prior action's development impact is not expected to be threatened by climate risks. The measure is constrained to the provision of fiscal incentives, hence material and physical climatic risks are not expected to hinder its execution.
Conclusion for Prior Action 3: This prior action's development impact is not expected to be threatened by climate risks. Consequently, it can be considered aligned on adaptation.	
Prior Action 4: The Borrower's Regulatory Authority of Public Services has updated the legal framework that regulates satellite operations, including the costs of the radio spectrum, to increase the coverage of telecommunications services in rural areas.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No. Explanation**: The reform aims to close the digital gap by facilitating access to mobile and fixed bandwidth, as well as voice and messaging services, in rural areas not reached by traditional networks, or where service quality has been poor. The policy reform will not encourage the installation of new infrastructure, but rather the use of existing infrastructure. The reform will play a positive role in disaster preparedness and response, as rural communities will have access to internet and will be able to receive timely information on potential risks or evacuation procedures and respond effectively.

Conclusion for Prior Action 4: This prior action's development impact is not expected to be threatened by climate risks. This prior action plays a key role in disaster preparedness and response. Consequently, it can be considered aligned on adaptation.	
Pillar2: Establish policy foundations to sustain natural capital for resilient growth.	
Prior Action 5: The Borrower has mandated the Climate Change Directorate to develop climate change scenarios every two years to inform the population, economic sectors, and decision makers about future impacts caused by climate change and facilitate the implementation of essential mitigation and adaptation measures.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No. Explanation**: The scenarios will allow decision makers to better anticipate the potential climate change impacts. The prior action strengthens Panama's climate and disaster resilience.
Conclusion for Prior Action 5: This prior action's development impact is not expected to be threatened by climate risks. Consequently, it can be considered aligned on adaptation	
Prior Action 6: The Borrower has approved a national climate change policy to promote climate-change adaptation and mitigation actions and established it as a mandatory strategic management instrument for the Borrower's authorities, including the Ministry of Economy and Finance's mandate to mainstream climate change in public investments across all sectors.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No. Explanation**: The Policy supported by the prior action will support the GoP to build resilience to climate change by establishing important objectives around the production and publication of risk and vulnerability information, indices and maps. Such information is critical to guide investment decisions of national and subnational governments, the private sector, and households.
Conclusion for Prior Action 6: This prior action's development impact is not expected to be threatened by climate risks. Consequently, it can be considered aligned on adaptation.	
Prior Action 7: The Borrower has approved a restoration monitoring system to enhance transparency and track the progress of forest landscape restoration actions in the Borrower's territory.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No. Explanation**: The monitoring and reporting system is not at risk from climate hazards. On the contrary this prior action will support the GoP assess the areas where forest restoration activities are developed and enhanced land management efforts if needed, indirectly reducing the country's vulnerability to natural disasters and contributing to sustainable and resilient livelihoods.
Conclusion for Prior Action 7: This prior action's development impact is not expected to be threatened by climate risks. Consequently, it can be considered aligned on adaptation.	

Prior Action 8: The Borrower's Aquatic Resources Authority has mandated the use of the e-Catch Platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008.	
Step A2: Are risks from climate hazards likely to have an adverse effect on the prior action's contribution to the Development Objective(s)?	**Answer: No. Explanation**: The design of the prior action is developed within Panama's policy and legal climate change adaptation framework. Panama recognizes the vulnerability of the sector and has integrated this risk to diverse policies. First, the NDC includes the coastal marine sector as one of the key sectors to meet the country's commitment. It specifically mentions the incorporation of nature-based solutions and natural protected areas as an adaptation measure. Panama is in the process of expanding and strengthening its System for the Recording and Evaluation of Damages (SIDER). This platform identifies and monitors the slow onset effects of climate change.
Conclusion for Prior Action 8: This prior action's development impact is not expected to be threatened by climate risks. Consequently, it can be considered aligned on adaptation.	
Adaptation and resilience: *All prior actions are aligned on adaptation and resilience. The adaptation risks are low.*	
OVERALL CONCLUSION OF PARIS ALIGNMENT ASSESSMENT: The operation is aligned with the goals of the Paris Agreement.	

ANNEX 6: STATUS OF DPL2 TRIGGERS AND PROPOSED CHANGES

Original Indicative Trigger (OIT) proposed in DPL 1	Prior Action for DPL 2	Comments
Pillar I – Support reforms to implement energy transition and socially inclusive low-carbon growth		
OIT #1. The Borrower has taken steps to scale up e-mobility by adopting technical standards and regulations to: (i) enable the conversion of ICE vehicles to electric vehicles; and (ii) support the installation and operation of electric car charging stations.	PA #1. The Borrower's Regulatory Authority of Public Services has regulated e-mobility infrastructure standards by approving the requirements for the installation and operation of electric vehicles charging stations.	Section (i) of OIT #1 is still very relevant and the GoP is finalizing the regulation. However, it is not expected that the Executive Decree could be published before approval of current operation and it is included in the LDP. The expected technical standards will focus on the adoption of a manual for the inspection of electric vehicles including converted ICE vehicles. The GoP and the Transit and Land Transport Authority (ATTT) has confirmed the need to develop an inspection regulation for all electric vehicles, including ICE vehicles, to guarantee compliance with the technical conditions that ensure their safe circulation. To better reflect the expected impact of the policy and previous reform agenda under DPL1, RI #2 is now measured in percentage terms.
OIT #2. The Borrower has taken measures to promote energy efficiency by: (i) adopting the Minimum Energy Performance Standards (MEPS) for refrigerators and aligning its regulation with the standards published in the RTCA for energy efficiency for refrigerators; and (ii) approving the Energy Transition Fund (FONTE), through the Climate Change Law.	PA #2. The Borrower has taken measures to promote energy efficiency by adopting and publishing the Central American Technical Regulations (RTCA) technical standards and energy efficiency specifications for refrigerators and freezers.	Trigger has been upgraded to a prior action for the Performance Standards. The establishment of FONTE is subject to the approval process of the Climate Change Framework Law. While still very relevant, this is currently beyond the timeframe of this operation. To better reflect the expected impact of the policy and previous reform agenda under DPL1, RI #3 and #4 estimate the percentage of total efficient air conditioners and refrigerators efficient in the country.
OIT #3. The Borrower has taken steps to implement its social inclusion policies by regulating the *Plan Colmena* Law.	PA #3. The Borrower has provided additional fiscal incentives for the construction, operation and maintenance of solar plants or installations to increase renewable generation and accelerate energy access.	The initially foreseen trigger is still very relevant, and the GoP is finalizing the regulation. Meanwhile, to accelerate implementation of the *Plan Colmena* Law the GoP has released nine province-level implementation plans, thereby boosting specific social inclusion and sustainability investments in the most marginalized areas. Specifically, those implementation actions geared towards energy access require enhanced complementary regulation to lower the cost of renewable energy technology and nudge beneficiaries into adopting them. Therefore, the initial trigger has been changed to focus on these complementary regulations that will boost rural electrification interventions from *Plan Colmena* implementation. To better reflect the expected impact of the policy reform, a new indicator has been included to measure the total installed capacity of solar energy for self-generation (MW). RI indicator corresponding to the *Number of indigenous women with skills to perform installation and maintenance tasks of isolated photovoltaic systems in their communities* has been removed, but as mentioned in the *Reform Implementation* section, the SNE continues the implementation of this

Original Indicative Trigger (OIT) proposed in DPL 1	Prior Action for DPL 2	Comments
		program, which currently receives financing from the WB.
OIT #4. The Borrower has taken steps to make markets more competitive by publishing regulatory instruments to allow mobile operators to reduce their spectrum costs and align their incentives to set more competitive prices for spectrum.	PA #4. The Borrower's Regulatory Authority of Public Services has updated the legal framework that regulates satellite operations, including the costs of the radio spectrum, to increase the coverage of telecommunications services in rural areas.	The GoP has made progress in ensuring a more competitive framework and reducing spectrum fees. The GoP has also identified the need for regulatory reforms of satellite operations to reduce the digital divide with rural areas. Therefore, the proposed prior action focuses on satellite operations while recognizing the ongoing importance of the digital reform program for sustainable and inclusive growth. To better measure the impact of the policy and previous reform agenda under DPL1, RI #1 now considers the annual growth (percentage) of the number of rural households connected to internet via satellite.
Pillar II – Establish policy foundations to sustain natural capital for resilient growth		
OIT #5. The Borrower has issued a regulatory decree to the Climate Change Framework Law establishing mandatory measures for the country's long-term low greenhouse gas emission development.	PA #5. The Borrower has mandated the Climate Change Directorate to develop climate change scenarios every two years to inform the population, economic sectors, and decision makers about future impacts caused by climate change and facilitate the implementation of essential mitigation and adaptation measures.	The GoP is in the process of consulting a draft of the country's long-term low greenhouse gas emissions strategy, a regulatory tool that would establish mandatory measures for the country's long-term low greenhouse gas emission development. This consultation complements the participatory process for the LTS elaboration, including CSOs and academia, among other. While the general climate law remains in congress and is not yet approved, the GoP is aiming at advancing this important instrument. However, it is not expected that the LTS could be published before approval of current operation. The policy reform selected as a prior action informs the LTS by allowing decision makers to better understand and anticipate the potential climate change impacts. An additional indicator is included that will showcase how international and nationally developed climate scenarios are mainstreamed to public and private sector planning and investment tools.
OIT #6. The Borrower has mandated climate change mitigation and climate impact assessment considerations as part of the country's Environmental Impact Assessment Process.	PA #6. The Borrower has approved a national climate change policy to promote climate-change adaptation and mitigation actions and established it as a mandatory strategic management instrument for the Borrower's authorities, including the Ministry of Economy and Finance's mandate to mainstream climate change in public investments across all sectors	The GoP advanced in a timely manner and has enacted the policy reform originally planned under the indicative trigger. In parallel, the GoP has updated the National Climate Change Policy. The Policy frames the efforts and achievements the country has made in terms of climate management since ratifying the Paris Agreement, and establishes the coherence and complementarity of different normative, institutional, programmatic and operational instruments. The Policy cements the key role of MEF in mainstreaming climate into economic policies, budget process, and public investment. To better reflect the expected impact of the policy and previous reform agenda under DPL1, the indicator wording has been slightly revised showcasing the total numbers of EIA that include climate change considerations. Also, an additional indicator has been included to showcase the extent to which climate change criteria have informed public sector investment projects to directly and more clearly measure the impact of the policy reform.
OIT #7. The Borrower has updated the Forest Law to (i) strengthen legal	PA #7. The Borrower has approved a restoration monitoring system to	The draft Forest Law will be widely consulted before the elections but not presented to the National Assembly

Original Indicative Trigger (OIT) proposed in DPL 1	Prior Action for DPL 2	Comments
recognition of forests to provide ecosystem services thereby allowing for economic schemes to compensate forest protection; (ii) strengthen planning and management instruments for sustainable forest management; and (iii) regulate land use changes.	enhance transparency and track the progress of forest landscape restoration actions in the Borrower's territory.	before approval of the current operation. In parallel, a strong reform plan remains, and the GoP is progressing measures for sustainable land management, as captured in the PA. To better measure the results of this new policy reform an additional indicator is included to the program that allows to account for the land area restored and registered, hereby enabling the country to advance its NDC commitments.
OIT #8. The Borrower has strengthened the sustainable management and conservation of the country's marine and coastal ecosystems by issuing a decree to increase the area of the marine-coastal natural protected areas.	PA #8. The Borrower's Aquatic Resources Authority has mandated the use of the e-Catch Platform for the validation and issuance of catch certificates to establish an adequate and comprehensive control and traceability system for aquatic products exported from the Borrower's territory in alignment with EU Regulation (EC) No. 1005/2008.	The GoP has enacted the policy elements of the OIT in a timely manner. It is now pushing for a more ambitious reform agenda to harness the economic benefits of marine and coastal ecosystem conservation and management, and thereby advance the progress towards the planned indicator. The prior action captures the steps taken by the GoP to eliminate illegal, unreported and unregulated fishing.