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Report No: PGD404

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A

PROPOSED LOAN

IN THE AMOUNT OF US\$ 750 MILLION

TO THE

**REPUBLIC OF PERU** 

FOR THE:

Peru: Enabling a Green and Resilient Development DPF-DDO II

26 of September 2023

Urban, Resilience and Land Global Practice

## Latin America and Caribbean Region

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MVCS

Ministerio de Vivienda, Construcción y

#### **Republic of Peru**

#### **GOVERNMENT FISCAL YEAR**

January 1 – December 31

#### **CURRENCY EQUIVALENTS**

(Exchange Rate Effective as of September 11, 2023)

#### Peruvian Soles (PEN) 3.7 = United States Dollars US\$1.00

#### ABBREVIATIONS AND ACRONYMS

ANA	Autoridad Nacional del Agua		Saneamiento (Ministry of Housing, Construction
ASA	Advisory Services Analytics		and Sanitation)
ATU	Autoridad de Transporte Urbano para Lima y Callao	NCRE	Non-Conventional Renewable Energy
	<u>(</u> Urban Transport Authority for Lima & Callao)	NDC	National Determined Contributions
BCRP	Banco Central de Reserva del Perú (Central Reserve	NFPS	Non-Financial Public Sector
	Bank of Peru)	NMT	Non-motorized transport
BIM	Building Information Modeling	OECD	Organization for Economic Co-operation and
BRT	Metropolitan Bus Rapid Transit		Development
CENEPRED	Centro Nacional de Estimación, Prevención y	PCM	Presidency of the Council of Ministers
	Reducción de Riesgos (National Center for Disaster	PEDN	Plan Estratégico de Desarrollo Nacional (Strategic
	Risk Reduction, Estimation, and Prevention)		Plan for National Development)
CGR	Comptroller General of the Republic	PFM	Public Financial Management
CPF	Country Partnership Framework	PLANAGERD	Plan Nacional de Gestión de Riesgo de Desastres
DDO	Deferred Drawdown Option		(National Disaster Risk Management Plan)
DPF	Development Policy Financing	PLANMET	Lima-Callao Metropolitan Plan 2040
DPL	Development Policy Loan		Single Procedure for Environmental Cartification
DRM	Disaster Risk Management	PUPCA	
DUS	Sustainable Urban Development (Law)	DENIANAI	Process Registro Nacional de Medidas de Mitigación
E&S	Environmental and Social	NENAMI	(National Registry of Mitigation Measures)
EE	Energy Efficiency	TE	Technical Experts
EIA	Environmental Impact Assessment	SBS	Banking supervisor
EOCs	Emergency Operation Centers	3D3	Systematic Country Diagnostic
FCL	Flexible Credit Line	SEACE	Sistema Electrónico de Adquisiciones y
FOREX	Foreign Exchange	JLACE	Contrataciones del Estado (Electronic Procurement
GDP	Gross Domestic Product		System)
GHG	Green House Gases	SECO	Swiss State Secretariat for Economic Affairs
GIZ	German Agency for International Cooperation	SELEO	Sistema Nacional de Evaluación de Impacto
GoP	Government of Peru	SEIA	Ambiental (National Environmental Impact
GRS	Grievance Redress Service		Assessment System)
IADB	Inter-American Development Bank	SENACE	National Environmental Certification Service
IBRD	International Bank for Reconstruction and	SEREOR	Servicio Nacional Forestal y de Fauna Silvestre
	Development	SERVOR	
IMF	International Monetary Fund	SERNANP	Servicio Nacional de Áreas Naturales Protegidas
INDECI	Instituto Nacional de Defensa Civil (National		por el Estado
	Institute of Civil Defense)	SHS	Solar Home System
LAC	Latin America and the Caribbean	SIAF	Sistema Integrado de Administración Financiera
LMA	Lima Metropolitan Area	0	(Integrated financial management system)
MEF	Ministerio de Economía y Finanzas (Ministry of	SINAGERD	Sistema Nacional de Gestión de Riesgo de
	Economy and Finance)	0	Desastres (National Disaster Risk Management
MEPS	Minimum Energy Performance Standards		System)
MINAM	Ministerio de Ambiente (Ministry of the	SME	Small and Medium Enterprises
	Environment)	UA	Universally Aligned
MINEM	Ministerio de Energía y Minas (Ministry of Energy		,
	and Mines)		
MTC	Ministerio de Transporte y Comunicaciones		
	(Ministry of Transport and Communications)		



Regional Vice President:	Carlos Felipe Jaramillo
Country Director:	Issam A. Abousleiman
Regional Directors:	Benoit Bosquet and Oscar Calvo-Gonzalez
Practice Managers:	David N. Sislen and Doerte Doemeland
Task Team Leaders:	Paula Restrepo Cadavid, Diana Marcela Rubiano Vargas, Bledi Celiku



## **REPUBLIC OF PERU**

## PERU: GREEN, RESILIENT AND INCLUSIVE GROWTH DEVELOPMENT POLICY FINANCING II

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The Peru Enabling a Green and Resilient Development Loan was prepared by an International Bank for Reconstruction and Development (IBRD) team led by Paula Restrepo Cadavid (Lead Urban Specialist, SLCUR), Diana Marcela Rubiano Vargas (Senior Disaster Risk Management Specialist, SLCUR), Bledi Celiku (Senior Economist, ELCMU) and consisting of Bjorn Philipp (Program Leader, SLCDR), Daniel Francisco Barco Rondan (Economist, ELCMU), Xingjun Ye (Governance Specialist, ELCG2), Felipe Targa Rodriguez (Senior Transport Specialist, ILCT1), Aiga Stokenberga (Senior Transport Economist), Gabriel Sergio Arrisueno Fajardo (Senior Urban Specialist, SLCUR), Akiko Toya (Disaster Risk Management Specialist, SLCUR) Gonzalo Martinez Torres (Financial Sector Specialist, EFNLT), Ines Perez Arroyo (Energy Specialist, ILCE1), Janina Andrea Franco Salazar (Senior Energy Specialist, ILCE1), Kennan Rapp (Senior Social Development Specialist, SLCSO), Kevin McCall (Senior Environmental Specialist, SLCEN), Maria Vizeu Pinheiro (Consultant, SAEE3), Carlos Rodriguez Castelan (Practice Manager, ELCPV), Luciana De la Flor Giuffra (Consultant, ELCPV), Maria Jose Carreras Gamarra (Environmental Specialist, SLCEN), Marisol Gisel Noriega Ramos (Program Assistant, LCC6C), Paola Carvalho Costa Maia (Program Assistant, SLCUR), Mariela Pérez-Costa Piscoya (Consultant, SLCUR), Micaela Reategui Amat Y Leon (Consultant, SLCUR), Nelly Ikeda (Senior Financial Management Specialist, ELCG1), Selene del Rocio La Vera (Senior Procurement Specialist), Mark Christian Sigrist (Senior Counsel, LEGLE), Greta Santillana Gautier (Program Assistant, LCC6C), César Crespo (Consultant, LEGLE), Maria Virginia Hormazabal (Finance Officer, WFACS), Laisa Daza (Disaster Risk Management Consultant, SLCUR), Maria Carolina Rogelis Prada (Disaster Risk Management Consultant, SLCUR), Paulo Alejandro Chavez Condori (Consultant, ELCMU), Elena Resk (Consultant, ELCMU).

The following colleagues provided useful comments and insights to inform the design of the project: Joanna Mclean Masic (Lead Urban Specialist), Andrea Liverani (Program Leader, SCADR), Tehmina S. Khan (Lead Economist, EAEM2), Sundus Naeem Siddiqi (Climate Change Specialist, SLCEN), Eliana Carolina Rubiano Matulevich (Senior Economist, ELCPV), Paola Buitrago (Economist, ELCPV), Carina Lakovits (Urban Development Specialist, SLCUR), Zoe Trohanis (Lead Disaster Risk Management Specialist, GFDRR), Pelayo Gonzalez-Escalada Mena (Consultant, SLCUR), Swati Sachdeva (Urban Specialist, GSUOA), Daniela Gayraud (Operation Analyst, SLCEN) and Maja Murisic (Senior Environmental Specialist, SLCEN)

The operation was prepared under the overall guidance of Issam A. Abousleiman (Country Director, LCC6C), Benoit Bosquet (Regional Director, SLCDR), Oscar Calvo-Gonzalez (Regional Director, ELCDR), David Sislen (Practice Manager, SLCUR) and Doerte Doemeland (Practice Manager, ELCMU).



#### SUMMARY OF PROPOSED FINANCING AND PROGRAM

## **BASIC INFORMATION**

Project ID	Programmatic	If programmatic, position in series
P179214	Yes	2 <sup>nd</sup> in a series of 2

#### **Proposed Development Objective(s)**

The Program Development Objective is to support Government policies to: (i) strengthen the foundations for a green economic recovery, (ii) build resilience and enhance climate change adaptation and (iii) transition towards a greener economy in selected sectors

#### Organizations

Borrower:	REPUBLIC OF PERU

Implementing Agency:	Ministry of Economy and Finance
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## **PROJECT FINANCING DATA (US\$, Millions)**

#### **SUMMARY**

#### DETAILS

International Bank for Reconstruction and Development (IBRD)	750.00
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## INSTITUTIONAL DATA

**Climate Change and Disaster Screening** 

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

#### **Overall Risk Rating**

Moderate



Results					
Indicator Name	Baseline	Target			
Pillar One: Strengthen the foundations for a greener economic recovery					
<b>Results Indicator 1:</b> Allocation reports are prepared and published, in line with Peru's sustainable bond framework.	RI#1: 0 (2021)	RI#1: 2 (2025)			
<ul> <li>Results Indicator 2. Reduction in the average time to develop and approve technical dossiers of investment projects applying the Building Information Modeling (BIM) methodology (%).</li> <li>Results Indicator 3. Schedule Performance Index of projects after adopting Building Information Modeling (BIM) methodology (%).</li> </ul>	RI#2: 0 (2022) RI#3: 67.9% (2022)	RI#2: >20% (2025) RI#3: 77.9% (2025)			
<b>Results Indicator 4.</b> Percentage of detailed Environmental Impact Assessments (EIAs) and EIA modifications that are evaluated within the timeframe established by the regulatory framework (%).	RI#4: 42% (2022)	RI#4 : >67% (2025)			
Pillar Two: Build resilience and enhance climate change adaptation					
<b>Results Indicator 5.</b> Number of people living in areas with local Emergency Operation Centers (EOCs) operating according to new guidelines.	RI#5: 0 (2021)	RI#5: 1.1 million (2025)			
<b>Results Indicator 6.</b> Share of priority communities that have prepared community risk maps in consultation with women's social organizations and have made them publicly available.	RI#6: 0 (2023)	RI#6: 20% (2025)			
<b>Results Indicator 7.</b> Number of people living in cities or populated settlements with urban planning instruments that integrate disaster risk management and public spaces management according to the main objectives and guidelines established by the 2030 National Housing and Urban Policy, the Law No. 31313 and its regulations.	RI#7: 0 (2021)	RI#7:10.3 million (2025)			
Pillar Three: Support the transition towards a greener economy in selected sectors					
<b>Results Indicator 8.</b> Number of housing units from Fondo <i>MiVivienda</i> registered in the National Registry of Sustainable Buildings and Urban Developments.	RI#8: 0 (2021)	R#8: 4,400 (2025)			
<b>Results Indicator 9.</b> Reduction of greenhouse gas (GHG) emissions and local pollutants ( $PM_{2.5}$ , $SO_2$ and $NOx$ ) linked to the implementation of scrapping programs, Law No. 31596 and the PLANMET 2040 (Strategic Objectives 9.1 and 9.2).	RI#9 : 0 (2021)	RI#9: 281,240 MtCO2e per year 1,952 Mt of local pollutants per year (2025)			
<b>Results Indicator 10.</b> Share of electricity auctions for regulated customers in which non-conventional renewable energy participate.	RI#10: 0 (2021)	RI#10: >80 % (2025)			
<b>Results Indicator 11.</b> Cumulative energy savings from energy efficiency measures in the public sector (gigawatt-hour - GWh).	RI#11: 0 (2023)	RI#11: 3.1 (2025)			



## IBRD PROGRAM DOCUMENT FOR A PROPOSED LOAN TO

THE REPUBLIC OF PERU

## 1. INTRODUCTION AND COUNTRY CONTEXT

1. The proposed Second Enabling a Green and Resilient Development Policy Financing with a Deferred Drawdown Option (DPF-DDO) for US\$750 million, is the second operation in a programmatic series of two. The series seeks to support the Government of Peru (GoP)'s reforms to: (i) strengthen the foundations for a green economic recovery; (ii) build resilience and enhance climate change adaptation; and (iii) transition towards a greener economy in selected sectors. The first operation, for US\$500 million, was approved by the World Bank's Board of Executive Directors in March 2022 and was fully disbursed in November 2022.

2. Following over a decade of fast economic growth which contributed to reducing poverty, GDP growth and poverty reduction slowed markedly since 2014 (Annex 7). Driven by its comparative advantage in commodities coupled with solid macroeconomic management and well-targeted social programs, Peru experienced inclusive growth in the 2004-2013 period. Economic growth averaged 6.4 percent annually in this period, which contributed to 1 million people escaping poverty every year. However, in the years prior to the pandemic (2013-2019), average growth rates declined to 3.5 percent as productivity and job growth slowed, and poverty reduction slowed down significantly. The COVID-19 pandemic led Peru to one of the deepest recessions in Latin America in 2020 and the national poverty rate increased by 10 percentage points to 30.1 percent. The economy rebounded in 2021 to pre-pandemic levels, and, while poverty declined to 25.9 percent in 2021<sup>1</sup>, it remains above pre-pandemic levels, hampered by the lower quality of employment and higher informality. GDP growth decelerated to 2.7 percent in 2022, partially affected by political tensions, and it is expected to slow down further to 0.8 percent in 2023, partly due to the absence of big new mining projects and potential ravages caused by the upcoming El Niño phenomenon, social unrest, and the effects of high domestic and international interest rates on private spending.

3. Given the country's high vulnerability to natural hazards and climate change, it is important to support reforms that strengthen foundations for resilience. Around 46 percent of Peru's territory is classified as having high to very high vulnerability to natural hazards and one third of the population occupies and uses this space.<sup>2</sup> Earthquakes, landslides, droughts, and floods together already cause average annual asset losses of 2 percent of GDP and welfare losses equivalent to 5.2 percent of GDP, and this is expected to increase without further climate adaptation investments.<sup>3</sup> Strengthening disaster risk management policies also offers an opportunity to address existing gender gaps, since women and girls are disproportionately affected by disasters, which impacts their already limited assets and livelihoods.<sup>4</sup>

4. Reducing the carbon intensity of certain economic sectors will be essential for Peru to meet National Determined Contributions (NDC) commitments and achieve net zero CO<sub>2</sub> emissions by 2050. In the absence of climate change mitigation action, Peru's development will lead to a significant increase of its contribution to global Green House Gases (GHG) emissions by 2050; with net emissions from the energy, transport and land-use change, and forestry sectors increasing by around 83 percent over the next 30 years.<sup>5</sup> While ending deforestation is a central piece to advance climate mitigation actions in Peru, the country also needs to reverse historic trends for the transport and energy sectors.

<sup>&</sup>lt;sup>1</sup> Based on Peru's national poverty line.

<sup>&</sup>lt;sup>2</sup> MINAM (2011) Descriptive Memoir of the Physical Vulnerability Map of Peru. http://bvpad.indeci.gob.pe/doc/pdf/esp/doc1851/doc1851-contenido.pdf <sup>3</sup> World Bank (2022) Country Climate and Development Report Peru: Considering all the impacts of climate change, by 2030, the income of Peru's poorest 40 percent

could be reduced by 5.2 percent, and another 0.6 percent of the population could be pushed into extreme poverty.

<sup>&</sup>lt;sup>4</sup> OECD (2022) Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work. https://doi.org/10.1787/e53901b5-en

<sup>&</sup>lt;sup>5</sup> World Bank staff calculations using the World Bank Macro-Fiscal Model (MFMoD) with climate change module



Transport is the fastest-growing sector in terms of emissions, increasing by 123 percent between 2000 and 2016, due to a 44 percent growth in the vehicle fleet. Electricity and heat are the second largest emitters of Peru's energy intensive sectors (19 percent of energy emissions). Furthermore, as outlined by Peru's Country Climate Development Report (CCDR), developing, and implementing comprehensive climate policies presents many opportunities to increase productivity and reduce poverty.

5. Over the past five years, the political context has been highly volatile, reducing the Government's capacity to pursue important structural reforms to boost growth and enhance economic resilience. After a presidential resignation in 2017, a dissolution of Congress in 2019, and three successive presidential changes in 2020, the leftist party Perú Libre won the presidential election in April 2021. Recent conflicts between the Executive and the Legislative branch culminated on December 7, 2022, with a failed attempt to dissolve Congress, the consequent impeachment of former President Castillo by Congress, and the designation of Vice President Dina Boluarte as President of Peru. Throughout this period, line ministries have suffered from frequent turnover and loss of human capital.

6. Despite the political volatility, the country has embarked on a path to economic recovery, with growth, social inclusion and equity at the center of its policy agenda. The GoP's program has a strong emphasis on supporting vulnerable populations, overcoming social exclusion, and promoting equity across regions, particularly in Peru's lagging regions and rural areas. In December 2022, the Ministry of Economy and Finance (MEF) presented the "Con Punche Peru" Plan with measures that seek to promote economic growth and further reduce poverty. The Plan included measures to boost economic recovery through household, regional and sectoral reforms. In May 2023, the GoP launched its "Con Punche Peru 2" Plan anchored in three economic policy priorities: (i) economic recovery and emergency response; (ii) promoting private investment and (iii) strengthening competitiveness and productivity of the economy. It includes measures aimed at promoting public investment, financing the recovery from climate and natural disaster related events, and promoting new growth engines while consolidating existing ones like mining, tourism, and agriculture. The third priority of the "Con Punche Peru 2" Plan responds to persistent structural constraints to growth (see Annex 7 for more details) which are also being addressed by another World Bank-supported DPF series that promotes fiscal resilience, a competitive financial sector and green productive sectors, and an investment lending operation that focuses on promoting science, technology, and innovation services.

7. The GoP remains committed to the transition to a low-carbon economy, build resilience to natural hazards and improve the enabling environment for greener public and private investments. Among others, Peru adopted a framework law on climate change (Law No. 30754, 2021) and established a National Registry of Mitigation Measures (RENAMI). The Ministry of Environment also approved the National Adaptation Plan which provides a roadmap for strategic actions across key sectors, submitted its second National Determined Contributions (NDC–2020) and is currently finalizing the consultation process for the updated National Strategy for Climate Change. The recently approved Strategic Plan for National Development (PEDN), which outlines the Government's vision with a 2050 horizon, aims at achieving a more sustainable management of the environment and putting in place measures to tackle climate change, and increasing the country's competitiveness and productivity with dignified jobs and in harmony with the environment.

8. This second DPF-DDO operation builds-on the policy reforms in the first operation and provides a buffer against shocks. It does so by advancing DPF1 reforms in critical areas such as improving the efficiency and sustainability of public and private investments; strengthening Disaster Risk Management's (DRM) operational framework and its incorporation into land-use planning instruments; promoting sustainable building construction standards; promoting a greener and more efficient urban transport system, promoting energy efficiency and the expansion of Non-Conventional Renewable Energies (NCRE) for electricity generation. It builds on a string of successful DPOs in the country that were disbursed as Peru weathered key crises, including the impact of "El Niño Costero" in 2017, the COVID-19 pandemic in 2020-2021, and the floods in early 2023. The financial buffers offered by DDOs were instrumental during the pandemic in allowing the



rapid deployment of social transfers. In the context of high uncertainty and financial market volatility, the authorities also see the DPF-DDO as an important hedge against increasing global interest rates and international capital markets volatility. The second operation is organized around the same three pillars, supporting actions to: strengthen the foundations for a green economic recovery (Pillar 1), build resilience and enhance climate change adaptation (Pillar 2) and transition towards a green economy in selected sectors (Pillar 3). This series is fully aligned with the Peru CCDR recommendations in all areas, including by supporting the clean electricity, decarbonizing urban transportation, strengthening disaster risk management and its integration into land use planning instruments, improving the efficiency of public spending and implementing policies that take action on climate change.

## 2. MACROECONOMIC POLICY FRAMEWORK

## 2.1. RECENT ECONOMIC DEVELOPMENTS

9. After a solid rebound from the devastating effects of the COVID-19 pandemic, GDP grew slowly in 2022, preventing informality and poverty from returning to their pre-pandemic levels. Peru's GDP grew at a sluggish 2.7 percent, driven by private consumption and exports, but weighed down by social unrest. Consumption growth was supported by government transfers and withdrawals of savings from private pension funds. Exports were boosted by fewer sanitary restrictions and the start of operations of the Quellaveco Copper mining project. Economic growth in 2022 was mainly driven by the non-primary sector, which expanded by 3.2 percent driven by construction and services. The growth of the primary sector moderated to 0.6 percent since most of the sectors contracted. The contraction of the mining sector stands out, which was affected by blockades and lower mineral grades. Political volatility and related social unrest led to a temporary halt in activities in some mines, depressing exports, and growth. Though Peru reached its 2019 GDP level by 2021, informality continued to increase, reaching 76 percent in 2022; 3.3 percentage points higher than in 2019. Higher informality and a higher concentration of workers in micro and small firms are negatively linked to the quality of employment and salaries. In this context, the poverty headcount reached 32 percent in 2022, remaining about 3 percentage points higher than pre-pandemic levels (US\$6.85 poverty line).

10. The current account registered a record deficit of 4.0 percent in 2022, mainly reflecting the rise in international energy and food prices. This led to the increase in the price of imports far exceeding the rise in the price of mineral exports, generating a reduction in the trade balance surplus. The recovery of domestic demand and the increase in the volume of imports also contributed to this decline. In addition, the profits of foreign companies remained relatively high, which together with the deficit in the balance of services, determines the negative sign of the external gap. The deficit has been completely financed by long-term capital inflows, mainly foreign direct investment, which also partially offset a short-term capital outflow of 1.8 percent of GDP. By June 2023, international reserves reached US\$74.8 billion, equivalent to 31 percent of GDP and eight times Peru's short-term external debt.

11. Inflation peaked in mid-2022 and has been slowly descending since then. By June 2021, inflation began to accelerate, and it further increased after Russia's invasion of Ukraine in February 2022 and the subsequent increase in international food and energy prices. By June 2022, inflation peaked to 8.8 percent, far above the 1-3 percent target range of the Central Bank. Already in August 2021, the Central Bank began tightening its reference policy rate, increasing it 750 basis points until January 2023, to 7.75 percent, the same level as of today. In addition, the government implemented the one-time delivery of a monetary transfer (*Bono Alimentario*) directed to attenuate the effects of inflation at the beginning of 2023. The contractionary monetary policy and the gradual reversal of supply shocks lowered inflation to 6.5 percent per year as of June 2023. Although energy prices partially reversed, food inflation, which hits the poor hardest, remained elevated and by June it stood at 12.9 percent.

12. Fiscal policy stabilized quickly, after the sizable response that was implemented in response to the COVID-19 crisis. The fiscal deficit declined further to 1.7 percent of GDP in 2022, after the COVID1-19 shock, well below the 3.7 percent



fiscal rule ceiling for the year<sup>6</sup>, driven by a record tax collection of 17.2 percent of GDP and a decline in current spending, as COVID-19 related supported measures were phased out. Higher corporate profits in the context of elevated mineral prices favored tax collection. Public sector's gross debt declined to 34 percent of GDP, among the lowest in Latin America. However, mainly due to the increased political uncertainty, Moody's and Fitch downgraded Peru's sovereign risk rating for long-term external debt in 2021.<sup>7</sup> The MEF estimated that the maximum exposure of the Non-Financial Public Sector to explicit contingencies amounted to 12.0 percent of GDP by end 2021, with the expected materialization of 0.9 percent of GDP in 2022.<sup>8</sup> In addition, the government maintains explicit guarantees for 3.3 percent of GDP related to *Reactiva Peru* and other financing programs to face the COVID-19 crisis, with an expected total materialization of 0.6 percent of GDP.

13. The financial sector remained resilient to the impacts of the COVID-19 pandemic and credit provision has risen above pre-pandemic levels. As of April 2023, capital adequacy levels (15.6 percent) remain well above minimum regulatory thresholds (8.5 percent) and liquidity risks have not materialized. The non-performing loan ratio in the banking sector is moderate at 4.0 percent; and the profitability of the sector is continuing to rebound though it remains somewhat below pre-pandemic levels. The credit growth rate was 1.8 percent y-o-y last May, with an expansion of 14.9 percent in personal credit. However, credit to companies decreased by 3.5 percent y-o-y, which together with the persistent low business confidence suggest a below-par performance of private investment.<sup>9</sup> Finally, while the financial system has been resilient to the impacts of the COVID-19 pandemic, some smaller financial institutions face greater solvency stress in part due to their exposures to SMEs experiencing credit repayment challenges.

## 2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

14. **Peru's GDP is expected to expand by about 0.8 percent in 2023, well below its pre-pandemic trend.** The lack of big new mining projects under implementation, social unrest, and the potential ravages caused by the upcoming El Niño phenomenon are expected to depress private investment in 2023. Over the medium term, output is expected to converge to its potential rate and expand at an annual rate of around 2.3 percent. GDP growth would continue to be supported by higher exports, as the new mines (such as Quellaveco and Toromocho enlargement) gradually reach their maximum production capability. Private investment would resume growth at moderate rates as business confidence partially recovers and financial costs reduce in the expected context of less political volatility and descending inflation. On the other hand, the expansion of public spending will be restricted by the fiscal consolidation mandated by fiscal rules.

15. The current account deficit is expected to gradually decline due to higher exports and lower outflows of primary income. Higher exports of mining and agribusiness products would support an increase in the trade balance in the following years. Also, the normalization of mining companies' profits in the context of copper prices that are expected to remain lower than in 2021-22 would reduce primary income outflows.<sup>10</sup> Although FDI is expected to stay short of the levels of previous years (due to global risk factors and still dominant political uncertainty), it is expected to remain above

<sup>&</sup>lt;sup>6</sup> By Legislative Decree 1276 of December 2016, the fiscal rules were defined as a limit of 1 percent of GDP for the public deficit and a ceiling of 30 percent of GDP for public debt. Compliance with fiscal rules was suspended in 2020-2021 by Legislative Decree 1457. Subsequently, fiscal rules were established just for 2022 at 3.7 percent for the fiscal deficit and a public debt ceiling of 38 percent of GDP, by DU (emergency decree) 079-2021.

<sup>&</sup>lt;sup>7</sup> Moody's downgraded Peru's sovereign risk rating from A3 to Baa1 in September 2021 and Fitch downgraded it from BBB+ to BBB in October 2021. Notwithstanding, Peru retains the investment grade and still possesses the second-highest rating in Latin America, behind Chile.

<sup>&</sup>lt;sup>8</sup> The identified contingent liabilities included: i) judicial processes in national and international courts, and national arbitrations (7.1 percent of GDP), ii) international controversies in investment matters (3.2 percent of GDP), and iii) guarantees granted with the signing of Public-Private Partnerships contracts (1.8 percent of GDP). The government estimates that the expected realization of the explicit contingent liabilities would generate a higher public debt path of 1.4 p.p. of GDP on average during the period 2022-2030 with respect to the path of the base scenario. This information will be updated by the Ministry of Finance in August 2023.

<sup>&</sup>lt;sup>9</sup> Recent stress testing exercises conducted by the banking supervisor (SBS) indicate that capital adequacy levels would remain above 12.5 percent through 2023, and that most financial institutions are well-placed to endure liquidity shocks. Financial Stability Report by SBS, May 2023.

<sup>&</sup>lt;sup>10</sup> Still, copper prices are expected to remain considerably higher than those in 2015-2020, in the context of the energy transition, according to the previsions by the World Bank's Development Prospects Group.



2 percent of GDP, as some mining projects are finalized and others medium-size projects initiated (Corani, Magistral, Antamina reposition, Zafranal, Yanacocha Sulfuros).

16. The fiscal deficit is projected to slightly increase in 2023, but to resume its downward trend, thereafter, aligned with the fiscal rules. The fiscal deficit is expected to increase in 2023, mainly due to an anticipated reduction in fiscal revenues, given the recent correction in mining prices and other administrative factors.<sup>11</sup> However, the fiscal deficit is projected to remain in line with fiscal rules this year and thereafter. In August 2022, Law 31541 established the new fiscal deficit rules for the 2023-2026 years at 2.4 percent, 2.0 percent, 1.5 percent and 1.0 percent, respectively. In addition, it established that public debt should not exceed 38 percent of GDP in the following ten years and 30 percent in subsequent years. Tax revenues would slightly increase in 2024 and remain above 16 percent of GDP, supported by the expiration of some temporary tax expenditures, still supportive mining prices, the effect of administrative measures taken in recent years and the moderate acceleration of domestic demand.<sup>12</sup> Thus, total revenues of the non-financial public sector are expected to remain above those pre-COVID, allowing for fiscal consolidation with a moderate effort on the expenditure side. In general, consolidation would require maintaining a moderate increase in both current and capital spending this year, similar to GDP growth. A permanent deviation from this rule would jeopardize consolidation efforts. On the other hand, this consolidation path would also be consistent with current and capital expenditures that would also be somewhat higher than the 2015-2019 average.

17. **Peru's public sector debt is assessed to be sustainable and resilient to a range of different shocks.** The public debtto-GDP ratio is likely to remain above the public debt ceiling of 30 percent of GDP<sup>13</sup> throughout the projection period, mainly due to a large one-off increase in 2020.<sup>14</sup> The debt-to-GDP ratio is expected to remain stable, around 34 percent of GDP until 2025, and is expected to decline gradually thereafter as the primary deficit falls below the debt-stabilizing primary deficit. However, there are some factors that could deviate the debt-to-GDP ratio from its expected path. A deviation of the primary fiscal balance or lower GDP growth by one standard deviation would increase the ratio by about 4 percentage points. Real interest rate and exchange rate shocks would have more moderate effects. Only a combined shock (all previous shocks simultaneously) would take the debt-to-GDP ratio above 40 percent, however still well below the 70 percent of GDP benchmark for emerging markets (Figure 1). Higher GDP growth than the 2.5 percent average in the projection period would prompt a faster decline of debt ratios.

18. **Overall, Peru's macroeconomic policy framework is deemed adequate.** The central bank (BCRP) took an active stance in anchoring inflation expectations and curbing inflation. The fiscal position remains strong and the GoP has clearly defined the fiscal rules for 2023-2026, thereby providing guidance for the pace of fiscal consolidation during the projection period. Higher tax collection due to increasing mining extraction, higher commodity prices and administrative measures has enabled Peru to rebuild its fiscal buffers, pursue countercyclical fiscal policy, and support the economic recovery. In line with the expected gradual reduction of the deficit, public debt is assessed to remain sustainable. Lastly, increased exchange rate flexibility and large international reserves offer comfortable policy margins to withstand external shocks.

<sup>13</sup> Changes to the fiscal rule in 2022 established that public debt should not exceed 38 percent of GDP in the following ten years and 30 percent in subsequent years. <sup>14</sup> Law No. 31541 approved a change to the public debt ceiling to 38 percent of GDP until 2031.

<sup>&</sup>lt;sup>11</sup> The regularizations of tax payments were high last year due to the previous upward trend in the prices of mining products. In comparison, the regularizations of tax payments this year have been much lower since the prices of mining products had a slight downward trend.

<sup>&</sup>lt;sup>12</sup> Since 2017, The GoP took administrative measures to reduce tax evasion and avoidance, through the digitalization of the tax system, the adaptation of the Tax Code to the best international practices and the implementation of a non-compliance risk management model in Sunat. Thus, in 2021, new risk indicators were incorporated to refine the risk profile assigned to taxpayers and establish different treatments. Also, the overcrowding of the electronic invoicing culminated in June 2022 with the incorporation of the last group of micro and small enterprises (MYPE). The coverage of sales supported through electronic documents increased from 70.4 percent in 2018 to around 96 percent in June 2022. Regarding international taxation, the automatic exchange of information allowed that in 2021 Sunat receives the Country-by-Country Report of 24 countries, which contains tax information on the transactions carried out by taxpayers with their related parties abroad during the 2019 fiscal year.



Figure 1. Public Debt Sustainability

Source: World Bank staff calculations. Notes: All shocks consist of a reduction/increase of one standard deviation of their base values. 1/ Primary balance shock consists of a reduction of 2.4 percentage points in the variable for one year. 2/Real GDP shock consists of a reduction of 5.9 percent in GDP for one year. This also increases primary balance and the interest rate on debt. 3/Real interest rate shock consists of a permanent increase of 82 basis points in the interest rate paid on debt. 4/ Exchange rate shock consists of an one-off 7 percent depreciation. 5/Combined shock consists in the worst scenario combining the size and duration of other shocks under 1/, 2/, 3/ and 4/.

19. The economic outlook is subject to significant uncertainty and some risks, but important mitigating factors exist. Domestic risks include political uncertainty, a decline in citizen and investor confidence, higher inflation and continued social unrest, which would all weigh on growth. External risks include a further slowdown in global economic activity, a deterioration in the terms of trade, higher international food, and energy prices, a faster than expected monetary tightening in the US, as well as higher frequency and intensity of climate-related disasters due to climate change. On the domestic side, the fiscal position remains a strong mitigating factor. The GoP is committed to a declining path of the fiscal deficit, in line with its fiscal rule which will enable Peru to respond to shocks and maintain their track record of macroeconomic management that investors favor. In addition, the ongoing global energy transition is expected to provide support to the long-term price of copper, Peru's main export product.

## 2.3. IMF RELATIONS

20. The GoP maintains an active dialogue and systematic engagement with the International Monetary Fund (IMF) on macroeconomic policy. In May 2022, the Executive Board of the IMF approved a two-year precautionary Flexible Credit Line (FCL)<sup>15</sup> arrangement for an amount of about US\$5.3 billion. In May 2023, the IMF completed the mid-term review of Peru's qualification under the FCL arrangement. In March 2023, the IMF concluded its Article IV consultation with Peru. The IMF Board noted that Peru's very strong economic fundamentals and institutional policy frameworks and sustained track record of implementing very strong macroeconomic policies have helped the country absorb large adverse shocks in recent years. They commended the authorities' decisive response to high inflation and noted that the banking system remains resilient, and the fiscal policy stance is appropriate. In addition, according to the IMF, risks to the growth outlook are tilted to the downside, including from an abrupt global slowdown and commodity price volatility, monetary policy miscalibration in advanced economies and systemic financial instability, an intensification of political uncertainty at home, and climate-related shocks. A renewed structural reform agenda in the context of the OECD accession process will be critical to mitigate scarring from the pandemic and support a green and inclusive recovery. Steps will also be needed

<sup>&</sup>lt;sup>15</sup> Peru qualifies for the FCL by virtue of its very strong economic fundamentals and institutional policy frameworks, a track record of implementing very strong policies, and commitment to maintaining such policies.



to reduce risks from climate change through both public investments and private sector contributions. The IMF and WB maintain close collaboration on macroeconomic and structural issues.

## 3. GOVERNMENT PROGRAM

21. The GoP has updated its Strategic Plan for National Development (PEDN) with a 2050 horizon. The PEDN 2050 guided the formulation of the current General Government Policy and global commitments such as the United Nations' 2030 agenda and the OECD accession process. The proposed operation supports reforms which are fully aligned with the PEDN 2050, especially with national objective 2 which aims at enhancing sustainable territorial management to strengthen climate adaptation and disaster risk reduction. The proposed operation is also aligned with: (i) the new administration's General Government Policy for the current presidential term approved in March 2023, which, in its fourth objective on economic recovery, enhances climate change adaptation and mitigation measures and promotes sustainable investments to prevent and reduce environmental degradation, and (ii) key strategic planning instruments including the National Adaptation Plan and Peru's NDCs. Reforms supported under this operation also contribute to OECD Accession Core Principles for Peru, including those aimed at (i) developing and implementing effective and ambitious environmental and climate strategies and policies, (ii) implementing a requirement for environmental assessment and continuous monitoring of projects with potentially significant impacts on the environment, and (iii) investing in climate resilience and adaptation as part of the national development agenda, mainstreaming adaptation into policy making and spatial and infrastructure planning.

## 4. PROPOSED OPERATION

## 4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

22. Through its three pillars, this operation supports policy reforms that are part of the GoP's initiatives to enable a green and resilient development. Reforms supported through Pillar 1 aim to strengthen the foundations for a greener economic recovery by supporting: (i) a more efficient preparation and execution of public and private investments which are climate sensitive and (ii) improvements in the efficiency of environmental assessments and review processes. Pillar 2 aims to build Peru's resilience to disasters and enhance its capacity to adapt to climate change, by (i) strengthening the country's DRM strategies, and (ii) mainstreaming DRM in urban planning instruments. Pillar 3 reforms support the shift towards a greener economy in select sectors by: (i) promoting greener buildings through the establishment of a national registry of sustainable buildings, (ii) facilitating a low-carbon transition of the bus fleet in the Lima-Callao transit system and encouraging the expansion of non-motorized transport; and (iii) promoting reforms to improve energy efficiency and the greening of the country's electricity grid by promoting non-conventional renewable energy (NCRE).

23. This operation is aligned with the goals of the Paris Agreement on both mitigation and adaptation. First, considering the recommendations outlined in Peru's CCDR, published in November 2022, the DPF reform program is consistent and supporting the implementation of the country's climate commitments, including the updated NDC (December 2020), the National Adaptation Plan (June 2021) and the soon to be updated National Strategy for Climate Change. Second, on mitigation goals, none of the prior actions are likely to cause a significant increase in GHG emissions or any persistent barriers to transition to low-GHG emissions. Therefore, all prior actions of the proposed DPF program are aligned with the mitigation goals of the Paris Agreement. Third, on adaptation and resilience goals, risks from climate hazards are not likely to have an adverse effect on all prior actions as their designs incorporate measures to reduce observed and anticipated risks to the achievement of the PDO. Last, PA3, PA4 and PA5 of this DPF are specifically undertaken with the objective of reducing Peru's climate change risks. Therefore, all prior actions of the proposed DPF are aligned with the adaptation and resilience goals of the Paris Agreement. Detailed review of these prior actions is presented in the Annex 9.



## 4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

24. DPF 2 builds on the program supported by the DPF 1, reflecting the GoP's strong commitment to continue to advance reforms in key areas. Of the nine indicative triggers identified in the DPF 1, five have been approved: the guidelines for Building Information Modelling (BIM) and the expansion of the social price of carbon, the updated National DRM Plan (PLANAGERD), the Regulations of the Urban Sustainable Development (DUS) Law, the registry for Sustainable Construction Technical Code Buildings and Urban Developments, and the draft law to ensure the efficient development of Electricity Generation (Law No. 28832). Two indicative triggers (the updated regulations of the National Environmental Impact Assessment (SEIA) law, OIT2 and; Lima-Callao vehicle scrapping incentive reform, OIT6) were replaced by related, reforms. OIT2 was replaced by Legislative Decree No. 1570 which approved the use of a "roster of specialists" for the SEIA.<sup>16</sup> OIT 6 was replaced by the Law which introduces a new regulatory framework for transit concessions in Lima-Callao and the Lima-Callao Metropolitan Plan 2040 (PLANMET 2040). Two indicative triggers, which aimed at closing the electricity gap in remote areas and issuing Minimum Energy Performance Standards (MEPS) were dropped, as in the former case the new administration decided to address gaps in electricity access in remote areas with their own resources, and the MEPS could not be issued in time for the proposed operation, due in part to the new requirements to do a Regulatory Impact Assessment of the reform. The GoP, remains committed to advance with the MEPS reform and the Bank is providing technical assistance to carry out the regulatory impact assessment of the reform. Annex 5 summarizes the changes proposed for DPF 2. Finally, the sustainable bond framework (PA1 in DPF1) has been instrumental in supporting Peru's issuances of sustainable bonds.<sup>17</sup>

## Pillar 1: Strengthen the foundations for a greener economic recovery.

**Prior Action 1 (DPF 2).** To enhance the efficiency and sustainability of public investments and promote their adoption of low-carbon technologies, the Borrower, through the General Directorate of Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and Infrastructure", and related adoption guidelines and piloting directives for BIM; and (ii) a technical note providing guidance for incorporating the mandatory use of the social price of carbon in estimating social costs and benefits in three additional types of investment projects (i.e., urban transit, recovery of degraded forest ecosystems, and public green spaces). As evidenced by the following Directorial Resolutions: (i) (a) No. 0005-2023-EF/63.01 published in the Official Gazette on May 7, 2023; (b) No. 0007-2022-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009-2023-EF/63.01 published in the Official Gazette on August 25, 2023.

25. **Rationale**: Peru has an efficiency gap in the management of public investments of 37 percent, significantly greater than the world average (27 percent) and that of Latin America and emerging countries (26 percent).<sup>18</sup> A World Bank study found long delays in every stage of the investment cycle.<sup>19</sup> To improve public investment efficiency and sustainability, the GoP has been rolling out BIM, which will speed up project preparation and execution, reduce construction material wastage, facilitate the uptake of low-carbon building technologies, and make infrastructure more climate resilient. The first DPF supported the publication of BIM implementation plan and roadmap, which constitute first steps for the country to introduce BIM in public investment. The GoP is also rolling out the use of Social Price of Carbon in the appraisal of public investment projects to estimate social costs and benefits linked to the project's GHG. The first DPF supported the use of Social Price of Carbon in the appraisal of three types of projects.<sup>20</sup>

<sup>&</sup>lt;sup>16</sup> This reform was initially part of the adjustments to the SEIA Law, but the GoP decided to move ahead with it, separately, through other legal instrument.

<sup>&</sup>lt;sup>17</sup> In October 2021, Peru issued two sustainable bonds for US\$4 billion in a borrowing operation in the international market which represented the first sustainable bonds issued by Peru under the recently approved Sustainable Bond Framework. About 19 percent of the bonds' proceeds were allocated to 159 green projects associated with: (i) efficient and resilient water and wastewater management; (ii) sustainable management of natural resources, land use, and marine protected areas; and (iii) sustainable agriculture. In May 2023, Peru issued their first sol-denominated \$2.5 billion equivalent sustainable bond to buy back existing sovereign bonds and finance green and social government expenditures.

<sup>&</sup>lt;sup>18</sup> Public Investment Management Assessment (PIMA, 2017)

<sup>&</sup>lt;sup>19</sup> World Bank (2021). Analyzing the Bottlenecks in Public Investment Execution in Peru with Focus on Infrastructure Investments.

<sup>&</sup>lt;sup>20</sup> Renewable power generation, sewage treatment, solid waste treatment and landfills with biogas capture and burning systems.



26. **Substance of the prior action:** The GoP has approved a series of regulations that enable the operationalization of BIM in public investment projects. In June 2022, the GoP issued a call for proposals for public institutions and companies to participate in the BIM pilot and in August 2022 announced the 10 selected projects from different sectors and levels of government. The pilot started in October 2022. The GoP also developed a detailed technical guide for the adoption of BIM in public infrastructure and buildings, and the guidelines for the progressive adoption of BIM at institutional level. The adoption of BIM is currently voluntary, and the GoP plans to make it mandatory and achieve national coverage by 2030. However, the two guidelines are mandatory for the institutions that choose to adopt BIM (starting with pilots that are already in implementation) and are fundamental instruments that will lead to the eventual national rollout. In addition, the GoP has expanded the mandatory use of the Social Price of Carbon to more investment projects. Through this reform, the use of Social Price of Carbon becomes mandatory for the appraisal of three additional types of projects: urban mobility (bike lanes), restoration of degraded forest ecosystems, and green public spaces.

27. **Expected Results:** The introduction of BIM will shorten the time for the preparation and implementation of infrastructure projects, reduce overall project costs and prevent cost and time overruns.<sup>21</sup> As a result of this prior action, (i) the average time to develop and approve technical dossiers of investment projects applying the BIM is expected to be reduced by at least 20 percent<sup>22</sup> and (ii) the Schedule Performance Index of the BIM projects is expected to increase from 67.9 to 77.9 percent, both by June 2025.<sup>23 24</sup> BIM is also expected to contribute to climate policy goals by facilitating the uptake of low-carbon technologies and making infrastructure more resilient. BIM provides tools that can predict energy consumption and GHG emissions of investments before construction takes place, which helps minimize construction emissions and operation of the asset. BIM also allows the virtual simulation of climate impacts on buildings thereby making infrastructure more climate resilient. Expanding the mandatory use of Social Price of Carbon in additional investment projects will guide public entities to appraise them taking into consideration GHG emissions, which is critical for low-carbon development and achieving NDC.

**Prior Action 2 (DPF 2).** To strengthen the National Environmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S instruments, the Borrower has allowed SEIA's Technical Experts (TE) to use a "roster of specialists". As evidenced by the single supplementary amending provision of the approved Legislative Decree No. 1570 published in the Official Gazette on May 28, 2023.

28. **Rationale:** Investment projects that adequately integrate E&S risks and impacts, and disaster risk management and climate change, represent a key pillar for sustainable development. A national environmental assessment system that is technically robust and aligned with international standards and best E&S practices is essential, as it significantly contributes to prevent setbacks associated with social conflicts and unexpected environmental adverse impacts, thus preventing delays and additional costs during project execution. Currently, requirements associated with Peru's SEIA are not fully aligned with these standards. Moreover, related processes often experience significant delays as involved TEs (*Autoridad Nacional del Agua -*ANA, *Servicio Nacional Forestal y de Fauna Silvestre -* SERFOR, *Servicio Nacional de Areas Naturales Protegidas por el Estado -* SERNANP, among others), have limited staff to conduct the necessary reviews under

<sup>&</sup>lt;sup>21</sup> Case studies from the US, UK and India have shown savings ranging between 2.3 to 12 percent of project budgets and up to 66 percent time savings.

<sup>&</sup>lt;sup>22</sup> During the period 2017-2022, on average it took 5.2 months for the preparation and approval of technical dossiers for projects whose value are between 3.5 million and 60 million soles, with the adoption of BIM, the time is expected to decrease to 4.2 months. For projects whose value are above 60 million soles, the preparation and approval of technical dossiers took 15.1 months on average and with the adoption of BIM the time is expected to decrease to 12.1 months.

<sup>&</sup>lt;sup>23</sup> A schedule performance index is used to measure a project's performance compared to the planned schedule. It is a ratio of earned value (actual progress at a given time) to planned value (planned progress at a given time). If the schedule performance index is 100 percent, it means the project is on schedule. A value less than 100 percent means the project is behind schedule. A value greater than 100 percent means the project is ahead of schedule. The current SPI baseline is 67.9 percent, the average of the National, Regional and Local Government for the 2017-2022 period.

<sup>&</sup>lt;sup>24</sup> The baseline for both indicators related to BIM were estimated based on information of comparable projects. For the first indicator (approval of technical dossiers), projects that were prepared between 2017 and 2022 with quality data entries were selected for the estimation of the baseline. For the second indicator (SPI), projects that were implemented between 2017 and 2022 with quality data entries were selected for the estimation of the baseline. Determining the baseline value based on a six-year period rather than a single year allows for the use of a larger and more representative sample.



the timeframes mandated by law<sup>25</sup>, and thus investment projects take longer to obtain the environmental certification necessary to operate. Although the GoP has been implementing important improvements in Peru's SEIA over the past years, additional reforms are required to strengthen the system, and particularly to enhance the efficiency of the environmental evaluation and certification processes.

29. **Substance of Prior Action:** To improve the efficiency of project environmental evaluation and certification processes through the SEIA, the government has approved Legislative Decree No. 1570, and its single supplementary amending provision, on May 28, 2023, which allows TEs the use of a "roster of specialists" to support the timely review of environmental assessments through the SEIA. The availability of a roster of specialists will significantly improve the institutional capacity of these entities, as prior to the legal provision included in this PA, these could not hire highly specialized consultants to directly respond to requests for reviewing environmental assessments, which led to delays in the certification processes of investment projects.

30. **Expected Results:** The approval of the single supplementary amending provision of Legislative Decree No. 1570, is expected to translate into more efficient and expedited environmental certification processes, by facilitating on-time binding technical opinions of E&S instruments. This reform is expected to increase the percentage of detailed EIAs and EIA modifications that are evaluated within the timeframe established by the regulatory framework and that receive on time binding technical opinions from 42 percent in 2022 to 67 percent by 2025.<sup>26</sup> This reform also builds on the PUPCA reform, supported as part of the DPF1. Through Supreme Decree 006-2023-MINAM, approved on May 30<sup>th</sup>, 2023, the application of the Single Procedure for Environmental Certification Process (PUPCA) has been postponed until January 1<sup>st</sup>, 2025.<sup>27</sup> Throughout this period the Bank is supporting the government to continue to identify bottlenecks and challenges in streamlining the SEIA and operationalizing the PUPCA (ASA P180362).

## Pillar 2: Build resilience and enhance climate change adaptation.

**Prior Action 3 (DPF 2).** To reduce the vulnerability of the population to disaster risk and climate change, the Borrower has approved an updated "National Disaster Risk Management Plan" (PLANAGERD) detailing specific actions, programs and activities, and responsible implementation entities to: (i) improve the organization and operation of local Emergency Operation Centers (EOCs) and (ii) increase the participation of women in DRM. As evidenced by Supreme Decree No. 115-2022-PCM, published in the Official Gazette on September 12, 2022.

31. **Rationale**: Peru's geographical location and environmental conditions make it prone to seismic, geodynamic, and hydrometeorological events. Climate change is expected to increase the frequency and intensity of events, impacting economic development and hindering poverty reduction efforts. Women, particularly in rural areas, face barriers in accessing resources, information, and decision-making, limiting their capacity to adapt to climate change. Despite advancements, gender gaps persist, with only a small percentage of women benefiting from preparedness and risk knowledge training activities.<sup>28</sup> There is also a need to strengthen disaster risk reduction and emergency preparedness at the subnational level. Peru has taken steps to enhance coordination among the government, private sector, and civil society, and prioritize climate change adaptation and disaster risk reduction. This includes the establishment of a national system for DRM (SINAGERD) and the development of a comprehensive National DRM policy.

<sup>&</sup>lt;sup>25</sup> This is not the case for the National Environmental Certification Service (SENACE), as it is allowed to hire from a roster of specialists, consultants to directly respond to review requests (Law N. 30317 in 2015).

<sup>&</sup>lt;sup>26</sup> The indicator has been slightly modified to assess the review process of EIAs that submit a maximum of 5 "supplementary information" considering that a greater number of supplementary information requests is an indicator of significantly deficient and incomplete assessments, in which project proponents are not complying with scope required by law.

<sup>&</sup>lt;sup>27</sup> The environmental certification processes of projects that start after the entering into force of this Decree, and before 01-01-2025, will be conducted based on procedures dictated by sectoral norms.

<sup>&</sup>lt;sup>28</sup> Peru ranks 37 among 146 countries in the Global Gender Gap Index with a score of 0.75; and the 2019 gender inequality index is 0.39 showing a significant reduction in comparison to its value in 2000 (0.53) and only about 10 percent of beneficiaries of preparedness & risk training activities are women while they account for 50.48 percent of the population affected by disasters.



32. **Substance of Prior Action:** The GoP has updated and approved the 2022-2030 PLANAGERD to align it with the recently updated National DRM Policy (supported under DPF 1), focusing on the integration of disaster risk management and climate change adaptation agendas. The PLANAGERD is a legally binding instrument that mandates public entities of the SINAGERD (Ministries, technical-scientific entities, National sector entities, Regional and local governments) to update and align their strategic planning and operational instruments, including institutional arrangements, investment projects, financing and monitoring; thus, guiding DRM planning at the three levels of government. This DPF supports two Strategic Objectives within the PLANAGERD: (i) improving the organization and operation of Emergency Operations Centers (EOCs) and (ii) reducing the gender gap in women's participation in DRM.

33. The 2022-2030 PLANAGERD, recognizes the opportunity to mainstream gender into DRM as a cross-cutting process, and emphasizes the key role that women's knowledge and skills play in prevention and response measures within their communities. It introduces and outlines specific actions to enhance gender equality, incorporate women's knowledge, risk perception and capacities in prevention and response measures, and improve assistance to the population during emergencies and disasters. The updated PLANAGERD incorporates a comprehensive gender approach to address these urgent needs. For example, the GoP will carry out activities to prepare community risk maps with systematic participation of women. The maps will consider women's perspectives, experiences, concerns, and risk perception, which will help in the decision making and women's empowerment in the face of DRM. Women have unique experiences and knowledge related to disaster risk and resilience due to their responsibilities and social positions. Women's significant role in managing natural resources and their deep understanding of the local environment make them invaluable for DRM. Their caregiving roles also enable them to build social networks and community connections that can be leveraged during disaster response. Involving women in DRM leads to more comprehensive strategies that consider their unique experiences and knowledge, can improve disaster preparedness and response, and lead to the enhancement of their social status and opportunities for leadership. Conversely, neglecting women's perspectives may result in ineffective and inappropriate response strategies.<sup>29</sup>

34. **Expected Results:** This policy reform will support the GoP's efforts to integrate disaster risk management and climate change adaptation at the subnational level, expanding and strengthening local EOCs. It will also strengthen resilience and disaster risk preparedness by increasing participation of women in disaster risk management. As a result of this Prior Action, the share of priority communities that have prepared community risk maps in consultation with women's social organizations and have made them publicly available is expected to go from 0 in 2023 to 20 percent by June 2025. To achieve this, women will be targeted through existing women's organization and social programs, and meetings will be scheduled according to their time preferences. Reforms under DPF 1 and 2, are also expected to strengthen EOCs at the local governments to allow them to respond more efficiently to emergencies/disasters and contribute to prevention and risk reduction by having better risk information. As a result of this DPF series, the number of people living in areas with local EOCs operating according to new guidelines is expected to increase from 0 in 2021 to 1,105,645 by June 2025.<sup>30</sup>

**Prior Action 4 (DPF 2).** To promote more resilient and sustainable urban development, incorporating climate change adaptation, disaster risk management, and densification strategies in urban planning instruments the Borrower, through the Ministry of Housing, Construction and Sanitation has approved and issued the "Regulation for Land Development and Urban Planning for Sustainable Urban Development," implementing regulations for the Sustainable Urban Development Law. As evidenced by Supreme Decree No. 012-2022-VIVIENDA published in the Official Gazette on October 5, 2022.

<sup>&</sup>lt;sup>29</sup> Erman, A., De Vries Robbé, S. A., Thies, S. F., Kabir, K., & Maruo, M. (2021). Gender Dimensions of Disaster Risk Reduction.

<sup>&</sup>lt;sup>30</sup> The target of this indicator was revisited by INDECI because for DPL 1, some COEs that had already been strengthened - before the approval of updated guidelines - were mistaken included as part of the target. Over the past years there has been progress in this result indicator and the number of people living in areas with local EOCs operating according to new guidelines stands at 311,976 (2023).



35. **Rationale:** Peruvian municipalities do not have adequate capacities and resources to plan and manage territorial development, or to prepare the complex planning instruments required by Law. In 2019, only 15.1 percent of municipalities had an Urban Development Plan. In addition, of the 196 provincial municipalities, only 92 (46.9 percent) had a territorial plan. Climate change impacts are affecting Peru's urban areas through increased frequency of climate-induced disasters. As highlighted by Peru's CCDR, effective land use planning instruments are a priority to manage long term climate risks and avoid locking people into high-risk areas.

36. **Substance of prior action:** In October 2022, as part of the efforts to achieve the objectives established by the 2030 National Urban and Housing Policy, the GoP issued Supreme Decree No. 012-2022-VIVIENDA, approving Regulations for Territorial Conditioning and Urban Planning for Sustainable Urban Development, which regulate the Sustainable Urban Development Law No. 31313, enacted in July 2021, in aspects related to the development and implementation of territorial and urban planning instruments and the incorporation of DRM. This regulation establishes among others: (i) the definition, contents and scope of the different planning instruments, the procedures for their preparation, consultation and approval, including DRM and climate change adaptation in territorial and urban planning; and (ii) legal instruments to promote a more compact development by mandating that planning instruments include densification strategies.

37. The regulations promote a more compact development by mandating that planning instruments include densification strategies to promote access to housing, such as incentives for densification (bonuses) and disincentives for sprawling development (taxes) as established by Law No. 31313, the Sustainable Urban Development Law. The classification of urban land specifies that consolidated urban land is suitable for promoting densification processes, while peri-urban areas require priority attention due to their role in city and population center expansion, emphasizing the need for its protection, thereby inhibiting urban sprawl. The regulations include specific provisions on DRM and climate change adaptation in territorial and urban planning by introducing a risk analysis method for DRM and climate change adaptation, aimed at defining land zoning, identifying mitigable and non-mitigable risk areas, supporting the mechanisms for resettlement and identification of priority risk areas to plan risk reduction measures.<sup>31</sup> In addition, the regulations mandate that urban action must prioritize the population most vulnerable to disasters, by establishing that planning instruments consider resettlement actions for the vulnerable population occupying non-mitigable risk areas. The Ministry of Housing is already providing technical assistance to municipalities to help them develop their urban planning instruments according to the new Sustainable Urban Development law and its regulation. Starting in 2024, all urban plans to be enacted by local governments must be aligned with the new regulations.

38. **Expected results:** It is expected that these regulations will lead to more resilient and lower carbon urban growth, resulting in cities that are less sprawled and less vulnerable to disaster and climate change-related events. It is expected that, by June 2025, 10,3 million people will be living in cities or populated settlements with urban planning instruments that integrate disaster risk management and public spaces management according to the main objectives and guidelines established by the 2030 National Housing and Urban Policy, the Law No. 31313 and its regulations.

## Pillar 3: Supporting the transition towards a greener economy in selected sectors

**Prior Action 5 (DPF 2)**. To promote sustainable construction and the measurement of progress in achieving climate change commitments, the Borrower, through the Ministry of Housing, Construction and Sanitation, has created the National Registry of Sustainable Buildings and Urban Developments in which buildings that comply with the 2021 Technical Code for Sustainable Construction will be registered. As evidenced by Ministerial Resolution No. 096-2023-VIVIENDA, published in the Official Gazette on March 8, 2023.

<sup>&</sup>lt;sup>31</sup> An area declared as a non-mitigable risk area should be classified as "Special Regulation Zone for Protection Purposes", and no urban development, tenure regularization, public service provision, or building projects can be carried out in such areas, thus providing an important climate change adaptation measure. Land use plans also should clearly outline land for public space use.



39. **Rationale.** In recent decades, the construction of private and public sector buildings has increased significantly. However, there is substantial room to improve the construction quality as current practices lead to high energy and water consumption and inadequate indoor environmental quality, among others. Shifting construction requirements incorporating climate-resilient and lower-carbon technologies is particularly relevant given the lifetime of buildings (which tend to last from 26-50 years) and expected climate change impacts in Peru.<sup>32</sup> In response to poor construction practices, the GoP enacted the 2021 Technical Code for Sustainable Construction (by Supreme Decree No. 014-2021-VIVIENDA of July 23, 2021), which establishes the mandatory nature of its standards for sustainable housing projects of *Fondo MiVivienda* and new public sector buildings, such as education and health facilities.<sup>33</sup> The 2021 Technical Code for Sustainable Construction entered into force on July 26, 2023, and establishes minimum technical standards to promote the reduction of GHG emissions and enhance climate change adaptation, including among others standards for water and energy efficiency, environmental quality inside and outside the building, the use of eco-materials and for low-carbon mobility.

40. **Substance of prior action:** As part of the implementation of the 2021 Technical Code for Sustainable Construction, the GoP has created the National Registry of Sustainable Buildings through Ministerial Resolution No. 096-2023-VIVIENDA on March 8, 2023. The registry seeks to facilitate the measurement of progress in achieving climate change commitments, promote the construction of sustainable buildings and inform the public on which buildings (public or private) comply with the requirements and standards of the 2021 Technical Code. The registry will be supported by an Information Technology platform that will be used by the Ministry of Housing, Construction and Sanitation to review detailed information on building's design provided by the developer, to assess its compliance with the 2021 Technical Code, and subsequently to certify and enable registration of buildings complying with the code.<sup>34</sup> It will also allow collecting data to report the country's contribution to the reduction of GHG through sustainable building practices.

41. **Expected results**: The creation and implementation of the registry will support the implementation of the 2021 Technical Code for Sustainable Construction, which intends to promote the reduction of GHG emissions to the environment through the increase of water and energy efficiency, the improvement of environmental quality, the reduction of waste and the promotion of sustainable mobility. The registration of sustainable housing projects is also expected to increase the demand for green buildings and incentivize the private sector to incorporate green construction practices for new buildings. It is expected that, by June 2025, 4,400 sustainable housing units by *Fondo MiVivienda* would be built under the standards of the 2021 Technical Code and registered in the National Registry of Sustainable Buildings.

**Prior Action 6 (DPF 2).** To promote the transition to low-carbon transit technologies and more efficient and safe traffic management in the Lima-Callao Metropolitan Area, the Borrower has: (i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of Public Transport Service in Lima and Callao", establishing a new regulatory framework for transit service licenses/concessions in Lima and Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies; and (ii) through the Metropolitan Council of Lima, approved the Lima Metropolitan Development Plan 2021-2040 (PLANMET 2040), which establishes the strategic objectives for the implementation of traffic calming zones<sup>35</sup> and an integrated network of traffic lights, prioritizing pedestrians, cyclists, and transit, as well as the integration of bicycle infrastructure with transit systems and the implementation of a bike-share system. As evidenced by: (i) Law No. 31596 published in the Official Gazette on October 28, 2022, and (ii) Ordinance No. 2499-2022 published in the Official Gazette on September 16, 2022.

42. **Rationale**: About 30 percent of Peru's population live in the LMA (10 million in 2022), of whom 73 percent commute by public transport, amounting to 12.1 million daily trips. Nearly 91 percent of LMA's commuters are dependent on

<sup>&</sup>lt;sup>32</sup> 60 percent of the population lives in desert areas & around 50 percent of potable water is lost due to poor water networks and usage and illegal connections.

<sup>&</sup>lt;sup>33</sup> As established by Supreme Decree 06-2022-VIVIENDA – the 2021 Technical Code for Sustainable Construction will become mandatory in July 2023.

<sup>&</sup>lt;sup>34</sup> An IT platform has been developed by MVCS and is expected to be pilot tested in the coming months. The MVCS is currently drafting the administrative procedure which will further describe the certification process to be carried out. The IT platform and administrative procedure are expected to become operational in 9 months, after which sustainable buildings will start to be registered in the Registry

<sup>&</sup>lt;sup>35</sup> Traffic calming is normally done with physical features installed in residential areas to reduce the speed and amount of traffic passing through an area to make streets safer and more environmentally friendly for all road users.



inefficient and carbon intensive means of public transport. LMA's non-motorized transport (NMT) network also needs to be further improved and consolidated. Furthermore, the poor state of public transport services and infrastructure in LMA is contributing to the rapid growth of GHG emissions of the transport sector in Peru.<sup>36</sup> The GoP and the Metropolitan Municipality of Lima (MML) have undertaken significant efforts to improve the governance and institutional context for transit service provision, traffic management, and road safety in the LMA. The *Metropolitano* Bus Rapid Transit line (26 km) began commercial operation in 2011 with significant benefits in travel time savings (45 percent when travelling to/from the north/south) and improved access to jobs and schools and is now being extended by 10 km to the north, both investments with World Bank financial support. In December 2018, the Lima-Callao Urban Transport Authority (ATU) was created to lead the operation and fare integration of transit systems in Lima and Callao. Traffic management and NMT infrastructure and services provision is under the mandate of the MML and the Callao Provincial Municipality.

43. **Substance of prior action**: On October 28, 2022, the Borrower issued Law 31596 which establishes a new regulatory framework for transit service provision in Lima and Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies. This new regulatory framework grants the ATU a revised mandate to implement the reform of the Integrated Transit System (SIT) including issuing new regulation standards for renewing or granting new bus route permits (licenses) and awarding new service provision concession contracts. The law also introduces the use of incentives for the renewal of the old bus fleet to low-carbon technologies, including electric buses.<sup>37</sup> These incentives, which will be further structured in the operational regulation manual of the law, are expected to include: (i) alternative service provision models such as leasing co-financed by ATU for the acquisition and maintenance of electric buses; and (ii) financial incentives to vehicle owners for the scrapping of old units and renewal with low-carbon technologies

44. On September 14, 2022, the Lima Metropolitan City Council approved the PLANMET 2040 by Ordinance No. 2499-2022, with a compliance order from the MVCS. PLANMET 2040 guides and regulates sustainable urban development in Metropolitan Lima and is of mandatory application for the 43 districts comprising the city. This DPF supports two Strategic Objectives within the PLANMET: the implementation of traffic calming zones in distinct areas of the city that require urban regeneration due to the impact of metropolitan through traffic (Strategic Objective 9.2), the integration of bicycle infrastructure with transit and the roll-out of a bike-share system (Strategic Objective 9.1). Under Strategic Objective 9.2, PLANMET 2040 also calls for the implementation of the Traffic Control Center (TCC) with an integrated network of modern traffic lights in coordination with local district municipalities to promote efficient traffic management, reduce congestion and improve travel times for public transport and non-motorized transportation (NMT), then encouraging their preference over private cars. The adoption of PLANMET 2040 is expected to contribute to the decarbonization of the urban transport sector in Lima, as well as to its adaptation.<sup>38</sup>

45. **Expected results:** The renewal of the transit bus fleet with low-carbon technologies, along with the PLANMET 2040 objectives for the expansion of the NMT networks and improvement of traffic management in the LMA will contribute to the country's NDC targets and commitments to achieve carbon neutrality by 2050. The expected results include a reduction of traffic fatalities; travel time and vehicle operating costs; and in GHG and local air pollution emissions, and a mode shift to NMT and public transport and reduced congestion. It is expected that, by June 2025, the MML will expand bicycle lanes by 90 kms under the PLANMET 2040 objectives and ATU will scrap 6,848 old buses and taxis through the implementation of the SIT and scrapping interventions, namely the rationalization of transit routes/corridors and the use of incentives for fleet renewal with low-carbon technologies and other financial incentives to vehicle owners for the scrapping of old units. Together, reforms from DPF1 and 2 are expected to lead to a reduction of 281,240 MtCO2e and

<sup>&</sup>lt;sup>36</sup> 92 percent of the transport GHG emissions came from road transport, which are concentrated in the LMA which holds 52 percent of the national vehicle fleet. <sup>37</sup> The BRT corridor under operation since 2011 introduced modern articulated buses fueled by compressed natural gas. Additional bus concessions may continue the use of this technology or other hybrid or full electric.

<sup>&</sup>lt;sup>38</sup> An integrated traffic management system in LMM can improve the efficiency of emergency response to climate events and reduce potential economic losses.



1,952 Mt of local pollutants per year, linked to the implementation of scrapping programs, Law No. 31596 and the PLANMET 2040 (Strategic Objectives 9.1 and 9.2).<sup>39</sup>

**Prior Action 7 (DPF 2)**. To enable suppliers of non-conventional renewable energy to participate in electricity supply auctions, the Borrower, through the Presidents of the Republic and the Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by introducing the possibility of distribution companies contracting for supply of blocks of energy and capacity either together or separately, in auctions of electricity distribution companies. As evidenced by Letter No. 075-2023-PR dated March 24, 2023.

46. **Rationale:** Peru's power generation is dominated by hydropower and natural gas (52.5 percent and 37.6 percent respectively of total generation in 2021). Although Peru is endowed with world-class solar resources and wind power potential,<sup>40</sup> and was a leader in the region in the promotion of non-conventional renewable energy (NCRE)<sup>41</sup> through renewable energy auctions more than a decade ago, NCRE generation has remained relatively low reaching only 9.8 percent in 2021. Four renewable energy auctions took place between 2009-2015 with a total capacity awarded of 1,305MW (44 percent small hydro, 30 percent wind, 21 percent solar, and 5 percent biomass). These auctions were relevant to bring renewables to the market, at a time when they had higher cost than conventional energy.<sup>42</sup> However, in the last 5 years, the increase of renewable energy capacity has been of only 4 percent (518 MW) of the total installed capacity, while neighboring countries like Chile or Colombia have increase substantially installed capacity of NCRE.

47. To attain Peru's target of achieving 15 percent of NCRE generation by 2030 (and mobilize the private sector), increase competition and affordability of electricity tariffs in the regulated market, important regulatory changes are needed in electricity supply auctions. Currently, power generators who participate in supply auctions must sign contracts to supply both firm power 24 hours a day and energy together.<sup>43</sup> This has prevented NCRE suppliers (such as solar) from participating in these auctions since the energy generated by these plants is variable (intermittent) and therefore cannot supply firm power. Given the drop in NCRE costs globally, it can be competitive in technology neutral electricity supply auctions, as done in other countries such as Chile, while improving energy security and resilience of the power system.

48. **Substance of the prior action.** On March 24, 2023, the GoP submitted to Congress a draft law that amends Law No. 28832, to enable suppliers of NCRE to participate in technology neutral electricity supply auctions for regulated market users. The proposed draft law will allow distribution companies to contract energy and capacity separately and/or by energy hourly blocks. Allowing generators to bid separately for energy and capacity will enable variable renewable energy, such as solar energy suppliers, to participate in the electricity auctions. Moreover, the introduction of hourly blocks – that are aligned with daily generation of solar and wind power – as done in other countries such as Colombia and Chile, will enable solar and wind technologies to be competitive in the auctions versus thermal or hydro generation. The draft law has been discussed at Congress' Energy and Mining Committee, which issued a favorable opinion on May 19, 2023. The draft law is pending to be voted at the plenary session of Congress in the Third Ordinary Legislature, starting on August 2023.

49. **Expected results:** The proposed Law to reform of Law 28832 will increase the share of electricity auctions for regulated customers in which non-conventional renewable energy participate from 0 to more than 80 percent by June 2025. In addition, it will increase competition with the entry of new players, reducing electricity prices and increasing the provision of clean energy to regulated customers, diversify the energy matrix increasing resiliency to climate change impacts on water hydrology, and reduce the country's overall carbon footprint by displacing fossil fuel-based generation

<sup>&</sup>lt;sup>39</sup> This corresponds to 1,000 trucks under DPF1 (59,893 MtCO2 and 522 Tons of local pollutants), 6,848 buses and taxis – ATU's Law (220,425 MtCO2 and 1,430 Tons of local pollutants) and 90 km of bike lanes under PLANMET (921.6 MtCO2, no estimate for local pollutants).

<sup>&</sup>lt;sup>40</sup> Solar technical potential is of 25 GW with daily irradiation over 5.5 kilowatt hours per cubic meter (kWh/m2) in most coastal areas, and over 7 kWh/m2 in the south, among the highest in the world. Furthermore, the estimated national wind power potential is 22.5 GW.

<sup>&</sup>lt;sup>41</sup> NCRE include solar, wind, biomass, and small hydro power plants.

<sup>&</sup>lt;sup>42</sup> Renewable energy auctions included a prime to cover the increase in energy prices which was included in the regulated customer's electricity tariff.

<sup>&</sup>lt;sup>43</sup> Firm power is the power which can be produced by a power plant at any given time.



in the electricity grid, thus supporting lower carbon energy transition and the achievement of the country's climate commitments.

**Prior Action 8 (DPF 2).** To promote energy efficiency and reduce GHG emissions, the Borrower, through the Ministry of Energy and Mines, has approved technical standards for nine different types of LED panels that public entities purchasing such lighting need to comply with. As evidenced by (Ministerial Resolution No. 190-2022-MINEM/DM published in the Official Gazette on June 1, 2022.

50. **Rationale:** Deployment of energy efficiency (EE) programs has been identified by the GoP as key to reduce energy demand, displace thermal generation and reduce both electricity price and GHG emissions. As such, Peru has enacted several EE policies,<sup>44</sup> has adhered to OECD's Green Growth Declaration (and therefore needs to improve its energy intensity levels to reach OECD standards) and has included EE as a focus area in its NDC. Still, the implementation of EE measures and actual reduction of energy demand has been limited and energy consumption has been growing steadily. Challenges remain in various fronts, including existing regulatory, financial, and technical barriers. The Ministry of Energy and Mines (MINEM) is working on a series of reforms to address some of these barriers and enable the scaling up of EE actions in sectors where there is wide potential for achieving a reduction in energy consumption, such as lighting and appliances, both for the private and public sector. In 2021, MINEM enacted a new regulation for the promotion of energy audits through certified energy auditors. Further policy regulation to achieve a reduction in energy consumption in the public sector, as established in Law No.27345, entails increasing the technical requirements for efficient appliances and lighting through the establishment of technical specification standards that define energy efficiency requirements for large scale public procurement of appliances and lighting. Beyond the public sector, MINEM is also working on enacting regulations to reduce energy consumption in end consumers, expanding the EE labeling for additional appliances and developing MEPS, where the Bank is supporting with technical assistance.

51. **Substance of the prior action:** The Government issued Ministerial Resolution no. 190-2022-MINEM/DM that approves technical specification standards for nine LED panels, which establish the energy efficiency requirements that LED panels purchased by public entities and enterprises need to meet to ensure that these are replaced with the most efficient and low-carbon technology existing in the market. This will facilitate the transition towards efficient lighting as it mandates that all public procurement complies with the requirement. Standardizing the requirements for efficient equipment to be purchased by the public sector supports energy savings and the reduction of the energy bill of public institutions that in turn will free up budget resources that could be redirected to other programs. In addition, MINEM continues working in follow-up regulations needed to enforce the obligation of carrying out energy audits in public entities, a prior action included in the first DPF of this series.

52. **Expected results**: As a result of the policy measures supported by this series of DPF, 3.1 GWh of cumulative energy savings from energy efficiency measures in the public sector are expected between 2023 and June 2025. This reform is also expected to contribute to a cumulative reduction of GHG emissions equivalent to 1,283tCO<sub>2</sub>e between 2023 and June 2025. The impact of energy efficiency measures, in terms of energy savings and GHG reduction, will increase with the continuous replacement of lighting for efficient LED tubes and panels in the public sector.

53. The table with a summary of the DPF Prior Actions and Analytical Underpinnings is included in Annex 6.

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

54. This operation is aligned with key Bank strategies and the WBG FY23-27 Country Partnership Framework (CPF) for **Peru.** The policy reforms supported under this operation, which are framed around enabling a green and resilient development, are aligned with the World Bank Group's broader strategy and approach, including the (i) 2021-2025 Climate Change Action Plan supporting reforms to transition in three key systems: energy, cities, and transport; and adapt

<sup>&</sup>lt;sup>44</sup> Including the Law for the Promotion of the Efficient Use of Energy (Law no.27345) and the National Long-term Energy policy 2010 – 2040 (Decree 064-2010-EM)



through enhanced disaster risk management, (ii) the strategic frameworks to move "From Crisis Response towards Green, Resilient and Inclusive Development", (iii) Peru's CCDR and (iv) the upcoming WBG Gender Strategy 2024-2030, specifically, with the Strategy's third strategic objective of gender equality in leadership to meet global challenges for sustainable and resilient futures. The proposed operation is aligned with the Peru Country Partnership Framework (CPF) FY23–FY27 discussed by the Board of Executive Directors on January 31, 2023 (Report No. 179046-PE), its High-Level Outcomes of Improved access to quality public services across the territory (HLO2), and Increased resilience to shocks (HLO3).<sup>45</sup>

55. Various projects under implementation complement the objectives of this operation. These include the *Sustainable Growth and Finance DPF-DDO* (P178591); the *Lima Metropolitano BRT North Extension* (P170595) and the *Integrated Forest Landscape Management Project in Atalaya, Ucayali* (P163023).

## 4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

56. The objectives, pillars, policy actions and expected results of the operation have been defined in collaboration with the GoP's key sectoral entities through a consultation process led by the MEF, which is the implementing agency for the DPL operation. In addition, the operation's task team maintained a close dialogue with representatives from key line ministries, agencies, and sectoral entities, including MEF, MINAM, MVCS, MTC, MINEM, PCM, INDECI, CENEPRED, ATU and LMM.

57. **Consultations**. According to article 14 of Supreme Decree N <sup>o</sup> 001-2009-JUS, public agencies must publish the draft bills in the official gazette, in their electronic portals (websites) or by any other means, within a period of no less than thirty days before the date scheduled for the bill's entry into force, except in exceptional cases, to enable citizens to comment on the proposed measures. In application of this provision, the MVCS pre-published for 30 days the draft regulations to the Sustainable Urban Development Law (PA4). The publication of the draft regulations was preceded by dialogues held with public, private, and nongovernmental actors. For the PLANAGERD (PA3) Ministries and subnational governments were consulted through more than 290 workshops. Actions related to the implementation of BIM (PA1) were also subject to consultations with stakeholders. Entities or public companies can consult through a form hosted on the Peru BIM Plan website, which also included a list of frequently asked questions.

58. The operation, as part of the WBG's broader program of support to Peru has benefited from close coordination with development partners. These include the IMF, Inter-American Development Bank (IADB), UN-Habitat and the Swiss State Secretariat for Economic Affairs (SECO). Some of the prior actions supported by this program are informed by long-standing technical assistance by the Bank and other development partners.

## 5. OTHER DESIGN AND APPRAISAL ISSUES

## **5.1. POVERTY AND SOCIAL IMPACT**

59. Policies under Pillar 1 are expected to have positive welfare effects via job creation, emissions reductions, health and productivity improvements, and increased climate resilience. PA1's low-carbon solutions for infrastructure will directly benefit Peruvian's wellbeing through the health and productivity channel. First, lower pollution will reduce the incidence of respiratory diseases, reducing the out-of-pocket expenditures. Second, less pollution and better health outcomes will increase workers productivity. A detailed Poverty and Social Impact analysis is included in Annex 10.

<sup>&</sup>lt;sup>45</sup> PA1, PA2, PA3 contribute to (HLO2) Improved access to quality public services which has the following objectives (Obj. 3) Enhance the delivery of public services and (Obj. 4) Strengthen institutional effectiveness at national and subnational levels, and PA1, PA2, PA3, PA4, PA5, PA6, PA7 and PA8 contribute to (HLO3) Increased resilience to shocks which has the following objectives (Obj. 5) Enhance climate change adaptation and mitigation and (Obj. 6) Strengthen mechanisms to protect people against shocks. The operation also supports the cross-cutting issues of increased state efficiency, delivering quality services, and coping with shocks.



60. The policies under Pillar 2 are expected to help households mitigate climate change risks. Around 20 percent of the population in the lowest income quintile of expenditure and of the rural population were exposed to a disaster in 2021. With poor and rural populations being the most exposed to natural disasters, PA3's updated guidelines and new EOCs are expected to equip districts with resources to combat these risks, especially because the prioritized districts are highly exposed to landslides and floods. Meanwhile, PA4, the Sustainable Urban Development Law, addresses the issue of increased urban growth in hazard-prone areas by promoting urban planning instruments. This action is crucial for improving living conditions given that 45 percent of the urban population lives in slums, in improvised settlements, and with inadequate housing. While the poverty effects will depend in part on resettlement standards, the activities under this PA will contribute to reducing exposure to disaster-related shocks that particularly affect poor and vulnerable households because of their lack of coping and protective mechanisms, while decreasing the probability of non-poor households falling into poverty. In terms of possible adverse impacts when those living in hazard-prone areas have to resettle, it is important to consider the standards for resettlement established in existing norms such as the Regulation for Law N° 29869, Ley de Reasentamiento Poblacional para Zonas de Muy Alto Riesgo no Mitigable. This Regulation considers the participation of both relevant government agencies and the affected populations to guarantee, for example, that these populations receive the necessary assistance in terms of access to housing, income protection, proper infrastructure connectivity, and access to health services, among other interventions. Such measures have the effect of limiting the potential negative effects of resettlement on affected households and enhancing the benefits of moving people out of hazard-prone areas.

61. Policies under Pillar 3 are expected to have positive welfare effects through better health outcomes, lower out of pocket expenditure, and higher savings With PA5's new Technical Code, water and energy efficiency improvements are expected to lead to poverty reduction. Traffic management efficiency, promoted by PA6, aims to alleviate poverty, and foster social inclusion, especially vital for Lima. In 2022, Lima was the 4<sup>th</sup> slowest city in the world to drive in and access to public transport is limited. An efficient and safe transportation is also fundamental to connecting people with essential services such as healthcare and education, especially for disadvantaged groups such as women and low-income households. Low-carbon green transport is also expected to reduce pollution and mitigate climate change, which reduces poverty as pollution affects the poor disproportionately. PA7's promotion of renewable energy could reduce multidimensional poverty and improve health outcomes. PA8 introduces energy efficiency regulations for the promotion of energy performance standards, further fostering poverty reduction and improved household welfare.

## 5.2. ENVIRONMENTAL, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

62. The policies and measures supported through this operation are expected to have an overall significantly positive impact on Peru's environment, forests, and other natural resources. In the event negative environmental impacts arise, Peru has a robust system for their adequate management. Prior Actions under Pillar 1 are expected among others, to strengthen the institutional basis for Peru's environmental governance system - enhancing positive long-term environmental effects - through the improvement of efficiency and technical capacity of the environmental assessment process (PA2), and preparation and implementation of infrastructure projects (PA1). Prior Actions under Pillar 2 will support building resilience and enhancing climate change adaptation through the introduction of an updated National Disaster Risk Management Plan (PA3), and the regulation of the Sustainable Urban Development Law (PA4), while actions under Pillar 3 seek to support the transition towards a greener economy in construction (PA5), transport and urban development (PA6) and renewable energy access (PA7) and supply (PA8). The implementation of PA6 – accelerating the renewal of the bus fleet with low-carbon technologies – could potentially lead to negative environmental effects in the event of improper disposal of older fleet infrastructure and eventual disposal of batteries from e-mobility technologies at end-of-lifecycle. To manage any potential impacts, Peru's environmental regulation incorporates the necessary mitigation measures and is accompanied by requisite enforcement capacity to adequately manage such risks.



Investments with potential adverse impacts will be managed mainly through SEIA Law Nº 27446 and its Decree Nº 019-2009-MINAM, which require the development of an environmental impact assessment for works or projects that may cause negative environmental impacts. The government has been implementing important improvements to strengthen its SEIA, including those detailed in PA 2 and supported by DPF1. The table with a summary of Environmental and Poverty and Social Analysis Impacts is included in Annex 4.

## 5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

63. **Peru's PFM framework is aligned with best international practices.** The use of budget resources, and its foreign exchange (FOREX) internal control environment as managed by the Central Bank do not pose material risks to the development objectives of the operation. Peru's budgeting practices meet most of the principles of the IMF Fiscal Transparency Code at a good or advanced level, and it ranks 61 out of 100 in the Open Budget Survey.<sup>46</sup> Although moderate shortcomings exist, they do not pose material risks to the operation's development objectives. The areas for improvement include challenges in the medium-term budget planning, which are reflected in constant incremental changes in the initially approved budget compared to the executed budget.

64. **Government Commitment to support PFM reforms.** During the last decade the GoP has demonstrated progress in implementing PFM reforms at the central government level, including among others the solid information technology systems (integrated financial management system- SIAF) and the single treasury account, the gradual implementation of International Public Sector Accounting Standards (IPSAS) at the central government level, and improvements in the tax collection system.<sup>47</sup>

65. **Budget credibility, comprehensiveness, transparency and control in budget execution.** Policies and priorities are reflected in the budget which is formulated using a Multiannual Macroeconomic Framework. preparation process, taking into consideration the macroeconomic and fiscal projections. The legal framework sets clear procedures for the preparation, approval, and execution of the budget. The transparency section of the MEF's website allows access to information on budget execution and budget reports can be obtained based on programmatic, functional, and administrative classifications. Budget execution, STA, and control and monitoring is done through the integrated financial management system.

66. **Public Procurement System**. Public procurement is governed by the Public Procurement Law, its amendments and rulings, which establish the criteria to carry out procurement with transparency, efficiency, competitivity, equality and integrity. The Public Procurement Law complies with good international practices related to the control of public procurement regarding independent control institutions, the existence of defined mechanisms to control under the direction of the General Comptroller. On the other hand, for public procurement, the electronic procurement system (*Sistema Electrónico de Adquisiciones y Contrataciones del Estado*, SEACE) is mandatory, easily accessible, and free for all user levels, providing information on contracting procedures. Therefore, no major procurement risks related to the implementation of the Prior Actions are expected. In addition to that, a new version of the current Regulation was approved in October 2022, and the project of a new procurement law is foreseen to be submitted to Congress during the first quarter of 2023.

67. **External scrutiny of public expenditures.** The Comptroller General of the Republic (CGR) provides independent oversight of public finances. The CGR is an independent body established under the Constitution to audit all public

<sup>&</sup>lt;sup>46</sup> https://internationalbudget.org/open-budget-survey/country-results/2021/peru

<sup>&</sup>lt;sup>47</sup> Tax Administration Diagnostic Assessment Tool (TADAT) evaluation conducted by the IMF in 2017 concluded that the tax administration authority (SUNAT) was making good progress in implementing modern tax administration practices making use of new technology.



entities. It undertakes compliance and financial audits of fiscal statements in accordance with the International Standards of Supreme Audit Institutions.

68. **Foreign exchange management.** In the absence of the current IMF Safeguard Assessment Report (the latest report was issued in 2007), alternative procedures were undertaken. The published audited financial statements of the Central Bank for the calendar year 2022 were reviewed. These financial statements are aligned with International Financial Reporting Standards. The audit was carried out in accordance with the International Standards on Auditing by an audit firm acceptable to the World Bank. Unmodified audit opinions did not reveal significant issues related to the internal control environment and the FOREX internal control environment does not pose risks to the development objectives of this operation.

69. **Disbursement and auditing arrangements.** Upon effectiveness of the Loan Agreement, and satisfaction of the applicable withdrawal conditions, the Borrower may submit a disbursement application requesting the loan proceeds to be disbursed into an account at the Central Bank, which is part of the country's Foreign Exchange Reserves. The withdrawal applications may be submitted up to November 30, 2026 (Closing Date). The funds will then be transferred into the Single Treasury Account managed by MEF at Banco de la Nación. Transactions and balances will be fully incorporated into the GoP's accounting records and financial statements through SIAF. The GoP, within 45 days after the withdrawal of the funds from the financing account, shall report to the Bank: (i) the exact sum received into the account referred to in Section 2.03 (a) of the General Conditions; (ii) the details of the account to which the local currency equivalent of the Loan proceeds was credited; and (iii) the record that an equivalent amount has been accounted for in the GoP's budget management systems. Given that the control environment into which the DPFs proceeds would flow is adequate, the World Bank will not require a dedicated account at the Central Bank for managing loan proceeds. On this basis, no specific audit of the deposit of the credit proceeds will be required and no additional fiduciary arrangements are considered necessary.

## 5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

70. As implementing entities, MEF is responsible for collecting and monitoring information related to program implementation and progress towards the achievement of results for this DPL operation. MEF is further responsible for coordinating necessary actions among the agencies involved in the reform program supported by this DPL operation, which include ATU, LMM, MINAM, MVCS, MTC, INDECI, PCM, MINEM and CENEPRED. The World Bank has worked closely with MEF and relevant sectoral entities to define results indicators that are clear and measurable. The Bank will focus on monitoring progress towards the expected results of the program development objectives.

71. **Grievance Redress**. Communities and individuals who believe that they are adversely affected by specific country policies supported as Prior Actions or tranche release conditions under a World Bank Development Policy Financing may submit complaints to the responsible country authorities, appropriate local/national grievance mechanisms, or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address pertinent concerns. Project affected communities and individuals may submit their complaints to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank's non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's Accountability Mechanism, please visit https://accountability.worldbank.org.

## 6. SUMMARY OF RISKS AND MITIGATION



72. **The overall risk rating for the proposed operation is assessed as Moderate**. The key risk ratings are included in the table below. The major risks identified include: (i) political and governance and (ii) institutional capacity for implementation and sustainability.

73. **Political and Governance Risks are considered Substantial.** There continues to be frequent turnover of high-level government officials at Ministerial level; and this is likely to continue during the implementation period of the proposed program. There is thus the risk of a slower implementation speed of reforms, and/or a lack of continuity of GoP programs due to a shift in priorities. The mitigation measures put in place for the operation include: (i) ensuring a high-level of commitment of the administration to the proposed reforms through on-going policy dialogue; (ii) having a continuous engagement with key Government bodies to assure that new Government officials are aware of the Program's objectives and intended results; and (iii) closely monitoring potential political and governance risks related to the operation throughout implementation and implementing adequate mitigation measures, when possible. Since political turnover cannot be foreseen or fully mitigated, its impact on achieving the operation's development outcome is considered Substantial (residual risk).

74. The risk around Institutional Capacity for Implementation and Sustainability is rated Substantial given that the operation involves multiple agencies. In fact, to succeed, some of the proposed reforms will require a high level of coordination among line-ministries and with regional and local governments. Coordination between agencies in Peru is weak, and consensus building usually takes time which could lead to delays in implementation. To mitigate these risks, the operation is focusing on supporting reforms benefiting from long-standing policy dialogue and technical assistance by the World Bank and other donors. The GoP has also ensured funding for the implementation of some of the reforms, such as the approval of the public budget for DRM.

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	Low
8. Stakeholders	Moderate
9. Other	Moderate
Overall	Moderate

## **Table 2: Summary Risk Ratings**



## ANNEX 1: POLICY AND RESULTS MATRIX

	Prior actions and Triggers			Results			
Objective	Prior Actions under DPF 1	Prior Actions under DPF 2	Indicator Name	Baseline	Target		
Pillar One: Str	illar One: Strengthen the foundations for a greener economic recovery						
Support a green financing framework	<b>Prior Action 1.</b> To enable the Borrower to issue sustainable green bonds in local and international capital markets, the Borrower, through MEF, approved the Peru Sustainable Bond Framework which defines the eligible green public expenditures to which proceeds of such bonds may be applied, the process for selecting eligible projects, and reporting on allocation and impact, as evidenced by Ministerial Resolution No. 221-2021-EF/52 published in the Official Gazette on July 17, 2021. Entities responsible: MEF		<b>Results Indicator 1.</b> Allocation reports are prepared and published, in line with Peru's sustainable bond framework.	RI#1: 0 (2021)	RI#1: 2 (2025)		
Improve the investment managemen t framework with a focus on efficiency and sustainabilit Y	<ul> <li>Prior Action 2: To enhance the efficiency and sustainability of investments, the Borrower:</li> <li>(i) through the General Directorate of Multiannual Investment Programming has approved the "Implementation Plan and Roadmap for the Peru BIM Plan", defining short- and long-term objectives for the progressive incorporation of BIM, to reduce time and cost overruns in the preparation and implementation of public works, as evidenced by Directorial Resolution N° 0002-2021-EF/63.01 published in the Official Gazette on June 15, 2021; through the Ministry of Environment, has approved Provisions for</li> </ul>	<b>Prior Action 1.</b> To enhance the efficiency and sustainability of public investments and; promote their adoption of low-carbon technologies, the Borrower, through the General Directorate of Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and Infrastructure" and related adoption guidelines and piloting directives for BIM; and (ii) a technical note providing guidance for incorporating the mandatory use of the social price of carbon in estimating social costs and benefits in three additional types of investment projects (i.e., urban transit, recovery of degraded forest ecosystems, and public green spaces).	Results Indicator 2. Reduction in the average time to develop and approve technical dossiers of investments projects applying the BIM methodology (%) Results Indicator 3. Schedule Performance Index of projects after adopting Building Information Modeling (BIM) methodology (%)	RI#2:0 (2022) RI#3: 67.9% (2022)	RI#2: >20% (2025) RI#3: 77.9% (2025)		



the Single Procedure for the Environmental Certification Process of the National Environmental Certification Service for Sustainable Investments, to enhance the predictability, consistency and agility of the environmental certification process of projects, as evidenced by Supreme Decree No. 004- 2022-MINAM published in the Official Gazette on January 26, 2022; (iii) through the General Directorate of Multiannual Investment Programming, approved the "Technical Note for Using the Social Price of Carbon in the Social Evaluation of Investment Projects", containing guidelines for estimating social costs and benefits linked to projects' greenhouse gas emissions, to inform the appraisal of investment projects, as evidenced by Directorial Resolution No. 006-2021- EF/63.01 published in the Official Gazette on August 1, 2021; Entities responsible: MEF, MINAM – DGPIGA	As evidenced by the following Directorial Resolutions: (i) (a) No. 0005-2023-EF/63.01 published in the Official Gazette on May 7, 2023; (b) No. 0007-2022-EF/63.01 published in the Official Gazette on November 10, 2022; and (c) No. 0001-2022-EF/63.01 published in the Official Gazette on March 31, 2022; and (ii) No. 0009- 2023-EF/63.01 published in the Official Gazette on August 25, 2023. <i>Entities responsible: MEF</i>			
	<b>Prior Action 2.</b> To strengthen the National Environmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S instruments, the Borrower has: allowed SEIA's Technical Experts (TE) to use a "roster of specialists". As evidenced by the single supplementary amending provision of Legislative Decree No. 1570 published in the Official Gazette on May 28, 2023. <i>Entities responsible: MINAM – DGPIGA</i>	<b>Results Indicator 4.</b> Percentage of detailed Environmental Impact Assessments (EIAs) and EIA modifications that are evaluated within the timeframe established by the regulatory framework (%).	RI#4: 42% (2022)	RI#4 :> 67 % (2025)



## Pillar Two: Build resilience and enhance climate change adaptation

Strengthen climate change adaptation and disaster risk managemen t	<b>Prior Action 3.</b> To strengthen its climate change adaptation, disaster risk reduction and emergency preparedness, the Borrower, through the President and the Council of Ministers, has approved and issued an updated national disaster risk management policy entitled "National Disaster Risk Management Policy to 2050", to be implemented by all relevant public administration entities, as evidenced by Supreme Decree No. 038-2021-PCM published in the Official Gazette on March 1, 2021. Entities responsible: PCM (INDECI/CENEPRED)	<b>Prior Action 3.</b> To reduce the vulnerability of the population to disaster risk and climate change, the Borrower has approved an updated "National Disaster Risk Management Plan" (PLANAGERD) detailing specific actions and responsible implementing agencies to: (i) improve the organization and operation of local Emergency Operations Centers (EOCs) and (ii) increase the participation of women in DRM. As evidenced by Supreme Decree No. 115-2022-PCM, published in the Official Gazette on September 12, 2022. Entities responsible: PCM (INDECI/ CENEPRED)	Results Indicator 5. Number of people living in areas with local EOCs operating according to new guidelines. Results Indicator 6. Share of priority communities that have prepared community risk maps in consultation with women's social organizations and have made them publicly available.	RI#5: 0 (2021) RI#6: 0 (2023)	RI#5 : 1.1 million (2025) RI#6 : 20 % (2025)
Promote a more resilient urban developmen t	<b>Prior Action 4.</b> To promote a more resilient and sustainable urban development, the Borrower has enacted: (ii) the Sustainable Urban Development Law, including provisions for incorporating disaster risk management and climate change adaptation in urban land planning, as evidenced by Law No. 31313, as published in the Official Gazette on July 25, 2021; and (ii) the Law on Management and Protection of Public Spaces, establishing the regulatory framework for the management and protection of public spaces, including a mandate to prepare public spaces plans to be integrated in urban planning instruments, as evidenced by Law No. 31199 promulgated on May 20, 2021, and published in the Official Gazette on May 22, 2021.	<b>Prior Action 4.</b> To promote more resilient and sustainable urban development, incorporating climate change adaptation, disaster risk management, and densification strategies in urban planning instruments, the Borrower through the Ministry of Housing, Construction and Sanitation has approved and issued the "Regulation for Land Development and Urban Planning for Sustainable Urban Development," implementing regulations for the Sustainable Urban Development Law. As evidenced by Supreme Decree No. 012-2022-VIVIENDA published in the Official Gazette on October 5, 2022.	<b>Results Indicator 7.</b> Number of people living in cities or populated settlements with urban planning instruments that integrate disaster risk management and public spaces management according to the main objectives and guidelines established by the 2030 National Housing and Urban Policy, the Law No. 31313 and its regulations.	RI#7:0(2021)	RI#7: 10.3 million (2025)



	Entities responsible: MVCS				
Pillar Three: So	upporting the transition towards a greener e	conomy in selected sectors			
Promote a greener urban developmen t	<b>Prior Action 5.</b> To promote the reduction of GHGs and increase adaptive capacity in the framework of Peru's climate change commitments, the Borrower, through the Ministry of Housing, Construction and Sanitation, has approved a new Technical Code for Sustainable Construction setting out requirements for buildings and urban developments to meet basic conditions of sustainability, as evidenced by Supreme Decree No. 014-2021-VIVIENDA published in the Official Gazette on July 26, 2021. <i>E</i> Entities responsible: MVCS	<b>Prior Action 5.</b> To promote sustainable construction and the measurement of progress in achieving climate change commitments, the Borrower, through the MVCS, has created the National Registry of Sustainable Buildings and Urban Developments in which buildings that comply with the 2021 Technical Code for Sustainable Construction will be registered. As evidenced by Ministerial Resolution No. 096-2023-VIVIENDA, published in the Official Gazette on March 8, 2023. <i>Entities responsible: MVCS</i>	<b>Results Indicator 8.</b> Number of housing units from Fondo <i>MiVivienda</i> registered in the National Registry of Sustainable Buildings and Urban Developments.	RI#8: 0 (2021)	RI#8: 4,400 (2025)
Promote a greener and more efficient urban transport	<ul> <li>Prior Action 6. To promote the provision of more efficient public transport services, reduce transport related GHG emissions, and improve health and road safety, the Borrower: <ul> <li>(i) through the Ministry of Transport and Communications:</li> <li>(A) has approved the National Regulation to Promote Vehicle Scrapping, including provisions governing the establishment of scrapping programs and the granting of economic incentives to vehicle owners, as evidenced by the Supreme Decree N° 005-2021-MTC published in the Official Gazette on February 5, 2021 and effective April 6, 2021; and (B) has approved the Methodology for Calculating Avoided GHG Emissions and Valuation of Mitigated Environmental Externalities with the Implementation of Vehicle Scrapping</li> </ul> </li> </ul>	<ul> <li>Prior Action 6. To promote the transition to low-carbon technologies and more efficient and safe traffic management in the Lima-Callao Metropolitan Area, the Borrower has:</li> <li>(i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of Public Transport Service in Lima and Callao", establishing a new regulatory framework for transit route concessions in Lima and Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies; and</li> <li>(ii) through the Metropolitan Council of Lima, has approved the Lima-Callao Metropolitan Development Plan 2021-2040 (PLANMET 2040), which establishes the strategic objectives for the implementation of traffic calming zones and an integrated network of traffic lights, prioritizing pedestrians, cyclists,</li> </ul>	<b>Results Indicator 9.</b> Reduction of greenhouse gas (GHG) emissions and local pollutants (PM2.5, SO2 and Nox) linked to the implementation of scrapping programs, Law No. 31596 and the PLANMET 2040 (Strategic Objectives 9.1 and 9.2).	RI#9: 0 (2021)	RI#9: 281,240 MtCO2e per year 1,952 Mt of local pollutants per year (2025).



	Programs, as evidenced by the Directorial Resolution No. 20-2021-MTC/18 published in the Official Gazette on April 23, 2021; and (ii) through the Executive Presidency of the Urban Transportation Authority for Lima and Callao (ATU), has approved the Directive that Regulates Vehicle Scrapping in the Area of Influence of the Complementary Corridors of the Integrated Transit System of the ATU, establishing regulations for the scrapping of vehicles of public transport service operators along key transit corridors , as evidenced by Resolution of the Executive Presidency N° 164-2021-ATIL/PE	and transit, as well as the integration of bicycle infrastructure with transit systems and the implementation of a bike-share system. As evidenced by (i) Law No. 31596 published in the Official Gazette on October 28, 2022; and (ii) Ordinance No. 2499-2022 published in the Official Gazette on September 16, 2022. Entities responsible: (i) ATU; and (ii) LMM			
	published in the Official Gazette on November 3, 2021.				
Promote renewable energy services for all		<b>Prior Action 7.</b> To enable suppliers of non- conventional renewable energy to participate in electricity supply auctions, the Borrower, through the Presidents of the Republic and the Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by introducing the possibility of distribution companies contracting for supply of blocks of energy and capacity either together or separately, in auctions of electricity distribution companies. As evidenced by Letter No. 075-2023-PR dated March 24, 2022	<b>Results Indicator 10.</b> Share of electricity auctions for regulated customers in which non-conventional renewable energy participate.	RI#10: 0 (2021)	RI#10: >80% (2025)
		Entities responsible: MINEM			



Promote	Prior Action 7. To promote energy	Prior Action 8. To promote energy efficiency	Results Indicator 11.	RI#11: 0	RI#11: 3.1 (2025)
energy	efficiency in public entities and private	and reduce GHG emissions, the Borrower,	Cumulative energy	(2021)	
efficiency	sector companies, the Borrower, through	through the Ministry of Energy and Mines, has	savings from energy		
	the Ministry of Energy and Mines, has	approved technical standards for nine	efficiency measures in		
	approved a decree containing provisions	different types of LED panels that public	the public sector (Gwh)		
	to promote the development of energy	entities purchasing such lighting need to			
	audits and for the certification of energy	comply with.			
	auditors, as evidenced by Supreme Decree	As evidenced by Ministerial Resolution No.			
	No. 011-2021-EM published in the Official	190-2022-MINEM/DM published in the Official			
	Gazette on May 14, 2021.	Gazette on June 1. 2022.			
	Entities responsible: MINEM	Entities responsible: MINEM			



#### **ANNEX 2: FUND RELATIONS ANNEX**

## IMF Executive Board Completes Review of Peru's Performance Under the Flexible Credit Line Arrangement

FOR IMMEDIATE RELEASE

- The IMF completed the mid-term review of Peru's qualification under the Flexible Credit Line (FCL) arrangement. The arrangement was approved on May 27, 2022 for an amount of about \$5.3 billion (equivalent to 300 percent of quota).
- Peru continues to qualify for the FCL by virtue of its very strong economic fundamentals and institutional policy frameworks, and sustained track record of implementing very strong macroeconomic policies that have helped the country absorb large adverse shocks in recent years.
- Given the still elevated global risks and increased uncertainty, the authorities have expressed a desire to maintain the current level of access. The authorities intend to continue to treat the arrangement as precautionary. In line with the strategy delineated at the time of the FCL approval, exit from the arrangement will be conditional on the evolution of external risks.

Washington, DC – May 18, 2023: The Executive Board of the International Monetary Fund (IMF) completed on May 17, 2023, the mid-term review of Peru's qualification under the Flexible Credit Line (FCL) arrangement.<sup>1</sup> The Executive Board reaffirmed that Peru's very strong macroeconomic policies and institutional policy frameworks, sound economic fundamentals, and proven track record of policy implementation warrant continued access to FCL resources.

The two-year arrangement was approved on May 27, 2022 for an amount of SDR 4.0035 billion (about US\$5.3 billion or 300 percent of quota). The Peruvian authorities have reiterated their intention to continue to treat the arrangement as precautionary. The authorities intend to exit the arrangement conditional on the reduction of external risks, in line with their strategy that sees the use of the facility as temporary.

Following the Executive Board's discussion on Peru, Mr. Kenji Okamura, Deputy Managing Director, made the following statement:

"Over the past two decades, Peru's very strong economic fundamentals, institutional policy frameworks, and prudent policy settings have underpinned robust economic growth and stability, spanning multiple electoral cycles and governments. The solid inflation-targeting

<sup>&</sup>lt;sup>1</sup> The FCL was established on March 24, 2009 as part of a major reform of the Fund's lending framework (see Press Release No. 00/85). The FCL is designed for crisis prevention purposes as it provides the flexibility to draw on the credit line at any time during the period of the arrangement (one or two years), and subject to a mid-term review in two-year FCL arrangements. Disbursements are not phased nor conditioned on compliance with policy targets as in traditional IMF-supported programs. This large, upfront access with no ongoing conditions is justified by the very strong track records of countries that qualify for the FCL, which gives confidence that their economic policies will remain strong.



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regime, credible fiscal framework, and robust financial sector supervision and regulation have allowed the country to deploy a robust policy response to mitigate the socio-economic impact of the pandemic, and subsequently remove the policy stimulus, while preserving macroeconomic stability and maintaining ample access to international capital markets.

"Following a strong post-pandemic rebound, economic activity slowed down in 2022 and is expected to remain subdued in 2023, with inflation gradually declining to the target range by year-end. The economic outlook remains highly uncertain, and external risks remain elevated. Access to the Flexible Credit Line arrangement, along with sizable international reserves, low public debt, anchored inflation expectations, and a sound financial system have provided the authorities with valuable insurance in a period of high uncertainty and volatility.

"Peru has a sustained track record of implementing very strong macroeconomic policies, and the authorities remain committed to maintaining very strong policies in the future. The Flexible Credit Line will continue to play an important role in supporting the authorities' macroeconomic strategy by sustaining market confidence and providing a valuable buffer against tail risks. The authorities intend to continue to treat the arrangement as precautionary, and to exit the facility conditional on the evolution of external risks."



#### **ANNEX 3: LETTER OF DEVELOPMENT POLICY**







"DECENIO DE LA IGUALDAD DE OPORTUNIDADES PARA MUJERES Y HOMBRES" "AÑO DE LA UNIDAD, LA PAZ Y EL DESARROLLO"

las entidades citadas resaltan que el entorno internacional aún es muy desafiante y que se tienen una serie de riesgos como la persistencia de una inflación elevada, endurecimientos monetarios, catástrofes climatológicas, tensiones geopolíticas, entre otros casos, que podrían ralentizar el crecimiento mundial. Pese a ello, el mercado también espera una mejora de la perspectiva de crecimiento económico para 2023, pero se viene revisando a la baja para 2024, según la última encuesta de Bloomberg.

#### A.2 Situación actual de la economía

A pesar de los choques adversos registrados en el 1T2023 (las protestas sociales y fenómenos climatológicos como el ciclón Yaku y el fenómeno El Niño), la economía peruana continuará con su proceso de recuperación en los próximos meses, en un contexto de mejora progresiva de la confianza de los agentes económicos. Así, el PBI creció 0,3% en abril (marzo: 0,2%), luego de las caidas consecutivas registradas en los primeros meses del año (enero: -1,0% y febrero: -0,5%), favorecidos por la recuperación de los sectores primarios como minería y recuperación progresiva de los sectores no primarios asociados al consumo.

Los indicadores adelantados continúan mejorando. Por ejemplo, la producción de electricidad, indicador altamente correlacionado con el PBI, creció 4,8% en junio y 6,3% en mayo, sumando 28 meses de tasas positivas, impulsada por la recuperación de la demanda del sector minero y otras industrias no primarias (incluye la demanda para uso residencial). Entre enero y mayo de 2023, la inversión pública registra un importante crecimiento de 15,4% nominal y alcanzó los S/ 18 mil millones, el monto más alto en la última década. En particular, la inversión pública creció 17,3% nominal en junio, lo que representa la sexta tasa consecutiva de crecimiento en el año.

La ocurrencia del Fenómeno de El Niño (FEN) podría ralentizar la dinámica de crecimiento de la actividad económica. De acuerdo con el último comunicado (16 de junio de 2023) del ENFEN, El Niño costero seria entre fuerte a moderado durante el 2S2023 (invierno y primavera). Para el verano de 2024, ENFEN pronostica la persistencia de El Niño costero con una magnitud entre debil (44%) y moderada (36%). En esa misma línea, según, la Oficina Nacional de Administración Oceánica y Atmosférica (NOAA por sus siglas en inglés), al 28 de junio de 2023, en la región 1+2 (costa norte y centro del Perú), la anomalia de la temperatura superficial del mar (TSM) continúa registrando valores cercanos o superiores a 2,0° por quince semanas consecutivas. Es importante destacar que el fenómeno de El Niño genera impactos negativos en la economía, lo cual depende de la duración y magnitud de la ocurrencia del evento. Así, según el Banco Interamericano de Desarrollo (BID, 2016)<sup>1</sup>, un fenómeno El Niño entre moderado y extraordinario en el Perú resta en promedio 1,7 puntos porcentuales (p.p.) al crecimiento económico del año, siendo este resultado el más severo entre los países que componen la región andina.

La buena posición fiscal del país le permite diseñar una estrategia fiscal para 2023 con el objetivo de para impulsar la economía y atender la emergencia

<sup>1</sup> ¡Es Niñol Impacto económico en la Región Andina. Martin, L. (2016).



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climática y los menores ingresos fiscales ante la normalización de los precios de materias primas. Con ello, el déficit fiscal en 2023 se incrementará a 2,1% del PBI desde 1,7% del PBI en 2022. De este modo, la política fiscal no solo tendrá un rol frente a un contexto internacional menos favorable y la ralentización de la demanda interna, sino también ante choques negativos transitorios temporales que han afectado al país recientemente como las presiones inflacionarias, la conflictividad social y los fenómenos climáticos. Además, la deuda pública del SPNF se reducirá a 33,3% del PBI en 2023 desde 34,0% del PBI en 2022, continuando con su trayectoria decreciente, y contribuyendo al objetivo de conservar unas finanzas públicas bruta por debajo del promedio de economías emergentes (67,5% del PBI) y de América Latina (68,2% del PBI).

Es importante señalar que a 2023, Perú cuenta con importantes activos macrofiscales que le permitirían hacer frente a situaciones extraordinarias adversas, como por ejemplo una prolongación o mayor intensidad de los fenómenos climatológicos. Se cuenta con activos financieros equivalentes a 12,8% del PBI (al cierre de 2022) y se dispone de líneas de créditos contingentes de aproximadamente US\$ 2 300 millones (a marzo de 2023), así como el acceso a condiciones favorables en los mercados financieros dado su bajo riesgo país. Asimismo, Perú posee una adecuada composición de la deuda pública debido a que tiene una alta proporción de deuda pública a tasa fija (cerca del 90%) y con vencimientos a largo plazo (con una vida media alrededor de 13 años) que no generan presiones a las necesidades de financiamiento en el corto plazo.

En el mediano plazo, la estrategia fiscal busca preservar la sostenibilidad fiscal, para lo cual se seguirá la travectoria de consolidación fiscal establecida en la Ley Nº 31541, en la cual el déficit fiscal alcanzará su regla de mediano plazo de 1,0% del PBI en 2026 y la deuda pública continuará con una trayectoria decreciente. Tal proceso no comprometerá la recuperación y el dinamismo de la economía pues conllevará a una reducción gradual del déficit fiscal que, en concordancia con la Ley, se ubicará en 2,0% del PBI en 2024, 1,5% del PBI en 2025 y 1,0% del PBI en 2026 y en adelante. A nivel regional, el proceso de consolidación fiscal del Perú es similar al de Chile en cuanto al ajuste gradual del déficit y se diferencia de otras economías como México y Colombia, para las cuales se prevén déficits por encima del 2,0% del PBI en 2026 con un ajuste marcado en 2024. Además, dicha norma dispone que la deuda pública se ubique en un nivel menor o igual a 30% del PBI en un periodo no mayor a 10 años, esto es, en 2032 (32,0% del PBI en 2026; 30,0% del PBI en 2030 y 27,9% del PBI en 2035). La trayectoria de reducción gradual del déficit fiscal permitirá que la deuda pública continúe su tendencia decreciente y se ubique en niveles sostenibles y prudentes2. Comparando con otras regiones similares, se estima que el país registre una deuda pública significativamente menor en el mediano plazo.

<sup>2</sup> Según un estudio del BID, un nivel prudente de deuda limita los costos de los intereses, con lo cual la consolidación requerida es menor, amplia el margen para la inversión de alta calidad, permite un mayor financiamiento si surgen shocks negativos adicionales y mitiga el riesgo de una crisis de endeudamiento. BID (2023). Lidíar con la deuda, menos riesgo para más crecimiento en América Latina y el Cariba.



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Ante riesgos fiscales futuros es relevante continuar fortaleciendo la resiliencia fiscal considerando el margen para incrementar los ingresos fiscales permanentes y reducir la ineficiencia del gasto público. Un análisis integral de las cuentas fiscales requiere de un enfoque multianual, que contemple cuestiones ligadas a demografía, cambio climático, innovaciones tecnológicas, entre otras, que se sumen a las brechas existentes3. La atención de dicha situación requerirá la adopción de medidas que conlleven a incrementar los ingresos permanentes, optimizar el manejo de activos y pasivos financieros del Estado, reducir gastos ineficientes y fomentar la inversión pública. Actualmente, los ingresos fiscales de Perú se encuentran marcadamente rezagados (promedio 2010-2022: 20,5% del PBI) respecto a lo observado en América Latina (promedio 2010-2022: 29,2%) y la OCDE (promedio: 39,2% del PBI), por lo que converger a dichos niveles requiere políticas que reduzcan las elevadas cifras de incumplimiento (IGV: 28,0% e IR: 33,1% de la recaudación potencial), mejoren la administración tributaria, otorguen progresividad al sistema, racionalicen beneficios, entre otros, como vienen planteando Chile y Colombia a fin de preservar la sostenibilidad de sus cuentas fiscales4.

#### В. Reformas asociadas Programa de Apoyo Presupuestal Habilitando un Desarrollo Verde y Resiliente II.

La operación propuesta comprende reformas prioritarias para el Gobierno del Perú con la finalidad de impulsar la recuperación económica y contribuir a mejorar la calidad de su crecimiento. Los objetivos se han estructurado en tres pilares: Pilar 1: fortalecer las bases para una recuperación económica más verde, Pilar 2: crear resiliencia y mejorar la adaptación al cambio climático, y Pilar 3: apoyar la transición a una economía más verde en sectores seleccionados.

En esta segunda etapa, la matriz de políticas está compuesta por ocho acciones que se encuentran agrupados en tres pilares, de acuerdo al detalle siguiente:

Pilar 1: Fortalecer las bases para una recuperación económica más verde. Este pilar tiene como objetivo brindar apoyo para la expansión de las finanzas verdes e inversiones susceptibles al clima, para lo cual:

En primer lugar, para mejorar la eficiencia y sostenibilidad de las inversiones públicas y promover la adopción de tecnologías bajas en carbono, se aprobó: i) la guía técnica BIM para edificaciones e infraestructura, lineamientos para la adopción relacionados y directiva de proyectos piloto para BIM; y ii) la ampliación del uso obligatorio del precio social del carbono en proyectos de inversión adicionales

En segundo lugar, para fortalecer el Sistema Nacional de Evaluación de Impacto Ambiental ("SEIA") y promover la revisión y aprobación oportuna de los instrumentos Ambientales y Sociales, se ha permitido a los opinantes técnicos

ecto, a fines de 2021 Colombia aprobó la Ley de Inversión Social, que aumentaria la recaudación fiscal en 1,2% del PBI a partir de 2023. Mientras que Chile, en julio de 2022, presento un proyecto de ley que tiene el objetivo de aumentar la presión fiscal en 0,6% del PBI en 2023 y hasta en 4,1% del PBI de 2026 en adelante.



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<sup>&</sup>lt;sup>3</sup> El envejecimiento poblacional implicará una carga significativamente mayor sobre los trabajadores para mantener a los jubilados, y ya en Europa, según olfras del FMI, se prevé que el número promedio de personas en edad de trabajar que apoyen en la jubilación de cada persona de 65 años o más se reduzca de 3,4 a 2 entre 2020 y 2050. Asimismo, según estimaciones del BID, el impacto del cambio climético en América Latina y el Caribe lendría un costo de entre 2% y 4%. del PBI para 2050.





"DECENIO DE LA IGUALDAD DE OPORTUNIDADES PARA MUJERES Y HOMBRES" "AÑO DE LA UNIDAD, LA PAZ Y EL DESARROLLO"

del SEIA utilizar una lista de especialistas para facilitar la evaluación y certificación ambiental.

#### Pilar 2: Crear resiliencia y mejorar la adaptación al cambio climático.

El segundo pilar tiene como objetivo apoyar acciones para aumentar la resiliencia del país y acelerar la adaptación al cambio climático, para lo cual:

En primer lugar, para fortalecer la reducción del riesgo de desastres, la preparación para emergencias, mejorar la articulación entre la adaptación al cambio climático y la gestión del riesgo de desastres, y reducir la vulnerabilidad de la población con un enfoque inclusivo de género, se ha aprobado y emitido un "Plan Nacional de Gestión del Riesgo de Desastres" (PLANAGERD).

En segundo lugar, para promover un desarrollo urbano más resiliente y sostenible, incorporando la adaptación al cambio climático y la gestión del riesgo de desastres, se ha aprobado y expedido el reglamento de la Ley de Desarrollo Urbano Sostenible.

# Pilar 3: Apoyar la transición a una economía más verde en sectores seleccionados.

El tercer pilar tiene como objetivo apoyar acciones que aseguren el uso más eficiente de los recursos naturales y que aceleren el cambio hacia tecnologías bajas en carbono, con un enfoque en los sectores de energía y transporte, para lo cual:

En primer lugar, para promover la construcción sostenible y facilitar la medición del avance en el logro de los compromisos de cambio climático vinculados al sector de la construcción, se ha creado el Registro de Edificaciones y Habilitaciones Urbanas Sostenibles. En segundo lugar, para promover la transición a tecnologías bajas en carbono y una gestión del tráfico más eficiente y segura que priorice a los peatones, ciclistas y el tránsito en el Área Metropolitana de Lima-Callao, se realizaron las siguientes acciones i) emisión de una nueva Ley que establece un nuevo marco regulatorio para las concesiones de rutas de tránsito en Lima y Callao, incluyendo incentivos para acelerar la renovación de la flota de buses con tecnologías bajas en carbono, ii) emisión de una orden de cumplimiento del Plan Metropolitano Lima-Callao 2040 (PLANMET 2040).

En tercer lugar, para habilitar a los proveedores de energía renovable no convencional a participar en las subastas de suministro de energía eléctrica neutral en tecnología, se ha presentado al Congreso una ley que modifica la \*Ley 28832 para asegurar el desarrollo eficiente de la generación eléctrica" que introduce bloques horarios y separa la contratación de potencia y energía.

En cuarto lugar, para promover la eficiencia energética y reducir las emisiones de GEI, se emitió una Resolución Ministerial que aprueba nueve fichas de homologación para paneles LED.



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"DECENIO DE LA IGUALDAD DE OPORTUNIDADES PARA MUJERES Y HOMBRES" "AÑO DE LA UNIDAD, LA PAZ Y EL DESARROLLO"

> ALEX ALONSO CONTRERAS MIRANDA MINISTRO

#### C. Conclusión

Como se desprende de lo descrito, el Gobierno Peruano está comprometido en continuar con la segunda fase del programa de Políticas para Habilitar el Desarrollo Verde y Resiliente, que permita fortalecer las bases para una recuperación económica verde e inclusiva, construir resiliencia y mejorar la adaptación al cambio climático, así como apoyar la transición a una economía más verde..

El Gobierno se compromete a continuar avanzando en estos ámbitos, para lo cual requiere contar con el apoyo del Banco Internacional de Reconstrucción y Fomento en las áreas señaladas.

En virtud de lo manifestado, por medio de la presente el Gobierno Peruano solicita la aprobación del "Programa de Apoyo Presupuestal Habilitando un Desarrollo Verde y Resiliente II por un monto de US\$ 750 millones por parte del Banco Internacional de Reconstrucción y Fomento.

Sin otro particular, hago propicia la ocasión para reiterarle a usted mi especial consideración.

Atentamente,

Alabert

09/2023



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#### **UNOFFICIAL TRANSLATION**

Lima, September 7, 2023 OFFICIAL LETTER No. 1840 2023-EF/10.01

POLICY LETTER

Mr. AJAY BANGA PRESIDENT WORLD BANK GROUP WASHINGTON, D.C.

Reference: Enabling Green and Resilient Development -Development Policy Loan II for US\$ 750 million.

Dear Mr. Banga,

I am pleased to write to you to express the commitment of the Government of Peru to promote policy measures aimed at carrying out effective policies to strengthen the foundations for a green and inclusive economic recovery, build resilience and improve adaptation to climate change, as well as to support the transition to a greener economy.

In this context, phase II of the "Enabling Green and Resilient Development – Development Policy Loan" has been developed with the International Bank for Reconstruction and Development (IBRD), which incorporates reform actions, commitments for 2023, and includes a debt operation.

The following is a description of the country's current context and economic outlook, followed by a description of the Program's objectives, as well as the pillars and policy areas that frame it.

- A. Current context and economic outlook
- A. 1 International context

The global economic growth outlook will take place in a challenging context in 2023, characterized by the persistence of inflation, high interest rates and latent risks that could affect the recovery of the economic activity. The World Bank published its Global Economic Prospects Report (June 2023) and revised its upward projection of the world GDP compared to what was published in January 2023, from 1.7% to 2.1%, due to a greater contribution from both advanced (from 0.5% to 0.7%) and emerging and developing economies (from 3.4% to 4.0%). Similarly, in its latest Inflation Report (June 2023), the Central Reserve Bank of Peru reported that the global growth projection - with respect to what was published in March-23, improved from 2.4% to 2.5% due to the boost from advanced economies (from 0.7% to 0.8%). Nevertheless, all the entities mentioned highlight that the international environment is still very challenging and that there are a series of risks such as, *inter alia*, the persistence of high inflation, monetary tightening, climate catastrophes, geopolitical tensions, which could slow down the world growth. Despite this, the market also expects an improvement in the economic growth outlook for 2023, but its downward projection has been revised for 2024, according to the latest Bloomberg survey.

## A.2 Current economic situation

Despite the adverse shocks recorded in Q12023 (social protests and climate phenomena such as Cyclone Yaku and the El Niño phenomenon), the Peruvian economy will continue its recovery process in the coming months, in a context of progressive improved confidence in the economic agents. Thus, GDP grew 0.3% in April (March: 0.2%), after the consecutive downturns recorded in the first months of the year (January: -1.0% and February: -0.5%), favored by the



recovery of primary sectors such as mining and the progressive recovery of non-primary sectors associated with consumption.

Leading indicators continue to improve. For example, electricity production, an indicator highly correlated with GDP, grew 4.8% in June and 6.3% in May, adding 28 months of positive rates, driven by the recovery in the demand from the mining sector and other non-primary industries (includes the demand for residential use). Between January and May 2023, public investment registered a significant nominal growth of 15.4% and reached PEN 18 billion, the highest amount in the last decade. Particularly, public investment grew 17.3% nominally in June, which represents the sixth consecutive growth rate during the year.

The occurrence of the El Niño Phenomenon (ENP) could slow down the economic activity growth dynamics. According to the latest statement (June 16, 2023) from ENFEN (The Multisectorial Commission in charge of the National Study of the El Niño Phenomenon), coastal El Niño would be strong to moderate during S22023 (winter and spring). For summer 2024, ENFEN predicts the persistence of a coastal El Niño with a weak (44%) to moderate (36%) magnitude. Along the same line, according to the National Oceanic and Atmospheric Administration (NOAA), as of June 28, 2023, the anomaly of the Sea surface temperature (SST) continues to register values close to or above 2.0° for fifteen consecutive weeks in region 1+2 (northern and central coast of Peru). It is important to highlight that the El Niño phenomenon generates negative impacts on the economy, which depends on the duration and magnitude of the event's occurrence. Thus, according to the Inter-American Development Bank (IDB, 2016)<sup>48</sup>, a moderate to extraordinary El Niño phenomenon in Peru subtracts an average of 1.7 percentage points (pp) from the year's economic growth, this result being the most severe among the countries that make up the Andean region.

The country's good fiscal position allows it to design a fiscal strategy for 2023 with the objective of boosting the economy and addressing the climate emergency and lower tax revenues due to the standardization of raw material prices. With this, the fiscal year deficit in 2023 will increase to 2.1% of the GDP, against 1.7% of the GDP in 2022. In this way, fiscal policy will not only have a role in a less favorable international context and the slowdown of internal demand, but also in temporary, transitory negative shocks that have affected the country recently, such as inflationary pressures, social conflict, and climate phenomena. In addition, NFPS public debt will be reduced to 33.3% of the GDP in 2023, from 34.0% of the GDP in 2022, continuing its downward trend, and contributing to the objective of preserving sustainable public finances. As in previous years, Peru will maintain its gross public debt below the average of emerging economies (67.5% of the GDP) and Latin America (68.2% of the GDP).

It is important to note that by 2023, Peru has important macro fiscal assets that would allow it to face extraordinary adverse situations, such as a prolongation or greater intensity of climate phenomena. There are financial assets equivalent to 12.8% of the GDP (at the end of 2022) and there are contingent credit lines of approximately US\$ 2.300 billion (as of March 2023), as well as access to favorable conditions in the financial markets given their low country risk. Likewise, Peru has an adequate composition of public debt because it has a high proportion of public debt at a fixed rate (close to 90%) and with long-term maturities (with an average life of around 13 years) that do not generate pressures to financing needs in the short term.

In the medium term, the fiscal strategy seeks to preserve fiscal sustainability, in this sense, fiscal consolidation trend established in Law No. 31541 will be followed, in which the fiscal deficit will reach its medium-term rule of 1.0% of the GDP in 2026 and the public debt will continue a downward trend. Such a process will not compromise the recovery and dynamism of the economy since it will lead to a gradual reduction of the fiscal deficit that, in accordance with the Law, will be 2.0% of the GDP in 2024, 1.5% of the PSI in 2025 and 1.0% of the PSI in 2026 and onwards. At the regional level, Peru's fiscal consolidation process is similar to Chile's in terms of the gradual adjustment of the deficit and differs from

<sup>&</sup>lt;sup>48</sup> *¡Es Niño! Impacto económico en la Región Andina.* (It's a a Boy!) Economic Impact in the Andean Region) Martín, L. (2016).



other economies such as Mexico and Colombia, for which deficits are expected above 2.0% of the PSI in 2026 with a marked adjustment in 2024. In addition, such rule provides for the public debt to be located at a level less than or equal to 30% of the PSI in a period no longer than 10 years, that is, in 2032 (32.0% of the PSI in 2026; 30.0% of the PSI in 2030 and 27.9% of the PSI in 2035). The trend in the fiscal deficit's gradual reduction will allow the public debt to continue its downward trend and be located at sustainable and prudent levels<sup>49</sup>. Compared with other similar regions, it is estimated that the country will register a significantly lower public debt in the medium term.

In the face of future fiscal risks, it is relevant to continue strengthening fiscal resilience considering the margin to increase permanent tax revenues and reduce the inefficiency of public spending. A comprehensive analysis of fiscal accounts requires a multi-year approach, which considers issues linked to demographics, climate change, technological innovations, *inter alia*, that add to existing gaps<sup>50</sup>. Addressing this situation will require the adoption of measures that lead to increasing permanent income, optimizing the management of the State's financial assets and liabilities, reducing inefficient expenses, and promoting public investment. Currently, Peru's tax revenues are markedly lagging behind (2010-2022 average: 20.5% of the GDP) compared to what is observed in Latin America (2010-2022 average: 29.2%) and the OECD (average: 39. 2% of the GDP), so converging at these levels requires policies that reduce the high non-compliance figures (VAT: 28.0% and Income Tax: 33.1% of potential collection), improve tax administration, grant progressivity to system, rationalize benefits, *inter alia*, as Chile and Colombia have been proposing in order to preserve the sustainability of their fiscal accounts<sup>51</sup>.

## B. Reforms associated with the Enabling Green and Resilient Development – Development Policy Loan II.

The proposed operation includes priority reforms for the Government of Peru with the purpose of promoting economic recovery and contributing to improving the quality of its growth. The objectives have been structured into three pillars: Pillar 1: strengthening the foundations for a greener economic recovery, Pillar 2: Building resilience and enhance climate change adaptation, and Pillar 3; Supporting the transition to a greener economy in selected sectors.

In this second stage, the policy matrix is made up of eight actions that are grouped into three pillars, detailed as follows:

## Pillar 1: Strengthening the foundations for a greener economic recovery.

This pillar aims to provide support for the expansion of green finance and climate-sensitive: investments; to this end:

First, to improve the efficiency and sustainability of public investments and promote the adoption of low-carbon technologies, the following were approved: i) the BIM technical guide for buildings and infrastructure, related guidelines for adoption, and pilot project guideline for BIM; and ii) expanding the mandatory use of the social carbon price in additional investment projects.

Second, to strengthen the National Environmental Impact Assessment System ("SEIA" in Spanish) and promote the timely review and approval of Environmental and Social instruments, SEIA technical experts (*opinantes técnicos*) have been allowed to use a list of specialists to facilitate the environmental evaluation and certification.

## Pilar 2: Building resilience and enhance climate change adaptation.

<sup>&</sup>lt;sup>49</sup> According to an IDB study, a prudent level of debt limits interest costs, thereby reducing the required consolidation, widening the scope for high-quality investment, allowing for greater financing if additional negative shocks arise, and mitigating the risk of a debt crisis. IDB (2023). Dealing with Debt, less risk for more growth in Latin America and the Caribbean. (*Lidiar con* b *deuda, menos riesgo paramás crecimiento en América Latina y el Caribe*).

<sup>&</sup>lt;sup>50</sup> Population aging will imply a significantly greater burden on those working, when it comes to support retired people, and already in Europe, according to IMF figures, it is expected that the average number of working age people supporting a 65+ year-old retired person will decrease from 3.4 to 2 between 2020 and 2050. Likewise, according to IDB estimates, the impact of climate change in Latin America and the Caribbean would have a cost of between 2% and 4% of the PSI by 2050.

<sup>&</sup>lt;sup>51</sup> In this regard, at the end of 2021 Colombia approved the Social Investment Law, which would increase tax collection by 1.2% of the GDP, starting in 2023. While Chile, in July 2022, introduced a bill that aims to increase the fiscal pressure at 0.6% of the GDP in 2023 and up to 4.1% of the PSI from 2026 onwards.



The second pillar aims to support actions to increase the country's resilience and accelerate the adaptation to climate change; to this end:

First, to strengthen disaster risk reduction, emergency preparedness, improve the articulation between climate change adaptation and disaster risk management, and reduce the vulnerability of the population with a gender-inclusive approach, a "National Disaster Risk Management Plan" (PLANAGERD) has been approved and issued.

Second, to promote a more resilient and sustainable urban development, incorporating adaptation to climate change and disaster risk management, the regulations for the Sustainable Urban Development Law have been approved and issued.

## Pilar 3: Supporting the transition to a greener economy in selected sectors.

The third pillar aims to support actions that ensure the most efficient use of natural resources and accelerate the change towards low-carbon technologies, with a focus on the energy and transportation sectors; to this end:

First, to promote sustainable construction and facilitate the measurement of progress in achieving climate change commitments linked to the construction sector, the Registry of Sustainable Urban Buildings and Facilities (*Registro de Edificaciones y Habilitaciones Urbanas Sostenibles*) has been created. Second, to promote the transition to low-carbon technologies and a more efficient and safe traffic management that prioritizes pedestrians, cyclists, and the traffic in the Lima-Callao Metropolitan Area, the following actions were carried out i) issuance of a new Law that establishes a new regulatory framework for transit route concessions in Lima and Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies, ii) issuance of an order for compliance with the Lima-Callao Metropolitan Plan 2040 (PLANMET 2040).

Third, to enable non-conventional renewable energy providers to participate in technology-neutral electricity supply auctions, a law has been introduced to the Congress that amends "Law 28832 to ensure the efficient development of electrical generation" which introduces time blocks and separates the procurement of power and energy.

Fourth, to promote energy efficiency and reduce GHG emissions, a Ministerial Resolution was issued that approves technical standards for nine LED panels.

## C. Conclusion

Based on the above description, the Peruvian Government is committed to continuing with phase II of the Policies to Enable Green and Resilient Development program, which allows strengthening the foundations for a green and inclusive economic recovery, building resilience, and enhancing climate change adaptation, as well as supporting the transition to a greener economy.

The Government undertakes to continue advancing these areas, for which it requires the support of the International Bank for Reconstruction and Development in the indicated areas.

By virtue of the above, the Peruvian Government hereby requests the approval of the "Enabling Green and Resilient Development – Development Policy Loan II" for an amount of US\$ 750 million by the International Bank for Reconstruction and Development.

I would like to take this opportunity and express my special appreciation.

Sincerely,

Alex Alonso Contreras



## ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior Actions DPF II	Significant environment effects (Positive or negative)	Significant poverty, social or distributional effects (positive or negative)
<b>Prior Action 1.</b> To enhance the efficiency and sustainability of public investments and; promote their adoption of low-carbon technologies, the Borrower, through the General Directorate of Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and Infrastructure" and related adoption guidelines and piloting directives for BIM; and (ii) a technical note providing guidance for incorporating the mandatory use of the social price of carbon in estimating social costs and benefits in three additional types of investment projects (i.e., urban transit, recovery of degraded forest ecosystems, and public green spaces).	<b>Positive:</b> The approval of guidelines for infrastructure and buildings are expected to help reduce wastage and make infrastructure more resilient to the effects of climate change in the long term. The use the social price of carbon, is expected to lead to longer term environmental benefits by incentivizing lower-carbon investment.	This PA is expected to have direct and indirect positive welfare effects through the creation of new jobs, resilience to climate vulnerability and low-carbon development.
<b>Prior Action 2.</b> To strengthen the National Environmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S instruments, the Borrower allowed SEIA's Technical Experts (TE) to use a "roster of specialists".	<b>Positive:</b> Allowing SEIA's TE to use a roster of specialists is expected to result in positive environmental effects as it is expected to improve the efficiency of the EIA evaluation and certification process, resulting in positive environmental effects by promoting timely review and increasing technical knowledge and capacity.	This PA is expected to have indirect positive welfare effects by promoting the timely identification of environmental risks and effects on the population.
<b>Prior Action 3.</b> To reduce the vulnerability of the population to disaster risk and climate change, the Borrower has approved an updated "National Disaster Risk Management Plan" (PLANAGERD) detailing specific actions and responsible implementing agencies to: (i) improve the organization and operation of local Emergency Operations Centers (EOCs) and (ii) increase the participation of women in DRM.	<b>Potential positive effects</b> are expected from updating the PLANAGERD -2022-2030. Particularly from its alignment with the National Disaster Risk Management Policy, and management of climate change in different levels of government since it will increase country capacity to deal with climate hazards, and therefore decrease environmental degradation	This PA is expected to benefit the poor and vulnerable populations by reducing vulnerability and increasing adaptation to risks for households and firms.
<b>Prior Action 4.</b> To promote more resilient and sustainable urban development, incorporating climate change adaptation, disaster risk management, and densification strategies in urban planning instruments, the Borrower through the Ministry of Housing, Construction and Sanitation has approved and issued the "Regulation for Land Development and Urban Planning for Sustainable Urban Development," implementing regulations for the Sustainable Urban Development Law.	<b>Potential positive effects</b> are expected from making mandatory the mainstreaming of disaster risk analysis (including hazard, vulnerability, and risk assessment and zonation of climate-related risks such as those posed by floods, debris flows and landslides) into the plans for territorial and urban development. Additionally, this is anticipated to reduce potential waste from construction materials and pollution from buildings in hazard locations when a disaster strikes.	While the poverty effects will depend in part on applicable resettlement standards, this PA is expected to have positive impacts on poor and vulnerable populations by reducing their exposure to disaster risks, reducing multidimensional poverty (MPI) and improving living standards. Negative impacts derived from resettling households out of hazard- prone areas can be mitigated via the proper application of existing national norms such as the Regulation for Law N° 29869, Ley de Reasentamiento Poblacional para Zonas de Muy Alto Riesgo no Mitigable.



<b>Prior Action 5.</b> To promote sustainable construction and the measurement of progress in achieving climate change commitments, the Borrower, through the MVCS, has created the National Registry of Sustainable Buildings and Urban Developments in which buildings that comply with the 2021 Technical Code for Sustainable Construction will be registered.	<b>Potential positive effects</b> on environment are expected from the implementation of the National Registry of Sustainable Buildings and Urban Developments which will facilitate the implementation of the Technical Code for Sustainable Construction that aims to increase water and energy efficiency, promote the use of eco-materials, reduce, and reuse construction waste, and promote low-carbon mobility. A reduction of GHG is expected in the long term due to the improvement of construction techniques.	This PA will likely increase welfare in the long term due to improved health outcomes and lower out of pocket health expenditures for households.
<b>Prior Action 6.</b> To promote the transition to low- carbon technologies and more efficient and safe traffic management in the Lima-Callao Metropolitan Area, the Borrower has: (i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of Public Transport Service in Lima and Callao", establishing a new regulatory framework for transit route concessions in Lima and Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies, and (ii) through the Metropolitan Council of Lima, has approved the Lima- Callao Metropolitan Development Plan 2021-2040 (PLANMET 2040), which establishes the strategic objectives for the implementation of traffic calming zones and an integrated network of traffic lights, prioritizing pedestrians, cyclists, and transit, as well as the integration of bicycle infrastructure with transit systems and the implementation of a bike-share system.	<ul> <li>Positive environmental impact on the environment is expected from the reduced emissions resulting from the promotion of nonmotorized systems and renewal of the bus fleet with low-carbon technologies.</li> <li>Potential negative effects emerging from the increased waste generated from the scrapping of old vehicles will be regulated by Supreme Decree No. 005-2021-MTC, published in February 2021, which adopted the National Regulation for the Promotion of Vehicle Scrapping. This Decree regulates final disposition, ensuring alignment and compliance with the environmental regulation (art. 9.2, and 14), and its environmental principles (art. 7).</li> </ul>	This PA could help improve population health, reduce out-of-pocket health expenditures, and increase productivity in the long term, by reducing greenhouse gas emissions and local pollutants, and improving traffic safety.
<b>Prior Action 7.</b> To enable suppliers of non- conventional renewable energy to participate in electricity supply auctions, the Borrower, through the Presidents of the Republic and the Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by introducing the possibility of distribution companies contracting for supply of blocks of energy and capacity either together or separately, in auctions of electricity distribution companies.	<b>Positive</b> effects on the country's environment, forests, and other natural resources are expected from enabling NCRE energy suppliers to participate in neutral electricity auctions.	Positive welfare effects from improvement of health outcomes due to lower emissions, and potentially generating savings for household and firms due to decreasing costs for consumers.
<b>Prior Action 8.</b> To promote energy efficiency and reduce GHG emissions, the Borrower, through the Ministry of Energy and Mines, has approved technical standards for nine different types of LED panels that public entities purchasing such lighting need to comply with.	<b>Positive</b> effects on the country's environment, forests, and other natural resources are expected from the promotion of energy efficiency, expected to result in energy savings and emissions reductions.	Positive welfare effects from improved health outcomes due to reduced emissions. Increased energy savings in the public sector can indirectly reduce poverty by redirecting resources to other social programs.



## ANNEX 5: STATUS OF DPF2 PRIOR ACTIONS AND PROPOSED CHANGES

Original Indicative Trigger (OIT) DPF 1	Prior Actions under DPF 2	Comments/Rationale for Change
Pillar One: Strengthening the foundations f	or a greener economic recovery	
<b>OIT 1.</b> To strengthen its approach and instruments to estimate the costs and benefits of carbon saving technologies in new and existing public investments, the Borrower, through Directorial Resolutions: (i) has issued BIM technical guidelines for infrastructure and buildings and directives for the adoption of BIM at the organizational level and through pilot projects complementing the National BIM Guide, and Implementation Plan and Roadmap; and (ii) has expanded the use of the social price of carbon in three additional types of projects through a revised "Technical Note for Using the Social Price of Carbon in the Social Evaluation of Public Investments".	<b>Prior Action 1.</b> To enhance the efficiency and sustainability of public investments and; promote their adoption of low-carbon technologies, the Borrower, through the General Directorate of Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and Infrastructure" and related adoption guidelines and piloting directives for BIM; and (ii) a technical note providing guidance for incorporating the mandatory use of the social price of carbon in estimating social costs and benefits in three additional types of investment projects (i.e., urban transit, recovery of degraded forest ecosystems, and public green spaces).	Trigger was upgraded to prior action and wording aligned with submitted legal evidence.
<b>OIT 2.</b> To enhance the efficiency and quality of the environmental assessments and review processes, the Borrower has updated the regulations of the SEIA Law by Supreme Decree.	<b>Prior Action 2.</b> To strengthen the National Environmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S instruments, the Borrower allowed SEIA's Technical Experts (TE) to use a "roster of specialists".	Trigger was replaced with linked regulatory instrument which was initially intended to be included as part of the SEIA law update.
Pillar Two: Build resilience and enhance clin	nate change adaptation	
<b>OIT 3.</b> The Borrower has approved the Disaster Risk Management Plan (PLANAGERD: 2022-2030) by a Supreme Decree issued by the President and the Council of Ministers.	<b>Prior Action 3</b> . To reduce the vulnerability of the population to disaster risk and climate change, the Borrower has approved an updated "National Disaster Risk Management Plan" (PLANAGERD) detailing specific actions and responsible implementing agencies to: (i) improve the organization and operation of local Emergency Operations Centers (EOCs) and (ii) increase the participation of women in DRM.	Trigger was upgraded to prior action and wording aligned with submitted legal evidence.
<b>OIT 4.</b> The Borrower has issued a Supreme Decree for the regulation of the Sustainable Urban Development Law, which will regulate in detail aspects related to the development and implementation of urban planning instruments, incorporating disaster risk management.	<b>Prior Action 4.</b> To promote more resilient and sustainable urban development, incorporating climate change adaptation, disaster risk management, and densification strategies in urban planning instruments, the Borrower through the Ministry of Housing, Construction and Sanitation has approved and issued the "Regulation for Land Development and Urban Planning for Sustainable Urban Development," implementing regulations for the Sustainable Urban Development Law.	Trigger was upgraded to prior action and wording aligned with submitted legal evidence.
Pillar Three: Supporting the transition tow	vards a greener economy in selected sectors	
<b>OIT 5.</b> The Borrower has issued a Ministerial Resolution to create the National Registry of Sustainable Buildings and Urban Developments to facilitate measurement of progress in achieving climate change commitments.	<b>Prior Action 5.</b> To promote sustainable construction and the measurement of progress in achieving climate change commitments, the Borrower, through the MVCS, has created the National Registry of Sustainable Buildings and Urban Developments in which buildings that comply with the 2021 Technical Code for Sustainable Construction will be registered.	Trigger was upgraded to prior action and wording was adjusted for consistency.
<b>OIT 6.</b> The Borrower has issued a Directorial Resolution to approve an incentive-based program for public transport vehicle scrapping program for Lima-Callao.	<b>Prior Action 6.</b> To promote the transition to low-carbon technologies and more efficient and safe traffic management in the Lima-Callao Metropolitan Area, the Borrower has: (i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of Public Transport Service in Lima and Callao", establishing a new regulatory framework for transit route concessions in Lima and Callao, including	Trigger was replaced by a broader policy reform and wording was adjusted for consistency.



Original Indicative Trigger (OIT) DPF 1	Prior Actions under DPF 2	Comments/Rationale for Change
	incentives to accelerate the renewal of the bus fleet with low-carbon technologies and (ii) through the Metropolitan Council of Lima, has approved the Lima- Callao Metropolitan Development Plan 2021-2040 (PLANMET 2040), which establishes the strategic objectives for the implementation of traffic calming zones and an integrated network of traffic lights, prioritizing pedestrians, cyclists, and transit, as well as the integration of bicycle infrastructure with transit systems and the implementation of a bike-share system.	
<b>OIT 7.</b> The Borrower has issued a Supreme Decree to improve the auctions for Solar Home Systems (SHS) concessions and contribute to closing the electricity access gap, that introduces modifications to the Regulation for the Promotion of Electric Investment in Areas not Connected to the Grid to incorporate lessons learned from projects under the first auction, including by shifting contractual responsibility for invoicing and payment collection from distribution companies to investors		Trigger was removed due to a change in GoP's approach to close the electricity access gap. Recent assessments on technology options to reach the last mile (grid connected vs. solar panels) have shown that the actual demand for solar panels is smaller than originally forecasted. Furthermore, two concession requests to provide service to this remote population have been received. As a result, MINEM will be implementing these connections through their own resources instead of carrying out a new auction.
<b>OIT 8.</b> The Borrower has issued a Supreme Decree to enable suppliers of non-conventional renewable energy to participate in technology neutral electricity supply auctions by introducing hourly blocks.	<b>Prior Action 7.</b> To enable suppliers of non-conventional renewable energy to participate in electricity supply auctions, the Borrower, through the Presidents of the Republic and the Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by introducing the possibility of distribution companies contracting for supply of blocks of energy and capacity either together or separately, in auctions of electricity distribution companies.	Trigger was upgraded to prior action and wording aligned with submitted legal evidence
<b>OIT 9.</b> The Borrower has issued a Supreme Decree that modifies the technical regulation of energy efficiency labeling for energy equipment and establish Minimum Energy Performance Standards (MEPS).	<b>Prior Action 8.</b> To promote energy efficiency and reduce GHG emissions, the Borrower, through the Ministry of Energy and Mines, has approved technical standards for nine different types of LED panels that public entities purchasing such lighting need to comply with.	Trigger was upgraded to prior action and reforms linked to energy efficiency labeling and Minimum Energy Performance Standards (MEPS) were dropped due to the timeline extending beyond the DPF preparation timeframe. Nonetheless, MINEM will continue to advance on the reforms on EE labeling and MEPS (with the support of the World Bank).



## ANNEX 6: DPF PRIOR ACTIONS AND ANALYTICAL UNDERPINNINGS

Prior Actions	Analytical Underpinnings
Pillar 1: Strengthening the foundations for a greener economic	recovery
<b>Prior Action 1.</b> To enhance the efficiency and sustainability of public investments and; promote their adoption of low-carbon technologies, the Borrower, through the General Directorate of Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and Infrastructure" and related adoption guidelines and piloting directives for BIM; and (ii) a technical note providing guidance for incorporating the mandatory use of the social price of carbon in estimating social costs and benefits in three additional types of investment projects (i.e., urban transit, recovery of degraded forest ecosystems, and public green spaces).	<ul> <li>International Monetary Fund (IMF) (2017). Peru Public Investment Management Assessment</li> <li>Organization for Economic Co-operation and Development (OECD) (2017). La Contratación Pública en el Perú, Reforzando Capacidad y Coordinación.</li> <li>PricewaterhouseCoopers (2018). BIM Benefits Methodology and Report.</li> <li>Economic Commission for Latin America and the Caribbean (2020). Social Price of Carbon in the Evaluation of Public Investment Projects in Latin America.</li> <li>Economic Commission for Latin America and the Caribbean (2021). Methodology for the Estimation of the Social Price of Carbon in Chile and the Countries of Latin America and the Caribbean.</li> <li>World Bank (2021). Macro Level Analysis of Public Investment Management in Peru.</li> </ul>
<b>Prior Action 2.</b> To strengthen the National Environmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S instruments, the Borrower allowed SEIA's Technical Experts (TE) to use a "roster of specialists".	<ul> <li>Social Capital Group (2021). Diagnóstico del Sistema Nacional de Evaluación de Impacto Ambiental Peruano, Análisis de Brechas del Marco Ambiental y Social del Sector Transportes y Evaluación de las Capacidades Institucionales Proyecto P170595 BRT Lima Metropolitano North Extensión.</li> <li>Banco Mundial (2021). Repensar el futuro del Perú. Notas de política para transformar al Estado en un gestor del bienestar y el desarrollo.</li> <li>Tatiana Valverde (2021). Improving the Environmental and Social management of investment projects in Peru.</li> </ul>
Pillar 2: Build resilience and enhance climate change adaptat	ion
<b>Prior Action 3.</b> To reduce the vulnerability of the population to disaster risk and climate change, the Borrower has approved an updated "National Disaster Risk Management Plan" (PLANAGERD) detailing specific actions and responsible implementing agencies to: (i) improve the organization and operation of local Emergency Operations Centers (EOCs) and (ii) increase the participation of women in DRM.	<ul> <li>Hallegatte, S. et al. (2016). Shock Waves: Managing the Impacts of Climate Change on Poverty.</li> <li>The World Bank (2021). Institutions, inclusion and territory, Proposals to strengthen resilience to disaster risk in Peru.</li> <li>The World Bank (2022). Peru Country Climate and Development Report.</li> </ul>
<b>Prior Action 4.</b> To promote more resilient and sustainable urban development, incorporating climate change adaptation, disaster risk management, and densification strategies in urban planning instruments, the Borrower through the Ministry of Housing, Construction and Sanitation has approved and issued the "Regulation for Land Development and Urban Planning for Sustainable Urban Development," implementing regulations for the Sustainable Urban Development Law.	<ul> <li>Banco Mundial (2018). Peru Slum RAS (P164495)</li> <li>Banco Mundial (2018). Policy Note: Local Government Infrastructure Planning and Investment in Peru.</li> <li>Banco Mundial (2021). Institucionalidad, inclusión y territorio: Propuestas para fortalecer la resiliencia del Perú frente a desastres.</li> <li>Banco Mundial (2021). Repensar el futuro del Perú. Notas de política para transformar al Estado en un gestor del bienestar y el desarrollo.</li> </ul>
Pillar 3: Supporting the transition towards a greener economy	y in selected sectors
<b>Prior Action 5.</b> To promote sustainable construction and the measurement of progress in achieving climate change commitments, the Borrower, through the MVCS, has created the National Registry of Sustainable Buildings and Urban Developments in which buildings that comply with the 2021 Technical Code for Sustainable Construction will be registered.	<ul> <li>Banco Mundial (2021). La Vivienda en el Perú: Un instrumento para la recuperación económica inclusiva y resiliente.</li> <li>Banco Mundial (2021). Repensar el futuro del Perú. Notas de política para transformar al Estado en un gestor del bienestar y el desarrollo.</li> <li>Alpin Limited (2016). LEED costs, benefits and ROI.</li> </ul>



<b>Prior Action 6.</b> To promote the transition to low-carbon technologies and more efficient and safe traffic management in the Lima-Callao Metropolitan Area, the Borrower has (i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of Public Transport Service in Lima and Callao", establishing a new regulatory framework for transit route concessions in Lima and Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies and (ii) through the Metropolitan Council of Lima, has approved the Lima-Callao Metropolitan Development Plan 2021-2040 (PLANMET 2040), which establishes the strategic objectives for the implementation of traffic calming zones and an integrated network of traffic lights, prioritizing pedestrians, cyclists, and transit, as well as the integration of bicycle infrastructure with transit systems and the implementation of a bike-share system.	<ul> <li>Jara Consulting Group (2018). Diseño de programa de chatarreo y renovación vehicular en el Perú. Identificación de impactos y costos de la implementación de programa de renovación. Part of the GIZ- NAMA Support Project.</li> <li>Apoyo Consultoría (2012). Propuesta de implementación del Plan de Chatarreo para Vehículos de Transporte.</li> <li>Autoridad de Transporte Urbano para Lima y Callao-ATU (2021). Tecnologías limpias para el transporte público en el Perú: EL MOMENTO PARA EL CAMBIO:</li> <li>WB (2020). Bicycle Strategy proposal for Lima and updated the Bicycle Infrastructure Plan.</li> <li>Jamey M. B. Volker &amp; Susan Handy (2021) Economic impacts on local businesses of investments in bicycle and pedestrian infrastructure: a review of the evidence,</li> <li>ITDP (2022). Making the Economic Case for Cycling</li> <li>MINAM (2016). Perú 2030: La visión del Perú que queremos.</li> </ul>
<b>Prior Action 7.</b> To enable suppliers of non-conventional renewable energy to participate in electricity supply auctions, the Borrower, through the Presidents of the Republic and the Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by introducing the possibility of distribution companies contracting for supply of blocks of energy and capacity either together or separately, in auctions of electricity distribution companies.	<ul> <li>WB (2017), Energy Sector Policy Note</li> <li>WB (2021), Marcos conceptuales para la reforma del sector eléctrico en Perú</li> <li>OECD/IEA (2018) Energy Policies Beyond IEA Countries: Chile 2018</li> </ul>
<b>Prior Action 8.</b> To promote energy efficiency and reduce GHG emissions, the Borrower, through the Ministry of Energy and Mines, has approved technical standards for nine different types of LED panels that public entities purchasing such lighting need to comply with.	<ul> <li>Creara for MINEM (2016). "Estudio de Barreras para el desarrollo de la Eficiencia Energética" en el Perú</li> <li>EPEE – European Partnership for Energy and the Environment (2020). Lessons Learned ECODESIGN</li> <li>World Bank (2017). Assessing and Measuring the Performance of Energy Efficiency Projects. Energy Sector Management Assistant Project Technical Report 011/17.</li> <li>European Council for an Energy Efficient Economy (ECEEE, 2017). Harmonisation of MEPS and energy labelling in Latin America and the Caribbean – opportunities and challenges</li> </ul>



## ANNEX 7: PERU'S CHALLENGES AND OPPORTUNITIES TO ACCELERATING ECONOMIC GROWTH

Between 2002 and 2019, Peru grew at an annual 5.1 percent rate on average, well above the 2.7 percent average in Latin America. During this period, GDP per capita as a percentage of that of US went from 12.7 percent to 20.5 percent, recovering part of the losses occurred during the 70s and 80s. General economic progress coupled with well targeted social programs translated into significant poverty reduction, which went from 52.5 percent in 2005 to 20.6 percent in 2019. Particularly, between 2002 and 2013, GDP growth was stellar, averaging 6.1 percent annually, driven by good economic reforms and favorable external conditions. Peru's macro-fiscal reforms initiated during the 90s continued throughout the 2000s, as the country improved macroeconomic stability and strengthened trade openness. Capital accumulation, mainly linked to the mining sector, was the main source of growth during this period, representing 60 percent of total growth between 2002 and 2013.

Economic growth more than halved between 2014 and 2019, to 3.0 percent, reflecting a less benign external environment, characterized by lower commodity prices, higher volatility in global financial markets, and a slowdown in reform momentum, which brought to light the more profound structural challenges of Peru's growth model. As identified in Peru's SCD Update (2022), productivity growth continues to be low. More than 70 percent of labor is either self-employed or working in firms with 10 employees or less, with an estimated labor productivity that is just around 10 percent that of firms with more than 50 workers. Also, territorial disparities are sizable, and exports are highly concentrated in mining and other extractive activities, rendering the economy vulnerable to terms of trade shocks.

The limited progress in addressing these challenges is correlated with the weak capacity of public institutions. Institutional instability has substantially increased since 2016, further weakening the capacity of the state. Poor performance in public investment management at the national and subnational levels translates into low levels of budget execution, which hinders households' access to basic services and poverty reduction.

In this challenging context, Peru needs to tap into new and sustainable drivers of growth for the coming decades, which will be critical to make continued gains in poverty reduction, enhance its resilience to economic and other shocks and create the fiscal space to invest in climate adaptation and mitigation. Accelerating long-term economic growth requires improving productivity, connecting infrastructure and public services, raising human capital, and streamlining rigidities in markets for factors and products. The ongoing global energy transition will entail a significant surge in copper demand in the forthcoming decades and is expected to provide opportunities to boost Peru's growth in the medium term (Peru CEM, forthcoming). The financial sector entered the crisis well-capitalized but will require continued monitoring. Accomplishing these goals requires increasing State capacity to regulate and enforce the law effectively, provide quality services, and manage diverse shocks. Some of these areas are supported under the proposed series.



	2020	2021	2022	2023P	2024P	2025P	2026P
Real economy		Annua	al percentage	change, unle	ss otherwise ir	ndicated	
GDP (nominallocal currency)	705,795	868,149	930,536	994,412	1,048,210	1,099,486	1,153,000
Real GDP	-10.9	13.3	2.7	0.8	2.3	2.3	2.3
Per Capita GDP (In US\$ Atlas Method)	6,000	6,420	6,770	6,825	6,985	7,148	7,313
Contributions:							
Consumption	-5.3	8.8	2.1	0.9	1.8	1.8	1.8
Investment	-5.4	6.6	0.3	-0.3	0.5	0.6	0.5
Net exports	-0.2	-2.0	0.3	0.2	0.1	0.0	0.0
Imports	-4.3	6.9	1.3	0.9	1.0	1.1	1.1
Exports	-4.5	4.9	1.6	1.1	1.1	1.0	1.0
Unemployment rate (ILO definition)	7.2	5.1	3.7	3.7	3.5	3.5	3.5
GDP deflator	3.9	8.5	4.4	6.0	3.0	2.5	2.5
CPI (average)	1.8	4.0	7.9	6.3	2.2	2.1	2.0
Fiscal Accounts		Percent of (	GDP, unless	otherwise ind	icated		
Expenditures	26.7	23.6	23.8	23.2	23.0	22.6	22.1
Revenues	17.8	21.0	22.1	20.8	21.0	21.1	21.1
Non-financial public sector balance	-8.9	-2.6	-1.7	-2.4	-2.0	-1.5	-1.0
PPG gross debt (eop)	34.6	36.0	34.0	34.1	34.4	34.1	33.5
Selected Monetary Accounts	Ann	ual percentad	ae change, ur	less otherwis	e indicated		
Base Money	31.2	11.7	-3.8	-3.5	-1.0	-0.5	-0.5
Credit to non-government	10.7	4.0	4.6	4.0	5.0	5.2	5.2
Interest (key policy interest rate)	0.7	0.8	5.7	7.6	3.6	3.5	3.0
Balance of Payments		Percent of (	GDP. unless (	otherwise ind	icated		
Current Account Balance	1.1	-2.2	-4.0	-3.1	-2.8	-2.7	-2.6
Imports	20.5	26.0	28.3	25.9	25.8	25.7	25.0
Exports	22.2	29.3	29.1	27.3	26.7	26.4	26.3
Foreign Direct Investment	0.4	2.5	4.6	2.3	2.2	2.1	2.1
Gross Reserves (in million US\$, eop)	74.707	78.495	71.883	73.227	74.392	75.613	76.574
In months of next years' imports	15.4	13.7	12.4	11.7			
As % of short-term external debt	538.0	578.0	454.0	525.0			
External Debt	43.6	45.2	41.8	38.8	36.9	36.2	34.5
Terms of Trade	3.6	9.8	-10.5	2.0	-2.5	-0.7	-0.1
Exchange Rate (average)	3.5	3.9	3.8	3.7	3.6	3.6	3.6
Other memo items				-			
GDP nominal (in million US\$) Net Public Debt	201,652 22.2	223,678 21.8	242,614 21.0	268,760	291,169	305,413	320,278

## ANNEX 8: KEY MACROECONOMIC INDICATORS Table 1. Key Macroeconomic Indicators 2019-2026



Source: World Bank staff based on the Central Bank, Ministry of Finance and the IMF data.

Table 2. Balance of Payments Financin	g Requi	rements	and Sou	rces, 202	0-2026 (I	JSD milli	on)
	2020	2021	2022	2023P	2024P	2025P	2026P
BOP financing requirements and Sources							
Financing requirements (US\$)	-3,576	-8,849	-13,730	-16,408	-14,369	-13,751	-13,342
Current account deficit	2,218	-4,921	-9,705	-8,579	-8,462	-8,411	-8,565
Medium and long-term debt amortization	-5,795	-3,928	-4,026	-7,830	-5,907	-5,340	-4,777
Financing Sources (US\$)		8,849	13,730	16,408	14,369	13,751	13,342
FDI and portfolio investments (net)	641	17,186	12,994	6,758	6,397	6,283	6,589
Capital grants	0	0	0	0	0	0	0
Medium and long-term debt disbursements (excl. IMF)	9,327	-4,548	-5,876	11,031	9,170	8,725	7,742
Change in reserves (+ decrease) *	-6,391	-3,788	6,612	-1,381	-1,198	-1,257	-988
Source: World Bank staff based on the Central Bank's data.							

#### Table 3. Key Fiscal Indicators for the Public Sector, 2020-2026 (% of GDP)

	2020	2021	2022	2023P	2024P	2025P	2026P
Overall Balance	-8.9	-2.5	-1.7	-2.4	-2.0	-1.5	-1.0
Primary balance	-7.3	-1.0	-0.1	-0.8	-0.5	-0.1	0.3
Total Revenues (and grants)	17.8	21.0	22.1	20.8	21.0	21.1	21.1
Tax revenues	13.3	16.3	17.2	15.9	16.2	16.3	16.3
Taxes on goods and services	6.3	7.7	7.6	7.0	7.5	7.5	7.5
Direct Taxes	5.3	6.3	7.5	6.6	6.6	6.6	6.6
Taxes on international trade	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other taxes	1.5	2.2	1.9	2.3	2.1	2.2	2.2
Non-tax revenues	2.3	2.6	2.9	2.6	2.6	2.6	2.6
Social insurance contributions	2.2	2.1	2.0	2.0	2.0	2.0	2.0
Capital revenues	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditures	26.7	23.6	23.8	23.2	23.0	22.6	22.1
Current expenditures	22.2	18.6	17.7	17.8	17.7	17.5	17.1
Wages and compensation	7.4	6.2	5.9	5.9	5.9	5.9	5.8
Goods and services	6.9	6.8	6.4	6.4	6.4	6.4	6.3
Interest payments	1.6	1.5	1.6	1.7	1.6	1.5	1.4
Current transfers **	6.3	4.1	3.8	3.8	3.8	3.7	3.6
Capital expenditures	4.5	5.0	6.1	5.4	5.3	5.1	5.0
Capital investments	3.8	4.2	4.7	4.6	4.6	4.6	4.6
Capital transfers **	0.7	0.8	1.4	0.8	0.7	0.5	0.4
Non-Financial Public Sector Financing	8.9	2.5	1.7	2.4	2.0	1.5	1.0
External (net)	4.8	6.1	0.5	0.9	0.7	0.5	0.3
Domestic (net)	4.1	-3.6	1.2	1.5	1.3	1.0	0.7
of which privatization	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: World Bank staff based on the Central Bank and Ministry of Finance data.

Notes : \* Non-financial public sector. \*\* Current transfers include spending on pensions, social benefits, and social programs. Capital transfers include deferred payments (APPs), capital contributions, expropriations, transfers to funds and advances for works.



## **ANNEX 9: PARIS ALIGNMENT**

Program Development Objective(s):		
Step 1: Taking into account the	Answer: Yes	
climate analysis undertaken, is the	Explanation: The Program Development Objective (to support Government policies to: (i) strengthen	
operation consistent with the	the foundations for a green economic recovery, (ii) build resilience and enhance climate change	
country climate commitments,	adaptation and (iii) transition towards a greener economy in selected sectors) and related PAs are	
including for instance, the NDC,	directly contributing to the decarbonization of Peru's economy and reducing vulnerability to observed	
NAP, LTS, and other relevant	and anticipated climate change impacts. As such, the PDO is aligned with the Paris Agreement goals.	
strategies?		
	Mitigation goals: assessing and reducing the risks	
PA1: To enhance the efficiency and su	ustainability of public investments and; promote their adoption of low-carbon technologies, the Borrower,	
through the General Directorate of	Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and	
Infrastructure" and related adoption	guidelines and piloting directives for BIM; and (ii) a technical note providing guidance for incorporating	
the mandatory use of the social pric	e of carbon in estimating social costs and benefits in three additional types of investment projects (i.e.,	
urban transit, recovery of degraded f	forest ecosystems, and public green spaces).	
Step M2.1: Is the prior action likely	Answer: No	
to cause a significant increase in	Explanation: This PA supports the improvements in energy efficiency of public investment projects	
GHG emissions?	though the application of BIM and the social price of carbon. BIM provides tools that can predict energy	
	consumption and GHG emissions of the investments while the mandatory use of social price of carbon	
	will also guide public entities to appraise investment projects taking into consideration the impact of	
	carbon emission, which is critical for low-carbon development and achieving the NDC commitment. As	
	such, this reform is not expected to lead to significant GHG emission increase. On the contrary, it will	
	contribute to Peru's GHG mitigation efforts.	
Conclusion for PA 1: PA1 is aligned w	vith the Paris Agreement.	
PA2: To strengthen the National En	vironmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S	
instruments, the Borrower allowed	SEIA's Technical Experts (TE) to use a "roster of specialists".	
Step M2.1: Is the prior action likely	Answer: No	
to cause a significant increase in	Explanation: The strengthening of the SEIA that this reform is supporting is expected to lead to more	
GHG emissions?	robust E&S instruments for investment projects and ensure that the investments are designed and	
	implemented considering the most adequate measures for disaster risk management, climate resilience,	
	and the protection of the environment and people (including by using best available technologies, when	
	applicable). As such, it will have no impact on the GHG emissions increase.	
Conclusion for PA 2: PA2 is aligned with the Paris Agreement.		
PA3: To reduce the vulnerability of the population to disaster risk and climate change, the Borrower has approved an updated "National		
Disaster Risk Management Plan" (	PLANAGERD) detailing specific actions and responsible implementing agencies to: (i) improve the	
organization and operation of local E	mergency Operations Centers (EOCs) and (II) increase the participation of women in DRM.	
Step WI2.1: Is the prior action likely	Answer: No	
to cause a significant increase in	<b>Explanation:</b> The PA will not result in significant increase in GHG emissions nor reduction of carbon sinks	
GHG emissions?	since its focus is on enhancing the country's disaster risk management practices and better integration	
	of DRM and climate change adaptation measures into public policy actions at the subnational and	
Conclusion for DA 2: DA2 is aligned a	sectoral levels – thereby helping Peru's achievement of sustainable development goals.	
Conclusion for PA 3: PA3 is aligned with the Paris Agreement.		
PA4: To promote more resilient and sustainable urban development, incorporating climate change adaptation, disaster risk management, and		
uensincation strategies in urban planning instruments, the Borrower through the Ministry of Housing, Construction and Sanitation has		
regulations for the Sustainable Urban Development Law		
Stop M2 1: Is the prior action likely	Answer: No	
to cause a significant increase in	Fundamentation: The DA aims to enhance resilient and low carbon whan growth by supporting the	
GHG emissions?	development and implementation of urban planning instruments which incorporate DPM principles as	
	well as promote a more compact urban development. While the action could lead to increased	
	wer as promote a more compact arban development. While the action could ledd to incleased	



	emissions, these are not expected to be significant given that the reform is put forward with the		
	consideration of denser and more compact development. In fact, the reform will provide an enabling		
	environment for less carbon-intensive urban forms and, as such, advance Peru's mitigation efforts.		
Conclusion for PA 4: PA4 is aligned with the Paris Agreement.			
PA5: To promote sustainable constru	ction and the measurement of progress in achieving climate change commitments, the Borrower, through		
the MVCS, has created the National	Registry of Sustainable Buildings and Urban Developments in which buildings that comply with the 2021		
Technical Code for Sustainable Const	ruction will be registered.		
Step M2.1: Is the prior action likely	Answer: No		
to cause a significant increase in	Explanation: This PA promotes the reduction of GHG emissions from the design and construction of		
GHG emissions?	buildings and urban facilities, through the increase of water and energy efficiency, the improvement of		
	environmental quality, the reduction of waste and the promotion of sustainable mobility. Moreover,		
	the reform is expected to increase the demand for green social housing among the target population,		
	thus orienting private sector housing supply towards the incorporation of green construction practices		
	for new housing. Also, activities this PA supports are included in the Universally aligned (UA) list.		
Conclusion for PA 5: PA5 is aligned w	vith the Paris Agreement.		
<b>PA6:</b> To promote the transition to	low-carbon transit technologies and more efficient and safe traffic management in the Lima-Callao		
Metropolitan Area, the Borrower ha	is: (i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of		
Public Transport Service in Lima and	a Callao", establishing a new regulatory framework for transit service licenses/concessions in Lima and		
callao, including incentives to accele	rate the renewal of the bus fleet with low-carbon technologies and (ii) through the Metropolitan Council		
the implementation of traffic calmin	ropolitan Development Plan 2021-2040 (PLANNET 2040), which establishes the strategic objectives for		
the integration of bicycle infrastruct	g zones and an integrated network of transcriptics, phontizing pedestinans, cyclists, and transit, as well as		
Step M2 1: Is the prior action likely	Answer: No		
to cause a significant increase in	<b>Explanation:</b> The PA is universally aligned since it promotes pedestrian and cycling infrastructure traffic		
GHG emissions?	management equipment: civil works under the concent of "complete streets" to enhance the safety and		
	reliability of urban streets for all users including non-motorized transport and public transport; and		
	renewal of the bus feet of Lima-Callao for zero-emission vehicles, thus incorporating Avoid-Shift-		
	Improve strategies. Also, activities this PA supports are included in the UA list.		
Conclusion for PA 6: PA6 is aligned w	vith the Paris Agreement.		
<b>PA7:</b> To enable suppliers of non-co	nventional renewable energy to participate in electricity supply auctions, the Borrower, through the		
Presidents of the Republic and the	Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by		
introducing the possibility of distribu	ition companies contracting for supply of blocks of energy and capacity either together or separately, in		
auctions of electricity distribution co	mpanies.		
Step M2.1: Is the prior action likely	Answer: No		
to cause a significant increase in	Explanation: This PA is universally aligned since it promotes the generation of energy from renewable		
GHG emissions?	sources with negligible lifecycle GHG emissions. The PA will promote the entry of NCRE, thus can help		
	reducing GHG emissions, helping the country to reach its climate targets.		
Conclusion for PA 8: PA8 is aligned w	vith the Paris Agreement.		
PA8: To promote energy efficiency and reduce GHG emissions, the Borrower, through the Ministry of Energy and Mines, has approved			
technical standards for nine differen	t types of LED panels that public entities purchasing such lighting need to comply with.		
Step M2.1: Is the prior action likely	Answer: No		
to cause a significant increase in	Explanation: This PA introduces regulations to establish minimum energy performance standards for		
GHG emissions?	appliances such as lighting sources incentivizes a shift to more efficient appliances, achieving energy		
	savings and GHG emissions reduction, improving the affordability of energy bills for the more vulnerable		
	households and increasing the competitiveness of businesses. Also, activities this PA supports are		
	Included in the UA list.		
Conclusion for PA 8: PA8 is aligned with the Paris Agreement.			
<b>Witigation goals:</b> All PAS in the DPF are aligned with the mitigation goals of the Paris Agreement.			
	Adaptation and resilience goals: assessing and managing the risks		
PA1: To enhance the efficiency and sustainability of public investments and promote their adoption of low-carbon technologies, the Borrower,			
through the General Directorate of Multiannual Investment Programming, has approved: (i) the "BIM Technical Guide for Buildings and			



Infrastructure" and related adoption	n guidelines and piloting directives for BIM; and (ii) the expanded mandatory use of the social price of
carbon in additional investment proj	ects.
Step A2: Are risks from climate	Answer: No
hazards likely to have an adverse	Explanation: The country's public investment system requires all public investment projects conduct a
effect on the prior action's	risk analysis and integrate risk reduction measures into all investments. In addition, the use of BIM will
contribution to the Development	help to have an updated inventory of all public assets which is essential to better understand the
Objective(s)?	exposure to climate related risks.
Conclusion for PA 1: PA1 is aligned w	vith the Paris Agreement.
PA2: To strengthen the National Er	vironmental Impact Assessment System (SEIA) and promote the timely review and approval of E&S
instruments, the Borrower allowed	SEIA's Technical Experts (TE) to use a "roster of specialists".
Step A2: Are risks from climate	Answer: No
hazards likely to have an adverse	Explanation: The country's public investment system requires all public investment projects conduct a
effect on the prior action's	risk analysis and integrate risk reduction measures into all investments, including specifically climate
contribution to the Development	change risks. In addition, the strengthening of the SEIA is expected to translate into having more robust
Objective(s)?	E&S instruments which provide another layer to screen the investment projects.
Conclusion for PA 2: PA2 is aligned w	vith the Paris Agreement.
PA3: To reduce the vulnerability of	the population to disaster risk and climate change, the Borrower has approved an updated "National
Disaster Risk Management Plan" (	PLANAGERD) detailing specific actions and responsible implementing agencies to: (i) improve the
organization and operation of local E	mergency Operations Centers (EOCs) and (ii) increase the participation of women in DRM.
Step A2: Are risks from climate	Answer: No
hazards likely to have an adverse	<b>Explanation:</b> The contribution of the prior action to the DPF Development Objective is not likely to be
effect on the prior action's	significantly impacted by current or future physical climate risk. The PA aims to mainstream DRM
contribution to the Development	principles and knowledge across sectoral and territorial planning which will contribute to the
Objective(s)?	construction of resilient infrastructure and communities. To strengthen resilience and disaster risk
	nrenaredness, community risk mans and family emergency plans will be developed for climate-related
	risk prioritized areas. In addition, through the improved FOCs taking consideration of physical risks, the
	local and regional governments will be able to respond to climate-related events more efficiently
Conclusion for PA 3. PA3 is aligned w	vith the Paris Agreement
<b>PA4:</b> To promote more resilient and	sustainable urban development incorporating climate change adaptation, disaster risk management, and
densification strategies in urban n	anning instruments the Borrower through the Ministry of Housing Construction and Sanitation has
approved and issued the "Regulati	on for Land Development and Urban Planning for Sustainable Urban Development" implementing
regulations for the Sustainable Urba	n Development Law
Sten A2: Are risks from climate	
hazards likely to have an adverse	<b>Explanation</b> : The contribution of the prior action to the DPE Development Objective is not likely to be
effect on the prior action's	significantly impacted by current or fiture physical climate risk. The PA will incorporate DPM and
contribution to the Development	climate change adaptation measures in territorial and urban planning through integrating disaster risk
Objective(s)?	identification vulnerability assessment and risk reduction measures. The PA will also ensure that no
Objective(3):	urban development tenure regularization public service provision or building projects are carried out
	in high-risk areas
Conclusion for PA 4: PA4 is aligned w	vith the Paris Agreement
PA5: To promote sustainable constru	ction and the measurement of progress in achieving climate change commitments, the Borrower, through
the MVCS has created the National	Registry of Sustainable Ruildings and Urban Developments in which huildings that comply with the 2021
Technical Code for Sustainable Const	ruction will be registered
Step A2: Are risks from climate	
hazards likely to have an adverse	<b>Explanation:</b> Climate risks are not expected to adversely impact this reform. On the contrary, this reform
effect on the prior action's	is directly being undertaken to address climate change risks since the PA aims to promote more
contribution to the Development	sustainable housing and infrastructure and thus increase the resilience of the nonulation enterprises
Objective(s)?	and the nublic sector against catastronbic events and climate change. Furthermore, the code is part of
	a group of instruments intended to avoid or reduce existing rick such as: (i) the requirement of rick
	a group of instruments interface to avoid of reduce existing fisk such as. (i) the requirements and (ii) the Degulation
	analysis and integration of fisk reduction measures into an public investments, and (ii) the Regulation
	to read bevelopment and orban rianning for sustainable orban bevelopment.



Conclusion for PA 5: PA5 is aligned w	ith the Paris Agreement.	
PA6: To promote the transition to low-carbon transit technologies and more efficient and safe traffic management in the Lima-Callao		
Metropolitan Area, the Borrower has: (i) enacted the "Law Establishing Measures to Ensure Adequate Coverage, Continuity and Quality of		
Public Transport Service in Lima and Callao", establishing a new regulatory framework for transit service licenses/concessions in Lima and		
Callao, including incentives to accelerate the renewal of the bus fleet with low-carbon technologies and (ii) through the Metropolitan Council		
of Lima, has approved the Lima Metr	ropolitan Development Plan 2021-2040 (PLANMET 2040), which establishes the strategic objectives for	
the implementation of traffic calming	zones and an integrated network of traffic lights, prioritizing pedestrians, cyclists, and transit, as well as	
the integration of bicycle infrastructure with transit systems and the implementation of a bike-share system.		
Step A2: Are risks from climate	Answer: No	
hazards likely to have an adverse	<b>Explanation:</b> The country's public investment system requires all public investment projects conduct a	
effect on the prior action's	risk analysis and integrate risk reduction measures into all investments. Furthermore, an integrated	
contribution to the Development	traffic management system in the LMA could also improve the efficiency of response to climate events	
Objective(s)?	(emergency response) and significantly reduce the potential economic losses of future natural hazards.	
Conclusion for PA 6: PA6 is aligned w	ith the Paris Agreement.	
PA7: To enable suppliers of non-con	nventional renewable energy to participate in electricity supply auctions, the Borrower, through the	
Presidents of the Republic and the	Council of Ministers, has submitted to Congress a draft law that modifies Law 28832, including by	
introducing the possibility of distribu	tion companies contracting for supply of blocks of energy and capacity either together or separately, in	
auctions of electricity distribution cor	mpanies.	
Step A2: Are risks from climate	Answer: No	
hazards likely to have an adverse	<b>Explanation:</b> Climate risks are not expected to adversely impact this reform since they are not material	
effect on the prior action's	to the substance of the reform. The country's public investment system requires all public investment	
contribution to the Development	projects conduct a risk analysis and integrate risk reduction measures into all investments. In addition,	
Objective(s)?	diversifying Peru's energy mix will increase resiliency to climate change impacts on water hydrology thus	
	ensuring a more resilient energy supply.	
Conclusion for PA 8: PA8 is aligned with the Paris Agreement.		
PA8: To promote energy efficiency	and reduce GHG emissions, the Borrower, through the Ministry of Energy and Mines, has approved	
technical standards for nine different	types of LED panels that public entities purchasing such lighting need to comply with.	
Step A2: Are risks from climate	Answer: No	
hazards likely to have an adverse	<b>Explanation:</b> Climate risks are not expected to adversely impact this reform since they are not material	
effect on the prior action's	to the substance of the reform. On the contrary, and even though the primary goal of this reform is to	
contribution to the Development	reduce GHG emissions and promote energy efficiency, this reform is also addressing climate change	
Objective(s)?	risks by reducing the need for additional generation capacity due to increased peak electricity needs,	
	protecting consumers from higher energy costs associated extreme weather events.	
Conclusion for PA 8: PA8 is aligned with the Paris Agreement.		
Adaptation and resilience: All PAs in the DPF are aligned with the resilience goals of the Paris Agreement.		
<b>OVERALL CONCLUSION OF PARIS ALIGNMENT ASSESSEMENT:</b> The DPF is fully aligned with and supporting the mitigation and resilience		
goals of the Paris Alignment.		



## ANNEX 10: DETAILED POVERTY AND SOCIAL IMPACT ANALYSIS

Prior Action 1: Approval of technical notes and guides to expedite public investment processes, promote low-carbon technologies, and enhance sustainability.

1. The adoption of BIM technologies will reduce the time to develop and approve technical documents for infrastructure investments, with indirect effects on welfare.<sup>52</sup> Public investments can have large and positive impacts on economic activity and job creation, thereby increasing income and contributing to poverty reduction.<sup>53</sup> For example, in Indonesia, road investments are associated with increased income for the poor and poverty reductions via growth (Kwon, 2000; Balisacan et al, 2002). Improved execution and efficiency of specific infrastructure projects will also contribute to poverty reduction. In Peru, investments in rural roads and electrification are linked to income diversification and higher non-farm income for rural households (Escobal, 2001). The adoption of BIM will also allow timely and more accurate estimations of the costs and benefits of low-carbon solutions, facilitating take-up and reducing emissions. This can improve wellbeing and health by reducing the incidence of respiratory diseases and out-of-pocket expenditures. In a low-carbon path, better health outcomes will also increase productivity and could lead to a 2 percent increase in GDP by 2030. Moving Peru towards this development path will thus have positive impacts on welfare and poverty reduction.<sup>54</sup>

## Prior Action 2: Strengthening the environmental risk assessment and management of investment projects.

2. Strengthening the SEIA will have direct positive impacts on welfare. Peru is exposed to climate risks due to its location and topography, and citizens—particularly the poor—lack formal coping mechanisms and insurance to deal with climate shocks, exacerbating inequalities.<sup>55</sup> Strengthening the SEIA is expected to have positive indirect impacts on poverty by preventing delays and reducing costs in investments. By freeing-up resources destined to mitigating emergencies, it may be possible to re-direct them to poverty-alleviating initiatives.

Prior Action 3: Approval of PLANAGERD to reduce the vulnerability of the population to disaster risk and climate change detailing specific actions, programs and activities, and responsible implementation entities.

3. The use of updated guidelines and better information by EOCs in 70 districts will enhance efforts to prevent and respond to disasters. The population living in areas with EOCs using the new guidelines will increase from 0 to 1.1 million while 22.6 million will remain covered by existing EOCs using the previous guidelines Error! Reference source not found.. T he activities under this PA will also narrow gender gaps by building women's capacity to respond to emergencies and promoting their participation in decision making. This PA will also benefit many Peruvians exposed to climate hazards and vulnerable to poverty. Approximately 210,000 Peruvians living in benefited districts are exposed to floods and 68 percent of them are either poor or vulnerable to poverty. The activities in this PA will also protect 615,000 Peruvians exposed to landslides, 400,000 of whom are vulnerable to poverty.

Prior Action 4: Approval of detailed regulations for urban planning instruments to incorporate climate change adaptation and disaster risk management.

4. **Sustainable urban planning will reduce vulnerability to disasters and contribute to poverty reduction.** Peru is the 6<sup>th</sup> most earthquake-prone country in the world and 42 percent of the urban population lives in inadequate or informal housing, housing not resistant to earthquakes (MINAM, 2019).<sup>56</sup>Negative shocks from natural disasters pose a challenge for eliminating poverty as they reduce poor households' income, while increasing the likelihood of nonpoor households

<sup>&</sup>lt;sup>52</sup> Serebrisky, Tomas, et al. Fay, et al. (2017).

<sup>&</sup>lt;sup>53</sup> Moszoro, Marian W (2021) and Izquierdo et al. (2019).

<sup>&</sup>lt;sup>54</sup> Peru CCDR (2022), Soppelsa et al (2020), Chang et al (2016), (Aragon et al, 2017).

<sup>&</sup>lt;sup>55</sup> Peru Poverty Assessment.

<sup>&</sup>lt;sup>56</sup> Ministerio de Ambiente, MINAM (2019) Asuntos Socio Ambientales. Estadística ambiental. In: https://sinia.minam.gob.pe/informacion/tematicas?tematica=12



falling into poverty.<sup>57</sup> This PA can also contribute to improving the quality of life by creating a safe and healthy habitat. While the impact of the activities will depend on resettlement standards, green areas will likely improve the citizens' perception of quality of life (Giannico, et al., 2021). If the relocation negatively affects social interactions, access to jobs or income, it may lead to negative effects.

## Prior Action 5: Promotion of resilient residential buildings and green construction practices for new housing.

5. The implementation of the technical code and registry will reduce emissions from constructions, with positive effects on welfare through improved health outcomes and lower out-of-pocket expenditures. This is based on evidence from China and Mexico (Tang et al., 2019; Hanna & Oliva, 2015) showing that increased pollution levels are associated with a shortfall in worker's output. In Sub-Saharan Africa, a study found a negative association between firm performance and air pollution. New buildings would be more water and energy efficient, reducing spending on utilities. Poorer households tend to allocate a larger share of their budget on utilities compared to non-poor households. Thus, an energy efficiency policy that reduces the cost of utilities will be more beneficial for the poor, with positive effects on the environment.

## Prior Action 6: Promotion of low-carbon transit and traffic management in Lima-Callao

6. Limited access to public transport is linked to unemployment and poverty. The longer the average commute in a city, the less likely poor people are to move up the social ladder (Chetty and Hendren, 2015) because of reduced access to opportunities and potential losses in human capital development. For example, in New York City, the lack of access to public transportation was linked to increased unemployment risk (Kauffman et al, 2015). Inefficient public transport also affects women and the poor disproportionately. Apart from having more complex travel patterns than men, women tend to face greater financial and time constraints. Other issues include exposure to sexual harassment, which may reduce transport use and diminish labor market participation.<sup>58</sup> Transport barriers deepen existing inequalities, particularly for the poor who already face challenges in access to opportunities. Long travel times and inadequate or unaffordable school transport systems also contribute to lower school enrollment and attendance and higher school dropout rates (Chang and Romero, 2018).

Prior Action 7: Law to enable non-conventional renewable energy suppliers to participate in technology-neutral electricity supply auctions.

7. Allowing additional providers of energy in the auctions will facilitate access to affordable and clean electricity. Auctions allow policymakers to buy renewable energy at competitive prices, and additional providers represent more competition that reduces prices. The adoption of cleaner energies will also mitigate pollution—improving health, promoting higher worker productivity, and mitigating the climate change risks. This is relevant for Peru where carbon emissions in the energy sector have increased by 84 percent between 2000 and 2016.

## Prior Action 8: Approval of regulation to promote energy efficiency and reduce GHG emissions.

8. Energy savings in public buildings may have positive impacts if additional resources are destined for other povertyalleviating projects. Also, potential shifts towards more efficient appliances, derived from the activities supported by this PA, can improve poor households' welfare. This, in turn, can improve energy affordability for the poorest households that tend to allocate a larger share of their budget to electricity, compared to nonpoor households (ENAHO, 2021).

<sup>&</sup>lt;sup>57</sup> Peru Poverty Assessment, forthcoming.

<sup>&</sup>lt;sup>58</sup> Thomson Reuters Foundation (2014)