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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A

PROPOSED LOAN

IN THE AMOUNT OF US$700 MILLION TO

REPUBLIC OF ECUADOR

FOR THE

First Green and Resilient Recovery (GARR) DPF
December 23, 2021

Macroeconomics, Trade And Investment Global Practice
Latin America And Caribbean Region

Republic of Ecuador

GOVERNMENT FISCAL YEAR

Jan 1 – Dec, 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of December 20, 2021)

Currency Unit

US$1.00

ABBREVIATIONS AND ACRONYMS

AEoI	Automatic Exchange of Information
ARCERNNR	Regulation Agency for the Oversight of Energy and non-renewable Natural Resources
ASAs	Advisory Services Analytics
BAU	Business-as-usual
BCE	Central Banks of Ecuador
BDH	*Bono de Desarollo Humano*
CAF	Latin American Development Bank
CGE	*Contraloría General del Estado*
CICC	Institutional Committee on Climate Change
CIFST	Institutional Committee for Financing and Thematic Monitoring
CNEE	National Energy Efficiency Committee
CNH	Growing up with Children Program (*Creciendo con Nuestros Hijos*)
CO2	Carbon Dioxide
COPLAFIP	Organic Code of Planning and Public Finances
COVID-19	Coronavirus disease 2019
CPF	Country Partnership Framework
CRS	Common Reporting Standard
DPF	Development Policy Financing
DRF	Disaster Risk Financing
EE	Energy Efficiency
EFF	Extended Fund Facility
EFIC	National Climate Financing Strategy of Ecuador
EGARR	Ecuador Green and Resilient Recovery
EMBI	Emerging Market Bond Index
ENDEMAIN	National Health Survey
ENEMDU	National Labor Force Survey
ENSO	El Niño-Southern Oscillation
EOI	Exchange of Information
ESANUT	Health and Nutrition Survey
ESCO	Energy service companies
FNIEE	National Fund for Energy Efficiency Investments
GARR	Green and Resilient Recovery
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GNP	Gross National Product
GoE	Government of Ecuador
GRS	Grievance Redress Service
GVCs	Global Value Chains
IADB	Interamerican Development Bank
IBRD	International Bank for Reconstruction and Development
ICSID	International Center for Settlement of Investment Disputes
ID	Civil Registry
IFC	International Finance Corporation
IFI	International finance institution
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
INEC	National Institute for Statistics and Census (*Instituto Nacional de Estadísticas y Censos*)
IPPC	Intergovernmental Panel on Climate Change
IPPU	Industrial Processes and Product Use
IPSA	International Public Sector Accounting Standards
kBOE	Barrels of oil equivalent
LAC	Latin America and the Caribbean Region
LDP	Letter of Development Policy
LEE	Organic Law on Energy Efficiency
LOEE	Organic Law for Energy Efficiency
LOSPEE	Organic Law for Public Service of Electricity
LTU	Large taxpayer's unit
LULUCF	Land use, land-use change and forestry

MAATE	Ministry of the Environment, Water, and Ecological Transition	RA-FIT	Revenue Administration – Fiscal Information Tool
MCAA	Multilateral Competent Authority Agreement on Automatic Exchange of Financial Account Information	S&P	Standard and Poor's
		SCD	Systematic Country Diagnostic
		SDG	Sustainable Development Goals
MEF	Ministry of Economy and Finance	SDR	Special Drawing Rights
MIES	Ministry of Social and Economic Inclusion (*Ministerio de Inclusión Económica y Social*)	SERCOP	National Procurement Entity
		SIN	National Interconnected System
MRV	Measurement, Reporting, and Verification	SME	Small and Medium Enterprises
MSME	Micro, small, and medium-size Enterprises	SOE	State owned Enterprise
MSP	Ministry of Public Health (*Ministerio de Salud Pública*)	SR	Social Registry
		SRE	Social Registry of Ecuador
MTFF	Medium-term fiscal framework	SRU	Social Registry Unit
MW	Megawatts	SRV	Social Registry of Victims
NAC	Norms on Confidentiality	SSN	Social safety net
NCRE	Non-conventional Renewable Energy	UCEs	Emission Compensation Units
NDC	Nationally Determined Contributions	UNASUR	Union of South American Nations
NDC-PI	NDC Implementation Plan	UNCTAD	United Nations Conference on Trade and Development
NDP	National Development Plan		
NGOs	Non-Governmental Organization	UNDP	United Nations Development Programme
NTM	Non-tariff measure	UNFCCC	United Nations Framework Convention on Climate Change
NTS	National Transmission System		
PA	Prior Actions	URS	*Unidad del Regístro Social*
PECC	Ecuador Zero Carbon Program	USA	United States of America
PEFA	Public Expenditure and Financial Accountability	VAT	Value Added Tax
		VEHRU	Temporary Residence Visa for Exception for Humanitarian Reasons
PER	Public Expenditure Review		
PFM	Public Financial Management	VIRTE	Exceptional Temporary Residency Visa
PIT	Personal income tax	VIS	Technical inspection systems
PLANEE	National Plan for Energy Efficiency	WB	World Bank
PPP	Public Private Partnerships	WBG	World Bank Group
PPS	Public Selection Processes (*Procesos Públicos de Selección*)	WTO	World Trade Organization
PSIA	Poverty and social impact assessment		

Regional Vice President:	Carlos Felipe Jaramillo
Country Director:	Marianne Fay
Regional Director:	Robert R. Taliercio and Franz R. Drees-Gross
Practice Manager (s):	Doerte Doemeland and Stephanie Gil
Task Team Leader (s):	Christian Yves Gonzalez Amador, Janina Franco, and Julio Velasco

REPUBLIC OF ECUADOR

ECUADOR FIRST GREEN AND RESILIENT RECOVERY (GARR) DEVELOPMENT POLICY FINANCE (DPF)

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The Ecuador First Green and Resilient Recovery DPF was prepared by a team led by Christian Yves Gonzalez Amador (ELCMU), Janina Franco (ILCE1), and Julio Velasco (ELCMU). The team also included Tanja Goodwin, Senior Country Economist (ELCDR), Maria Laura Sanchez Puerta, Lead Economist (HLCDR), Bjorn Philipp, Program Leader (SLCDR), Paula Ramos, Office Assistant (LCCEC), Jimena Jesus Mejia, Operations Officer (LCCEC), Ana Bucher, Senior Climate Change Specialist (SCCAO), Carolina Vaira, Senior Public Sector Economist (ELCG2), Eduardo Estrada, Governance Specialist (ELCG2), Juan Carlos Serrano-Machorro, Senior Financial Management Specialist (ELCG1), Nelson Gutierrez, Senior Social Protection Specialist (HLCSP), Luz Stella Rodriguez, Social Protection Specialist (HLCSP), Rafael Puebla, Consultant (HLCSP), Adolfo Rouillon, Consultant (HLCSP), Truman Packard, Practice Leader (HLCDR), Jose E. Signoret, Senior Economist (ETIRI), Axel Rifon Pérez, Digital Development Specialist (IDD01), Doyle Gallegos, Lead Digital Development Specialist (IDD01), Niccolo Comini, Digital Development Specialist (IDD01), Ana Cebreiro, Senior Economist (EMFTX), Joaquin Toro, Lead Disaster Risk Management Specialist (SLCUR), Salvador Perez, Consultant (SLCUR), Alexander Agosti, Senior Disaster Risk Management Specialist (SLCUR), Diana Rubiano, Senior Disaster Risk Management Specialist (SLCUR), Sergio Olivieri, Senior Economist (ELCPV), Jaime Fernandez, Consultant (ELCPV), Ana Rivadeneira, Consultant (ELCPV), Leonel Estrada, Procurement Specialist (ELCRU), Daniel Arguindegui, Senior Procurement Specialist (ELCRU), Gabriela Encalada, Senior Environmental Specialist (SLCEN), Mark Christian Sigrist, Senior Counsel (LEGLE), Alejandro Espinosa-Wang, Senior Private Sector Specialist (ELCFN), Yara Esquivel, Senior Financial Sector Specialist (EFNFS), Christian de la Medina, Consultant (ETIIC), Juan Carlos Cardenas, Consultant (ILCE1), Ivan Gachet, Consultant (ELCPV), Giselle Velasquez, Program Assistant (ELCMU), Anjali Shahani, Operations Officer (ELCMU), , Kevin McCall, Senior Environmental Specialist (SLCEN), Sylvia Solf (Senior Private Sector Specialist, ETICI), Graciela Miralles, Senior Economist (ETIMT), Noelia Carreras Schabauer, Consultant (ETIMT), Claudia Vargas, Consultant (EMFTX), Ines Perez Arroyo, Energy Specialist (ILCE1), Kenn Rapp, Senior Social Specialist (SLCSO), Mariana Felicio (SLCSO), Paula Rossiasco, Senior Social Development (SLCSO), Patricia de Narvaez, Consultant (SLCSO), Ana Maria Munoz, Senior Social Scientist (EPVGE), Iris Marmanillo, Senior Water Supply and Sanitation Specialist (SLCWA), Carmen Yee-Batista, Senior Water Supply and Sanitation Specialist (SLCWA), Martin Albrecht, Senior Water Resources Management Specialist (SLCWA),Alejandro Hoyos, Senior Transport Specialist (ILCT1), and Claudia Lopez, consultant (ILCT1). The operation was prepared under the supervision of Doerte Doemeland, Practice Manager (ELCMU), Stephanie Gil, Practice Manager (ILCE1), Robert Taliercio Regional Director, (ELCDR), and Franz R. Drees-Gross, Regional Director (ILCDR). The team is grateful for the guidance and support of Marianne Fay, Country Director (LCC6C), Juan Carlos Alvarez, Resident Representative (LCCEC) and Pilar Maisterra, Operations Manager (LCC6C) and the close collaboration with the IMF. The peer reviewers were Gregor Wolf, Program Leader (SLCDR); Pablo Acosta, Program Leader (HLCDR); and Kevin Carey, Lead Economist (EMNDR).

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SUMMARY OF PROPOSED FINANCING AND PROGRAM

BASIC INFORMATION

Project ID	Programmatic	If programmatic, position in series
P176983	Yes	1st in a series of 3

Proposed Development Objective(s)

The Program's Development Objective (PDO) of this DPF is to assist the government in its agenda to tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience, strengthen low-carbon development and help realize its commitment to become carbon neutral by 2050.

Organizations

Borrower:	REPUBLIC OF ECUADOR
Implementing Agency:	MINISTRY OF ECONOMY AND FINANCE

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Financing	**700.00**

DETAILS

International Bank for Reconstruction and Development (IBRD)	700.00

INSTITUTIONAL DATA

Climate Change and Disaster Screening

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

Overall Risk Rating

Substantial

Results

Indicator Name	Baseline (2020)	Target (2024)
RI#1. Increase in Central Government Tax revenues, excluding tariffs, US$ million.	2019=13,072	At least 14,000
RI#2. Increase in budget allocation linked to climate change objectives and targets using the new methodology, percent.	0	At least 5
RI#3. Increase in the number of new financial instruments implemented to manage disaster risk and emergencies in accordance with the Disaster Risk Financing Strategy	0	At least 2
RI#4. Increase in the percentage of imports benefiting from the measures (reducing tariffs and non-tariff measures).	0	At least 30
RI#5. Increase in the percentage of homes in rural areas with internet access.	34.7	At least 38
RI#6. Increase in the percentage of working youth and women with access to social security.	Women= 39.8 Youth=20.9	Women= At least 42 Youth= At least 23
RI#7. Increase in total number of women from households nucleus from deciles 1 to 3 included in the social registry and thus potentially eligible to multiple programs.	2021= 911,776	More than 1.5 million
RI#8. Increase in the percent of boys and girls living in the 90 prioritized cantons who received their first attention from the CNH services before reaching 90 days of life and whose date of birth was after the day [30] of the month of [August] of the year [2020].	21	At least 60 of the boys and girls
RI#9. Increase in clean energy generation capacity awarded to private sector-owned power plants (percent of total capacity).	2.5	At least 12
RI#10. Increase in renewable energy generation capacity awarded (MW).	310	At least 1,200
RI#11. Decrease in energy consumption as per NDP 2021-2025 (kBOE).	0	3,000
RI#12. Decrease in CO2 emissions from land transportation (percentage change).	0	More than 3.5
RI#13. Increase in the number of public and private institutions that registered their mitigation measures under the PECC.	0	150

IBRD PROGRAM DOCUMENT FOR A PROPOSED *LOAN* TO THE *REPUBLIC OF ECUADOR*

1. INTRODUCTION AND COUNTRY CONTEXT

1. **The proposed First Green and Resilient Recovery DPF, for US$700 million, is the first operation in a programmatic series of three that aims to extend World Bank support for Ecuador's structural reform agenda initiated in 2018 and to deepen its low-carbon development.** This operation seeks to assist the government in its agenda to tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience, strengthen low-carbon development and help realize its commitment to become carbon neutral by 2050. The proposed series is aligned with the National Development Plan 2021-2025 (*Plan de Creación de Oportunidades 2021-2025*, NDP) and the Country Partnership Strategy FY2019-2023. It also builds on the reform agenda initiated with the Inclusive and Sustainable Growth DPF and includes reforms related to the ongoing Social Safety Net Project. In addition, this operation significantly expands WB support to the government's climate change mitigation and adaptation efforts.

2. **The proposed operation aims to support the government in mitigating the impact of the COVID-19 crisis while addressing long-lasting structural challenges to reach fiscal sustainability, foster job creation, and protect vulnerable people.** Ecuador has struggled to mitigate the pandemic's economic impact, which plunged the economy into a 7.8 percent recession in 2020, pushed one million people into poverty, and triggered a renegotiation of government debt with international bondholders.[1] The economy is now showing signs of a rebound on the back of improving external conditions, easing mobility restrictions, and a successful vaccination campaign—67.5 percent of all Ecuadorians was fully vaccinated as of December 14, 2021. Yet, Ecuador will need to undertake ambitious reforms to achieve strong, green, resilient, and inclusive growth. With a fully dollarized economy and limited macroeconomic buffers, the government aims to implement a strong, resilient, and inclusive fiscal framework that sustains fiscal consolidation while protecting the vulnerable and regain access to the international capital markets in favorable financial conditions. In this context, Ecuador also needs to continue improving its investment climate to avoid fiscal consolidation from dampening economic growth and job creation and to allow the private sector to lead the recovery.[2]

3. **Additionally, Ecuador's high exposure to climate change and climate-related disasters calls for additional efforts to foster green and resilient growth as a critical element of its economic growth strategy.** As a rise in world temperature would reduce Ecuador's per capita income by 5 percent in

[1] Poverty levels increased to levels not seen since 2010 (i.e., 33 percent), and the inequality Gini coefficient increased from 47.3 to 49.8 (INEC, 2021). Unemployment peaked by mid-2020, at 13.3 percent, its highest level ever. Similarly, underemployment and informality rose, particularly among women, youth, low-skilled workers, and migrants. Consequently, a substantial reduction in labor income and, therefore, in total family incomes. Social protection measures partially mitigated the shock on households' income, and around 300 thousand people were prevented from falling below the poverty line. However, other dimensions of well-being, including food security and access to health and education, were also affected, with potential long-term impacts.

[2] Although labor participation has recovered in 2021, informality and underemployment rates have remained above pre-pandemic levels. Moreover, labor incomes have not been able to recover, and poverty has still reached up to 32 percent of Ecuadorians in June 2021.

2030 and by almost 20 percent in 2050,[3] Ecuador has much to gain from global efforts to combat climate change and is committed to decoupling economic growth from greenhouse gas (GHG) emissions. Ecuador is among the ten countries globally with the highest natural disaster risk.[4] Earthquakes have caused significant economic losses, estimated at US$8.5 billion in damages, and climate-related ENSO (El Nino-Southern Oscillation) phenomena have generated losses of around US$4.4 billion over the past 50 years.[5] It is expected that increasing floods and droughts will continue to affect the sustainability and economic growth of the country. Moreover, in the context of a global transition towards net-zero economies and displacement of fossil fuels, Ecuador may want to refrain from investing in projects that could lead to stranded assets and instead focus on a low-carbon economy. Additionally, as other growth-enhancement efforts, enabling green and resilient growth can unlock private investments and create green jobs to support an economic recovery.[6] The development of renewable energy has generated more than 89,000 direct and indirect jobs in Spain, 97,000 jobs in Mexico, and 17,500 jobs in Chile, and could have a strong job multiplier in Ecuador.[7]

4. **President Lasso's administration has demonstrated a strong commitment to continue addressing obstacles to growth, job creation, inclusion and moving to a low-carbon growth path.** The new NDP, which was recently presented to the National Assembly, aims at attracting investment to foster economic recovery and job creation, improving the social protection system and efforts to curb down malnutrition, and access to public services, improving security, advancing an ecological transition,[8] and strengthening governance and institutions. Although the program with the IMF has been changed to reflect the new government priorities and the government decision to suspend the gasoline and diesel price band system on exceptional basis, it has ratified the Government's commitment to continue the ongoing fiscal consolidation process, foster private investment, and strengthen governance. On the social front, while building on previous efforts to continue improving the social safety net to reach the most vulnerable and ease migrants' integration into the society, the government has prioritized dealing with malnutrition, which affects one-quarter of children under five years, as one of its flagship issues. As a signatory of the Paris agreement, Ecuador committed to embark on a low-carbon development path and increase its resilience to climate change by promoting the decarbonization of its energy sector and other

[3] IDB. 2021. Políticas climáticas en América Latina y el Caribe: casos exitosos y desafíos en la lucha contra el cambio climático at https://publications.iadb.org/publications/spanish/document/Politicas-climaticas-en-America-Latina-y-el-Caribe-casos-exitosos-y-desafios-en-la-lucha-contra-el-cambio-climatico.pdf

[4] Hallegatte, Stephane; Rentschler, Jun; Rozenberg, Julie. 2019. Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure. https://openknowledge.worldbank.org/handle/10986/31805 License: CC BY 3.0 IGO

[5] Ecuador. https://www.planificacion.gob.ec/wp-content/uploads/downloads/2016/08/Evaluacion-de-los-Costos-de-Reconstruccion-Resumen-Ejecutivo.pdf

[6] Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. 2020. 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?'. Oxford Smith School Working Paper 20-02.

[7] In 2019, data from IRENA shows that all renewable energy technologies generated 89,236 direct and indirect jobs in Spain, 97,868 new jobs in Mexico, 17,493 in Chile and 12,448 new positions in Ecuador. Information accessed at: https://www.irena.org/Statistics/View-Data-by-Topic/Benefits/Renewable-Energy-Employment-by-Country

[8] Ecuador, through Executive Decree No. 59 -committed to an ecological transition that promotes economic green growth to protect the environment and social well-being. The ecological transition supports public policies and public and private initiatives that promote clean energy and less energy-intensive manufacturing activities to help Ecuador transition to a net-zero economy by 2050 (https://www.fielweb.com/App_Themes/InformacionInteres/DE59AMFW.pdf). The ecological transition is also one of the pillars of the National Development Plan that aims to conserve, restore, protect, and make sustainable use of natural resources and promote sustainable development through climate change mitigation and adaptation measures.

priority sectors, enabling key reforms, and increasing its institutional capacity to mainstream climate change issues economy wide. The government has committed to reaching carbon neutrality by 2050 through increased adoption of renewable energy, fossil fuel replacement in the transport and agro-industrial sectors by fostering electromobility and connecting key productive activities to the electricity grid, and overall implementation of low-carbon development.[9] At the same time, the government faces a challenging political environment. Even though the Lasso administration enjoyed high approval ratings (74 percent) as of September 2021, the lack of control over a majority in the National Assembly and fluctuating party alliances imply the government needs to build consensus around critical reforms while implementing measures within the existing legal framework to deliver tangible outcomes.

5. **The new government agenda also seeks to strengthen fiscal policy through budget ceilings, improving revenue mobilization, public debt transparency, public spending efficiency, including through better procurement processes and state-owned enterprises' (SOEs') governance.** This agenda is not only critical to safeguarding macroeconomic stability but also to improving the fiscal policy framework. Moreover, although the Government is still highly dependent on revenues coming from oil exports, these measures would lay the ground to prepare the public sector for the expected long-term decline in oil revenues resulting from the global transition away from fossil fuels. The new administration is taking concrete measures to support a poverty- and a growth-friendly fiscal consolidation by reducing tax expenditures, raising taxes for individuals at the top of the income distribution, improving tax transparency, improving public expenditure efficiency, building on the previous World Bank support to safeguard fiscal sustainability, boost private sector development, and low-carbon development.

6. **With limited options to boost growth through fiscal policies, the administration is seeking to support the recovery through private sector reforms.** Igniting faster growth in a small open economy such as Ecuador's will require both taking better advantage of the country's oil resources and accelerating the ongoing diversification of the economy. In this context, the government is improving the investment climate by promoting new investments in the mining sector and launching new risk-sharing contracts to attract more private investment with higher environmental standards to the oil sector, attracting private investment in the renewable energy sector, ratifying the International Center for Settlement on Investment Disputes (ICSID) convention, reducing tariff and non-tariff trade restrictions, easing some labor market rigidities, enhancing competition, implementing regulatory improvement and administrative simplification, gradually exiting financial repression, and improving access to digital technologies.

7. **The measures adopted by the new government are expected to underpin a strong recovery, which in itself has the potential to build the necessary consensus to unlock Ecuador's full growth potential**. The reform agenda set by the new government is expected to contribute to a solid recovery from the COVID-19 pandemic and start to address structural challenges. It focuses on measures that can be implemented at the executive level or where reaching political consensus is feasible in a relatively short period of time. The results of implementing such measures in terms of trade flows, private sector investment, credit growth, or formal job creation are expected to lay the seeds for the necessary social and political consensus about deeper reforms in the medium and long term. The IMF (2021) estimates

[9] President Lasso issued Executive Decree No. 59 (June 5, 2021) where Ecuador commits to the ecological transition to achieve carbon neutrality by 2050. *https://www.fielweb.com/App_Themes/InformacionInteres/DE59AMFW.pdf*

that structural reforms in the labor market, financial sector, external finance, and trade could boost Ecuador's long-term potential GDP growth up to 4 percent, which in an environment of low oil prices is close to the growth reached during the commodity boom. The government aims to improve the regulatory framework to foster formal job creation, public-private partnerships, access to finance, and trade integration. However, addressing the deeply rooted distortions in factor and product markets and strengthening its institutions to unlock Ecuador's full growth would require overhauls of legislative frameworks, subject to broad support from society and the National Assembly.

8. **Despite having low per capita greenhouse gas emissions, Ecuador is committed to reducing emissions** taking advantage of opportunities in the energy sector, which account for 42 percent of total emissions, followed by land-use change and forestry with 28 percent, and agriculture with 13 percent. In this initial phase, the DPF would focus on mitigation aspects in the energy sector as the government is still prioritizing the land use and land-use change and forestry aspects where the Bank could support. The DPF would focus on green recovery measures that can help decouple economic growth from GHG emissions with a strong job multiplier effect and relatively short implementation period; studies have identified the development of renewable energy and energy efficiency as critical recovery measures that can also help have an early-stage demonstration of key technology needed to reach net-zero emissions.[10] To this end, the government is fostering private sector participation in the supply of non-conventional renewable energy (NCRE[11]) to continue moving away from fossil fuels and reducing exposure to the likely impacts from a changing climate, including increasing rainfall volatility in hydroelectricity production. It is also promoting energy efficiency regulation to reduce fossil fuel consumption by fostering investments in electromobility infrastructure, a precondition for transport sector electrification, and connecting agro-industries to the electricity grid to reduce their fuel consumption. Moreover, to leverage the necessary financing and further private capital mobilization for investments in ecological transition, it is creating a voluntary carbon trading platform and establishing the governance and institutional set up for climate financing.

9. The first pillar of the proposed series tackles selected structural challenges to foster growth, inclusion, job creation, and climate resilience. It supports selected measures to: (i) make fiscal management more inclusive and resilient by increasing tax collection in an inclusive, transparent, and green manner and strengthening the institutional framework to deal with climate-related challenges; (ii) foster growth and labor opportunities by reducing trade barriers, and reducing rigidities in labor markets; and (iii) strengthen mechanisms to support the most vulnerable groups such as people at the bottom of the income distribution and those exposed to malnutrition.

10. **The first operation supports prior actions to provide an institutional framework for a more strategic management of climate change risks and opportunities, reduce trade barriers, strengthen the social protection system, and support children at risk of malnutrition.** Its first pillar includes establishing

[10] Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. 2020. 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?'. Oxford Smith School Working Paper 20-02.
Herbest, S. 2020. 'the First Phase of the Transition is about Electricity, Not Primary Energy'.

[11] Non-conventional renewable energy (NCRE) is a term used in many Latin American countries that refers to clean energy sources such as geothermal, wind, solar, tidal, biomass and small hydroelectric plants, generally run-of-river. It does not include large hydroelectric plants.

a committee for financing and thematic monitoring with the mandate to assess and finance climate change mitigation and adaptation policies. Building on previous efforts to improve competitiveness, this pillar also includes a prior action to reduce tariffs and non-tariff barriers, part of a broader government agenda to enhance trade integration that also includes efforts to conclude various trade agreements under negotiations. To protect the most vulnerable, this pillar backs creating an institutional model to update the social registry to allow better targeting, the implementation of a prioritized nutrition package for pregnant women and children, and the collection of annual data on malnutrition. Currently, the Social Registry covers 3.1 million households, of which 30 percent (mostly from the lowest three deciles) have access to social programs. Child malnutrition stands at 23 percent, and it is one of the highest rates in the region. The National Strategy "Ecuador grows without child malnutrition" mandates that all boys and girls under the age of two and pregnant women will receive a Prioritized Package of Healthcare, Hygiene, and Nutrition Services, as well as an annual statistical survey of chronic child malnutrition rates that would help to monitor progress and better target the prioritized package. This last set of measures is critical for the most vulnerable women as potential beneficiaries of social assistance programs and would help partially address the disproportionate burden that women have suffered during the COVID-19 pandemic and other weather-induced disasters, especially in the labor market.[12]

11. **In addition to the reform avenues opened by these prior actions, the proposed triggers for the upcoming two operations include measures to increase revenue mobilization in a green and equitable way, enhance risk management capacities, improve labor regulations, and support people in human mobility.** Building on recent government efforts to improve tax administration, including the creation of a large-taxpayer unit, a tax reform was enacted at the end of November 2021. This reform aims to increase taxes on the upper end of the income distribution, improve poorly targeted tax expenditures, foster the use of electric vehicles, and enhance the ultimate beneficial owner framework, a measure that will curb tax evasion and elusion. To complement efforts to improve the government's ability to manage climate change challenges, the authorities are creating a fiscal risk unit within the Ministry of Economy and Finance (MEF) to enhance their capacity to handle fiscal risk, including climate-related ones. Concerning actions to foster growth and labor opportunities, the government is preparing reforms to simplify labor contract options, that will be discussed through social dialogue and improve the decision-making process in the country's wage-setting body (Employment and Wage Council). Reducing labor market rigidities should both stimulate private sector dynamism and result in formal jobs. It also supports a measure to redirect the universal service contribution, paid by digital communication services providers to the government, toward a private-sector-led expansion of digital coverage in prioritized areas – including rural and marginalized, and climate risk areas-, thereby expanding access to information, including climate-related information, markets, and public services for a population that was previously excluded. It also offers opportunities for integrating producers and service providers living in rural areas into new local and regional value chains. On the social front, in addition to improving the targeting of victims of disasters and allocating windfall oil revenues to capitalize a fund to secure medium-term financing to reduce

[12] Around one-fifth of individuals have lost their job since the onset of the pandemic in Ecuador, of which 60 percent are women. Women are more likely to be in more precarious employment pre- and post-COVID-19 as informality rates were two percentage points higher for women than for men in 2019 (i.e., 47.9 and 45.9 percent respectively), and the gap widened to four percentage points in 2020 (i.e., 53.4 vs. 49.5 percent respectively). Women were more likely than men to withdraw from the labor market due to the need to take care of children and the elderly at home. Women work 20 hours more per week than men in unpaid work such as food preparation, cleaning, dwelling, laundry, and childcare.

malnutrition, the triggers include measures to integrate migrants and protect victims of human trafficking and natural disasters.

12. **The <u>second pillar of the proposed series</u> aims to strengthen low-carbon development.** It does so by: (i) promoting a greener and more resilient energy sector by fostering private investment in developing NCRE generation, including distributed renewable generation,[13] fostering energy efficiency investments, and promoting a decarbonized transport sector; and (ii) enhancing measurement and reporting of GHG mitigation initiatives to better monitor decarbonization progress, and help develop voluntary carbon markets.

13. **Prior actions aim to facilitate a low-carbon development focus on attracting private financing to NCRE, increasing energy efficiency, and decarbonizing the transport sector**. These include enabling the participation of the private sector in public bidding processes to finance NCRE, which have strong job generation spillovers, and facilitating distributed renewable generation to make the electricity matrix more resilient and further displace thermal generation, which currently accounts for about 40 percent of installed capacity and varies between 20 to 10 percent of generation depending on the hydrology conditions. For more efficient energy use, the prior actions also support the establishment of a national institutional setup to prioritize investments in energy efficiency, including in street lighting, buildings, and the transport sector, as well as the electrification of relevant agro-industrial sectors, thereby reducing dependence on fossil fuels and supporting GHG mitigation efforts. Transport sector reforms aim at encouraging more efficient, safer, and decarbonized road transportation. The second and third operations are expected to continue supporting these policy areas to continue fostering private sector participation in clean energy development, financing energy efficiency investments to foster a more rational energy consumption and promoting electromobility and vehicle efficiency.

14. **Prior actions aiming at enhancing measurement and reporting of GHG mitigation initiatives and carbon trading mechanisms will allow better monitoring of emissions and promote the reduction of emissions across the economy**. They include measures to publish and define the methodology to collect and manage climate data to prepare national GHG inventories. The pillar also supports the establishment of a voluntary carbon trading program to obtain one of three green certifications for climate change mitigation and adaptation actions by a range of public and private institutions. This voluntary GHG mitigation program will foster behavioral changes in the private and public sector, Non-Governmental Organizations (NGOs), universities, and other entities to develop and implement measures to mitigate or compensate for their GHG emissions. The second and third operations expect to support actions to establish a measurement, reporting and verification (MRV) of GHG in the productive sectors and compensation mechanism for carbon trading, and a National GHG Emissions Registry to monitor climate progress, support emission compensation mechanisms, and provide the necessary international climate communications.

15. **The proposed operation has significant climate co-benefits.** On the mitigation side, it includes

[13] Distributed generation (also called on-site generation or decentralized generation) refers to the generation of electricity for use on-site, rather than transmitting energy over the electric grid from a large, centralized facility. When connected to the electric utility's lower voltage distribution lines, distributed generation can help support delivery of clean, reliable power to additional customers and reduce electricity losses along sub -transmission and distribution lines.

actions to decarbonize the energy sector, increase electrification (notably of transport), and improve energy efficiency, thereby hitting three of the four mitigation levers identified by the Intergovernmental Panel on Climate Change (IPCC). On the adaptation side, a broadened safety net and ramped-up action on malnutrition will help the more vulnerable populations, while improved access to digital services, diversified energy with NCRE, and small-scale distributed energy will reduce vulnerability to climate events.

16. **In addition to the reforms directly supported by this DPF series, the World Bank Group (WBG) is providing complementary technical assistance in related reform areas.** The WBG is providing supplemental technical assistance to increase debt transparency, evaluate the tax reform incidence of poverty and inequality, evaluate fiscal risk, improve disaster risk management, enhance SOEs governance, improve public financing management, enhance the public-private-partnership framework, electricity tariffs and storage, development of the carbon registry, MRV and the development of economic instruments for GHG reduction, and improve business climate reforms (Annex 5).

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

17. **Ecuador's state-led economic model created significant macroeconomic and structural imbalances once the oil price boom ended**. The oil price boom combined with revenue-enhancing policy measures enabled Ecuador to double public spending between 2004 and 2014, especially public investment and wages. The expansion of the public sector led to solid growth and substantial gains in terms of shared prosperity and poverty reduction but was not sustainable. Ecuador did not generate any fiscal surplus since 2009. Moreover, public sector wages and minimum wages hikes pushed up private-sector wages, eroding competitiveness. All these factors hampered the country's ability to respond and adapt to the external shock that hit the economy in 2014.

18. **Since oil prices plummeted in 2014, Ecuador has made significant efforts to rebalance its economy.** With no national currency and limited macroeconomic buffers, the GoE has gradually reduced its sustained fiscal deficit, mainly by rationalizing public investment. In conjunction with the partial recovery of oil prices, this consolidation process reduced the non-oil fiscal deficit from a peak of 17.2 percent of GDP in 2016 to 14.1 percent in 2019, slowing down public debt accumulation but contributing to a deceleration of economic growth to around 0.5 percent. The contraction of capital expenditures was partially offset by a recovery of private investment resulting from some improvements in the business environment and private sector expectations. Over this period, the Government fostered private sector development by attracting investments to develop its untapped mining resources, dropping import surcharges, reducing some tariffs, advancing new trade agreements, and allowing regional international arbitration in large foreign investment projects. However, these partial reforms were just beginning to lift long-lasting barriers to private sector development, including a rigid and costly labor market (including a high minimum wage), low access to finance, limited international integrations, a challenging business environment, regulatory discretion vis-à-vis the private sector, and uncertainty about future macroeconomic management.

Table 1. Key Macroeconomic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021e	2022f	2023f	2024f
Real sector, annual percentage change, unless otherwise indicated											
GDP growth	3.8	0.1	-1.2	2.4	1.3	0.0	-7.8	3.9	3.1	2.5	2.6
Private Consumption (Contribution)	1.7	-0.1	-1.5	2.3	1.3	0.2	-4.3	3.8	2.4	1.6	1.2
Government Consumption (Contribution)	1.0	0.3	0.0	0.5	0.5	-0.3	-0.9	0.0	-0.3	-0.3	0.0
Gross fixed capital formation (Contribution)	0.6	-1.7	-2.2	1.2	0.5	-0.8	-2.7	1.7	1.7	1.2	1.2
Changes in inventories (Contribution)	0.3	-0.8	-0.6	1.4	-0.1	0.0	-1.5	0.0	0.0	0.0	0.0
Net exports (Contribution)	0.2	2.3	3.1	-3.0	-0.9	0.9	1.7	-1.6	-0.6	-0.1	0.1
Real sector, percent of GDP, unless otherwise indicated											
Current account	-0.7	-2.2	1.1	-0.2	-1.2	-0.1	2.5	2.7	1.5	0.3	0.4
Exports	28.5	21.6	20.1	21.6	23.6	24.2	22.5	27.2	27.8	27.2	27.3
o.w. oil exports	12.8	6.4	5.1	5.9	7.3	7.2	4.7	7.4	7.7	6.7	6.6
Imports	29.7	24.1	19.5	22.1	24.4	24.0	20.2	25.9	27.3	27.6	27.5
Foreign investment	0.8	1.3	0.8	0.6	1.3	0.9	1.2	0.8	1.3	1.4	1.4
International reserves	3.9	2.5	4.3	2.5	2.7	3.4	7.2	7.2	9.1	10.5	11.8
Months of imports	1.6	1.2	2.6	1.3	1.3	1.7	4.3	3.3	4.0	4.6	5.1
Percent of GDO	3.9	2.5	4.3	2.4	2.5	3.1	7.3	6.8	8.2	9.2	9.9
Inflation, annual percentage change, unless otherwise indicated											
Consumer price index (p.a.)	3.6	4.0	1.7	0.4	-0.2	0.3	-0.3	0.8	1.9	1.7	1.7
GDP deflator	3.0	-2.5	1.9	1.9	1.8	0.5	-0.9	2.4	1.9	0.9	1.6
Public sector finance, percent of GDP, unless otherwise indicated 1/											
Public revenues	38.4	36.3	32.4	34.7	38.1	36.1	32.1	36.8	38.6	37.6	36.9
Public expenditure	46.3	42.5	42.2	39.8	40.3	38.9	38.2	38.3	37.8	36.6	35.9
o.w. capital expenditure	15.9	13.4	14.2	11.3	9.7	7.7	7.4	9.2	8.9	8.6	8.1
NFPS balance	-7.9	-6.2	-9.8	-5.0	-2.2	-2.8	-6.2	-1.5	0.8	1.0	1.0
NFPS debt 2/	30.1	38.1	46.3	48.4	49.1	51.4	61.2	59.9	58.2	56.5	54.8
Memorandum items											
Oil price, average (US$ per barrel)	96.2	50.8	42.8	52.8	68.3	61.4	41.3	70.0	74.0	65.0	65.4
Nominal GDP (US$ billion)	101.7	99.3	99.9	104.3	107.6	108.1	98.8	105.1	110.5	114.2	119.0
GDP per capita (US$)	6,377	6,124	6,060	6,214	6,296	6,223	5,600	5,872	6,069	6,172	6,297

Notes: (1) The NFPS figures are based on the revised figures recently released by the Ministry of Economy and Public finance that desegregate the SOE's operation in each category of revenues and expenditures rather than summarizing them in the SOEs' operative balance in the NFPS revenues. (2) The NFPS debt includes the outstanding balance for advance oil sales, treasury certificates, central bank loans, other liabilities, and domestic floating debt.
Source: Central Bank of Ecuador, Ministry of Economy and Finance, International Monetary Fund, and staff estimates.

19. **Ecuador continued addressing structural issues during the COVID-19 crisis.** With a fully dollarized economy and limited macroeconomic buffers, Ecuador struggled to mitigate the economic impact of the pandemic, which reduced output by 7.8 percent and pushed a million people into poverty as a tight fiscal situation restricted the Government's capacity to deploy a sizable stimulus package. Still, the fiscal deficit increased from 2.8 percent of GDP in 2019 to 6.2 percent in 2020 due to low tax and oil revenues. However, the shock was partially offset by the debt renegotiation with international bondholders and, to a lesser extent, Chinese creditors, triggered by repayment difficulties resulting from pandemic-related triple shock: a sharp oil price decline, lack of access to external financing, and the COVID-19 related demand and supply shocks. Ecuador also benefited from multilateral financing, including a US$6.5 billion Extended Fund Facility (EFF) with the IMF to support fiscal sustainability, expand social assistance, and strengthen institutions. It also received support from other multilateral institutions, including the World Bank, which adapted its programmatic DPF series to support some elements of the government's agenda during the emergency and approved rapid disbursement operations to expand the social safety protection system, strengthen the health sector response, and increase access to finance for micro, small, and medium-sized enterprises (MSMEs). As part of this agenda, the Government introduced a mechanism to phase out fuel subsidies and reformed the financial management code (COPLAFIP) while

protecting the poor and vulnerable—it expanded social protection assistance and eased access to unemployment benefits. The Government also strengthened the Central Bank's autonomy and the anti-corruption framework and improved the business environment by lowering tariffs, simplifying the regulated interest rates scheme, and streamlining some business regulations.[14]

20. **Although the government remains embarked on a fiscal consolidation process, the economy is recovering due to a successful vaccination campaign, better external conditions, and expectations on improvements in the business environment.** After having dropped by 5.4 percent y-o-y in the first quarter of 2021, GDP grew by 8.4 percent y-o-y in the second quarter due to easing mobility restrictions and an improving external context. The new authorities have sped up vaccination to enable a decisive recovery from the pandemic—about 67.5 percent of the population was fully vaccinated by mid-December. On the external front, Ecuador is benefiting from a strong recovery of oil, food, and mining prices, a rebound of economic activity in most of the country's trading partners, and higher remittances. Moreover, oil production recovered from the collapse registered in 2020, after two landslides damaged the main crude pipelines. On top of that, although most reforms to improve the business environment undertaken in the last few years are likely to pay off in the medium-term, the new Government's commitment to continue improving it had a positive impact on private sector confidence.

21. **However, the labor market remains weak.** Although urban labor participation and unemployment returned to their pre-pandemic levels, urban informality (underemployment) stood at 40.2 percent (22.8 percent) in October 2021, well above its pre-pandemic level of about 35 percent (18 percent).[15] With a still rigid labor regulation preventing formal job creation, informality and underemployment have stayed well above their pre-pandemic levels as, with limited social programs, workers have turned to poor-quality and partial time jobs. The unskilled and minority groups have been affected the most because they tend to work in the most hit sectors during the pandemic, such as construction, wholesale and retail, and accommodation and restaurants. Moreover, the school closure has constrained women's return to the labor markets, mostly among low-skilled ones.

22. **The fiscal balance improved due to recovering revenues, lower interest payments after the 2020 bond restructuring, and expenditure rationalization measures.** The fiscal balance passed from a US$3.0 billion deficit in the first nine months of 2020 to a US$1,346 million surplus in the same period of 2021, mainly because of the recovery of international oil prices. Additionally, the market-based band introduced in June 2020 allowed gasoline and diesel prices to rise gradually, increasing oil revenues related to domestic fuel sales and, hence, cushioning the effect of rising oil prices on the fuel subsidy. While the ongoing economic recovery increased tax revenues and social security contributions, the Government continues implementing some tax administration measures initiated by the previous administrations, including creating a large taxpayer unit and sharing information with other jurisdictions on an automatic basis. Despite emergency expenditures, the expansion of social assistance, the recovery of public investment, and the increasing cost of fuel imports, total expenditure increased modestly due to the reduction of interest payment after the bond restructuring and the wage bill reduction carried out

[14] The previous administration also set a formula to set the minimum wage increase when the tripartite dialogue fail to reach an agreement. However, in 2021, the government did not use the formula and increased the minimum wage from US$400 to US$425 while trying to open the dialogue around a labor reform, which is expected to be submitted to the National Assembly in 2022.
[15] INEC.

throughout 2020.

23. **Limited access to external financing led to an upsurge in public arrears in early 2021, but new external funding and rising oil and tax revenues have reduced them in recent months.** The General Budget of State's arrears, taking the approximate accrual date and adding 90 days, increased from US$733 million in December 2020 to US$1417 million in March 2021. However, as the new Government managed to mobilize multilateral financing and oil revenues improved in recent months, arrears decreased to only US$376 million by October 2021: US$376 million with other public institutions, mainly subnational governments and social security, and US$147 million with the private sector. Although the 2020 bond restructuring and the election process have reduced risk perception, the authorities decided to postpone new international bond issuance until the ongoing fiscal consolidation cements confidence, further decreasing the still high-country risk. Additionally, the electoral process temporarily paused the flow of multilateral funding in the first semester of the year. Additionally, the hydrocarbon and tax revenues favored higher international oil prices, increasing local fuel prices, and recovering economic activity.

Table 2. Key Fiscal Indicators

Percent of GDP	2014	2015	2016	2017	2018	2019	2020	2021e	2022f	2003f	2024f
Revenues	38.4	36.3	32.4	34.7	38.1	36.1	32.1	36.8	38.6	37.6	36.9
Oil revenues /1	13.8	8.7	7.3	9.3	11.9	11.3	8.0	12.4	13.2	11.3	11.0
Non-oil revenues	24.6	27.6	25.0	25.5	26.2	24.8	24.1	24.4	25.4	26.2	25.9
Tax revenues	18.9	21.2	18.3	18.9	19.5	18.8	18.0	18.7	19.4	20.3	19.9
Other	5.7	6.4	6.8	6.6	6.7	5.9	6.0	5.7	5.9	6.0	6.0
Expenditures	46.3	42.5	42.2	39.8	40.3	38.9	38.2	38.3	37.8	36.6	35.9
Expenses	30.4	29.1	28.0	28.5	30.5	31.2	30.9	29.1	28.9	28.0	27.8
Compensation of employees	9.4	10.1	10.1	10.1	10.1	9.9	10.2	9.4	8.9	8.6	8.4
Use of goods and services	15.3	12.7	10.5	10.2	11.6	11.6	10.3	11.2	11.3	10.8	10.7
Interest payments	1.0	1.4	1.6	2.1	2.5	2.8	2.9	1.4	1.3	1.5	1.6
Foreign	0.8	1.2	1.4	1.8	2.2	2.4	2.5	1.0	1.1	1.2	1.2
Domestic	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.4	0.2	0.2	0.4
Social security	3.5	4.2	4.6	4.7	5.0	5.3	6.1	6.2	6.1	5.8	5.8
Other	1.2	0.8	1.2	1.4	1.4	1.6	1.4	1.0	1.2	1.2	1.2
Capital expenditure	15.9	13.4	14.2	11.3	9.7	7.7	7.4	9.2	8.9	8.6	8.1
Overall balance (NFPS) /2	-7.9	-6.2	-9.8	-5.0	-2.2	-2.8	-6.2	-1.5	0.8	1.0	1.0
Primary balance	-6.9	-4.8	-8.2	-2.9	0.4	0.0	-3.3	-0.1	2.2	2.5	2.6
Non-oil balance /3	-21.7	-14.8	-17.2	-14.3	-14.1	-14.1	-14.2	-13.9	-12.4	-10.3	-10.0
NFPS financing	7.9	6.2	9.8	5.0	2.2	2.8	6.2	1.5	-0.8	-1.0	-1.0
External, net	4.4	3.0	6.0	4.9	3.4	3.4	5.3	1.9	1.9	0.1	0.1
Domestic net	3.5	3.1	3.8	0.1	-1.2	-0.6	0.9	-0.4	-2.7	-1.1	-1.1
NFPS debt /4	30.1	38.1	46.3	48.4	49.1	51.4	61.2	59.9	58.2	56.5	54.8
External debt	17.7	22.3	28.1	32.3	34.2	37.5	45.0	44.1	43.8	42.6	40.9
Domestic debt	12.4	15.8	18.2	16.1	14.9	13.9	16.2	15.7	15.0	14.1	13.2

Notes: (1) The oil revenues include the general budget of the state oil revenues, the *Cuenta de Financiamiento de Derivados Deficitarios* (CFDD), and the financial operations linked to oil service contracts carried out by the *Ministerio de Energía y Recursos Naturales no Renovables*, formerly known as *Secretaria de Hidrocarburos*, and the oil SOE's operative revenues. (2) The NFPS figures are based on the revised figures recently released by the Ministry of Economy and Public Finance that desegregate the SOE's operation in each category of revenues and expenditures rather than summarizing them in the SOEs' operative balance in the NFPS revenues. (3) The non-oil balance excludes the oil revenues from the overall fiscal balance. The NFPS debt includes the outstanding balance for advance oil sales, treasury certificates, central bank loans, other liabilities, and domestic floating debt.
Source: Central Bank of Ecuador, Ministry of Economy and Finance, International Monetary Fund, and staff's estimates

24. **A current account surplus and access to international finance institution (IFI) financing to the public sector are expected to boost domestic credit while allowing Ecuador to maintain international reserves stable.** Despite surging oil prices and nascent mining exports, the trade surplus decreased from US$2.4 billion in the first nine months of 2020 to US$1.9 billion in the same period of 2021 on the back of a solid cyclical import recovery and higher fuel imports. Despite low external financing registered over this

period, the resulting current account surplus contributes to sustaining the expansion of the money supply at an annual growth rate of 10 percent this year. With low non-performing loans (3.0 percent in October 2021), banks are using excess liquidity accumulated last year and growing deposits to fuel domestic credit, which rose 16 percent y-o-y in October 2021. Although insufficient external financing has reduced international reserves from a peak of US$7.2 billion in December 2020 to a low US$5.4 million in July 2021, they rose to US$7.5 billion in November on the back of external financing mobilized by the new administration, including the disbursement enabled after the IMF completed the combined second and third reviews under the EFF and an IADB budget support, and the SDR allocation. Although International reserves are expected to lose momentum in the last months of this year due to the seasonal increase of imports, they are expected to continue recovering in the upcoming months as the new Government continues mobilizing IFI financing.[16]

Table 3. Balance of Payments Financing Requirements and Sources

US$ billion	2014	2015	2016	2017	2018	2019	2020	2021e	2022f	2023f	2024f
Gross financing needs	6.8	8.8	5.3	8.1	9.4	9.2	6.0	3.5	5.7	7.1	7.6
Current account deficit	0.7	2.2	-1.1	0.2	1.3	0.1	-2.5	-2.9	-1.6	-0.4	-0.5
Public debt amortizations	3.6	4.0	3.3	4.3	4.2	4.9	4.0	1.8	2.7	2.7	3.3
Private debt amortizations	2.6	2.6	3.1	3.7	3.9	4.2	4.4	4.6	4.6	4.8	4.8
Financing sources	6.8	8.8	5.3	8.1	9.4	9.2	6.0	3.5	5.7	7.1	7.6
Capital grants	0.1	0.0	-0.5	0.1	-0.2	0.1	1.8	0.1	0.1	0.1	0.1
Foreign direct investment	-0.8	-1.3	-0.8	-0.6	-1.4	-1.0	-1.2	-0.9	-1.4	-1.6	-1.7
Public debt	7.0	7.1	9.4	9.4	7.5	7.2	9.2	3.7	4.8	2.8	2.8
Other financing sources	0.1	1.7	-1.0	-3.1	3.7	3.6	0.3	0.5	4.2	7.1	7.7
Financing gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Changes in reserves	0.4	1.5	-1.8	2.3	-0.2	-0.7	-4.1	0.0	-1.9	-1.3	-1.3

Source: Central Bank of Ecuador, Ministry of Economy and Finance, International Monetary Fund, and staff's estimates

25. **Although growing domestic credit, domestic fuel prices, and international agriculture prices have resulted in some inflationary pressures in recent months, the inflation rate remains low as the economy continues far below its potential**. Annual inflation increased from a low of -1.6 percent in October 2020 to 1.8 percent in November 2021 as a gradual but sustained increase in gasoline and diesel prices has reverberated in transport and food prices until the government suspended the band price mechanism in late October. This trend has been compounded by emerging inflationary pressure resulting from the rapid expansion of domestic credit and a recent surge in international food prices. However, inflation remained low as the economy is still depressed due to the pandemic's lagged effects—although seasonally adjusted GDP has recovered after reaching a low in the second quarter of 2020, it remained 4.5 percent below its pre-pandemic level in the second quarter of 2021.

26. **The new administration continues taking steps to complete the ongoing fiscal consolidation.** It has recently enacted a tax reform to increase taxes to individuals at the top of the income distributions, reduce poorly targeted tax expenditures, and introduce some temporarily tax measures, aiming at supporting the ongoing fiscal consolidation and offsetting the short-term impact of the exceptional suspension of gasoline and diesel prices mechanism introduced in 2020 to fade out fuel subsidies (Box 2). In line with the 2020 reform to the public financing code, the new authorities promoted fiscal discipline by implementing budget ceilings and improving public debt transparency by adding other liabilities to the local definition of the public debt and other liabilities to the GDP ratio and providing more detailed information in the public debt bulletin (Box 1). Additionally, they are also taking steps to improve the

efficiency of the public procurements, reform SOEs governance, and mobilize some SOEs assets. This programmatic DPF would support some of these reforms, which will support a smoother fiscal consolidation.

Box 1. Ecuador has implemented international good practices on public debt transparency

Since 2020, the GoE has made remarkable progress in improving public debt transparency in line with international sound practice, including with regard to bilateral transactions. Between 2019 and 2020, it released the aggregate and consolidated debt figures of the general budget, the non-financial public sector, the overall public sector, published information about advanced oil sales, now expired, and other liabilities, and adopted a medium-term debt management strategy. In 2020, the GoE published previously undisclosed contracts with the Chinese Development Bank (CDB) (*https://www.finanzas.gob.ec/cdb/)*. All oil–off-take contracts between PetroChina and PetroEcuador have also been made available to the general public. In 2021, the GoE updated the information on financial conditions of outstanding loans and bond issuances in the external market (https://www.finanzas.gob.ec/wp-content/uploads/downloads/2021/07/Literal-l.pdf). This provides investors and the general public with information on debt transactions with each creditor.

To further enhance public debt transparency, the GoE has recently adopted guidelines expanding the minimum content of the monthly public debt bulletin and its statistical annex to be published from early 2022 onwards. These guidelines ruled that, in addition to information on local debt definitions published by the current bulletin, the new bulletin should include a new ratio (public debt and other liabilities to GDP—see below), detailed information about “other liabilities”, debt service profiles, and the average interest rates and maturities. Further, the statistical annex will now present public debt figures disaggregated by creditors in the case of loans with multilateral, bilateral, and banks, and by instruments in the case of bond issuances or other liabilities, the extended debt services profiles, and the financial conditions of all outstanding loans and issuances. The guidelines ensure that current best practices adopted by GoE will continue to be implemented going forward. These improvements to public debt reporting are expected to reduce uncertainty about public debt figures and thus help improve market risk perceptions about Ecuador's public debt.

Building on previous efforts to improve the country’s definition of public debt, the new Government has introduced a “public debt and other liabilities to GDP” ratio. The new government updated the methodology to estimate the public debt and other liabilities to GDP ratio, drawing on the definition set by the 2020 amendment of the COPLAFIP (Article 218). Besides the liabilities included in the country’s definition of consolidated non-financial public sector debt, this new metric includes: (i) securities with less than three hundred and sixty (360) days maturity such as treasury or credit letters related to fuel imports; (ii) advances agreed in commercial contracts for the sale of product such as advanced oil sales; (iii) liabilities derived from liquidity agreements; (iv) contractual rights originated with or linked to ordinary operations such as hydrocarbon ministry carry forward related to oil service contracts; and (v) obligations pending payment for the current fiscal year. It is expected that this metric will provide a more precise idea of the actual public debt situation, reducing uncertainty about the quality of public debt information perceived by potential creditors and informing policy decisions. For instance, the 2020 amendment to the COPLAFIP ruled that this metric should be reduced below 57 percent by 2025 and 40 percent by 2032 and onwards.

27. **With little room to raise spending, the government aims to lay the foundations of higher medium-term growth.** The government is committed to improving the investment climate to foster growth and reduce the pandemic's long-term effects on potential growth due to stranded capital and unemployment hysteresis. In recent months, the new government has ratified the ICSID convention,

reduced tariff and non-tariff restrictions, and launched new risk-sharing contracts to foster investments in the oil sector. It has also taken measures to facilitate new investments in the mining sector, attract private investment to the renewable energy sectors, ease some labor market rigidities, enhance competition, promote public-private partnerships, and improve access to digital technologies. This programmatic DPF would support several of these critical reforms, which will raise medium-term growth prospects.

Box 2. A recent tax reform will help to reduce the fiscal deficit and partially offset the effect of suspending the gasoline and fuel price band system

The government has recently suspended the domestic diesel and gasoline price bans system to prevent a new wave of social unrest and unlock the dialogue around the tax reform. In October 2021, the government ruled a one-time exceptional increase in diesel and gasoline prices and froze them until the end of 2023, suspending the band system that was closing the prices gaps since mid-2020. Considering the latest World Bank oil price projections, the revenue losses resulting from this decision would amount to about 0.3 and 0.4 percent of GDP in 2022 and 2023, respectively. However, these revenue losses could be higher if oil prices continue rising in the upcoming year or if the band system is not restored in late 2023.

The government managed to pass tax reform that includes temporary measures to mobilize revenues while some permanent measures pay off and offset the revenue losses triggered by frozen fuel prices. Although the government has limited influence in the legislative, the reform was enacted via Presidential Decree as the National Assembly did not gather enough votes to approve or reject the project sent by the Government as an urgent economic project in the stipulated 30 days. It introduces a one-time wealth contribution of 1.0 percent of assets over US$1.0 million and 1.5 percent of assets over US$1.2 million, a two-year 0.8 percent contribution from firms with equity greater than US$5.0 million in 2019, and a one-year amnesty to regularize assets abroad. These measures would increase tax collection by about 0.7 and 0.4 percentage points of GDP in 2022 and 2023. This includes some last-minute changes to the original tax reform to increase tax revenues by 0.3 and 0.1 percent of GDP in 2022 and 2023, respectively, to partially offset the revenue losses of suspending the gasoline and diesel piece band system.

The reform also includes some permanent measures to increase revenues by about 0.6 percentage points of GDP over the medium term. The bulk of these permanent revenues will come from lowering deductions from the corporate income tax and changing the personal income tax brackets and deductions to increase the tax burden to people at the top of the income distribution. It also improves the beneficiary ownership framework and includes minor changes to other taxes with little impacting tax revenues, aiming to change direct consumers' behaviors and promote private investment. It changes the value-added tax (VAT) and the excise taxes to encourage the consumption of products such as electric cars, diapers, glasses, correction headphones, and phone services. It also dropped the 2.0 percent tax on microenterprises' sales and set tax incentives to promote investment, including a 3.0 percentage point reduction of the corporate income tax for 15 years to new investments and lower dollar outflow tax on capital and intermediate goods imports.

2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

28. **Fueled by improving external conditions and an ambitious vaccination campaign, the economy is expected to recover in 2021, while sustained efforts to enhance the investment climate are expected to strengthen medium-term prospects.** Despite the limited policy room to stimulate the economy and

the ongoing consolidation process, GDP was projected to rebound by 3.9 percent in 2021, thanks to improving external conditions and easing mobility restrictions. Successful vaccination is expected to underpin the economic recovery. After the recovery period, economic growth is projected to lie at around 2.6 percent in 2024, well above the 0.5 percent average recorded in the five years before the pandemic. As the bulk of envisaged fiscal consolidation will be implemented in the first two projection years, medium-term economic growth will be favored by a less intense fiscal compression and the early effects of the business-environment-enhancing policies. As mentioned above, the previous administration started implementing some growth-enhancement measures, including reducing red tape to open a business, simplifying the interest rate ceilings, and the sustained reduction of trade barriers. Building on these early efforts to catalyze domestic private investment and attract foreign direct investment, the new government is undertaking regulatory changes to promote more flexible work arrangements, reduce trade barriers, enhance trade integration, set new arbitration mechanisms, reform the Public-Private Partnership framework, promote private investment in closing the digital gaps and the generation of non-conventional renewable energy, eliminate the tax on dollar outflows, streamline regulation and licenses, and promote access to finance. Similarly, the sustained efforts to secure macroeconomic stability and reach a sustainable fiscal path are also expected to boost private investment in the medium term by reducing uncertainty on macroeconomic risks.

29. **As these growth projections are conservative, substantial upside risks on economic growth exist**. Although the base case assumes that the aforementioned investment-enhancing policies will pay off mainly in the medium and long terms, a stronger and quicker private sector reaction to a more conducive business environment could advance the result on trade flows, private sector investment, credit growth, and formal job creation. In the short term, this upside risk could be exacerbated by improving external conditions that could catalyze the economic recovery while reducing pressure on fiscal accounts. Additionally, higher medium- and long-term growth could be achieved if the necessary social and political consensus about deeper reforms is reached. The IMF (2021) estimates that structural reforms in the labor market, financial sector, external finance, and trade could boost growth up to 4.0 percent. However, given that the distortions in Ecuador’s factor and product market are deeply rooted in its legislation, comprehensive changes would require broad support from the society and the National Assembly.

30. **Although the current account surplus is expected to decline gradually, money supply and international reserves would grow.** The current account surplus is projected to increase from 2.5 percent of GDP in 2020 to 2.7 percent in 2021 as surging oil prices, nascent mining exports, lower interest payments after 2020 bond restructuring, and recovering remittances more than offset the effect of recovering imports. After that, the current account surplus is projected to decrease to 0.4 percent by 2024 on the back of lower oil prices and increasing factor payments abroad. Although fiscal consolidation is projected to gradually reduce external financing to the public sector, the current account surplus and improving foreign investment are expected to keep the money supply growing over the projection period. Additionally, international reserves are projected to increase from 7.3 percent of GDP (4.3 months of imports) in 2020 to 9.2 percent (4.6 months) in 2024 as the expansion of deposits increase banks' mandatory liquidity requirements, and the public sector accumulates some savings at the Central Bank. The latter would not only help to strengthen the Central Bank balance sheet but also generate some fiscal room to prevent adverse macroeconomic fluctuations from triggering liquidity problems, including an

increase in public arrears, with negative side effects on public management and financial sector performance.

31. **The Government is expected to continue the fiscal consolidation, reaching surpluses from 2022 onwards, relying on a mix of expenditure rationalization, tax administration measures, and temporary and permanent tax policies on the better off firms and people.** Despite this year's emergency health and social expenditures, the partial recovery of capital expenditure, and increasing cost of fuel imports, the fiscal deficit is projected to drop from a peak of 6.2 percent of GDP in 2020 to 1.5 percent in 2021 on the back of higher oil revenues resulting from recovering international oil prices and, to a lesser extent, lower fuel subsidies. Additionally, the economic recovery is projected to improve tax collection, the 2020 bond restructuring to reduce interest payments, and the 2020 consolidation effort to reduce the public wage bill. After that, the fiscal balance is projected to turn into a 0.8 percent of GDP surplus in 2022 as the effect of increasing oil prices will be compounded by sustained expenditure consolidation efforts and the early result of the recently approved tax reform (the non-oil fiscal deficit will decrease from 13.9 percent of GDP 2021 to 12.4 percent in 2022). Additionally, the Government has created a large taxpayer's unit and allowed the automatic share of information with other jurisdictions to tax efficiency. Going forward, although nominal social spending is expected to grow over the medium term partially, the recently introduced temporal tax measures will end, and oil prices are projected to decline in 2023, the fiscal balance is expected to remain around 1.0 percent of GDP until 2024 on the back of substantial expenditure rationalization measures (the non-oil fiscal deficit will decrease to 10.1 percent in 2024). Besides rolling back the emergency current and capital expenditure, the government is aiming to control the public wages bill growth by limiting the salary increase, replacing retired staff, expiring fixed-term contracts, and reducing wages for new hires. It also plans to improve public procurement processes by relying more on standardized purchases, competitive processes, and catalog purchases. To encourage fiscal discipline and efficiency, it also aims to implement budget ceilings, improve public investment management, enhance SOEs governance, and advance the anti-corruption agenda.

Table 4. Fiscal Financing Requirements and Sources

US$ billion	2014	2015	2016	2017	2018	2019	2020	2021e	2022f	2023f	2024f
Gross financing needs (NFPS)	13.8	14.3	20.8	18.2	9.5	10.7	12.6	6.4	4.7	4.9	4.9
Fiscal deficit	8.1	6.1	9.8	5.2	2.3	3.0	6.1	1.6	-0.9	-1.1	-1.2
External debt amortizations	3.6	4.0	3.3	4.3	4.2	4.9	4.0	1.8	2.7	2.7	3.3
Domestic bonds	1.4	3.2	5.9	3.9	0.9	1.2	0.5	0.8	0.6	1.1	0.6
Treasury certificates	0.8	1.0	1.7	4.8	2.1	1.7	2.0	2.3	2.3	2.3	2.3
Financing sources	13.8	14.3	20.8	18.2	9.5	10.7	12.6	6.4	4.7	4.9	4.9
External debt disbursements	7.0	7.1	9.4	9.4	0.0	7.2	9.2	3.7	4.8	2.8	2.8
IMF	0.0	0.0	0.0	0.0	0.0	1.4	4.7	0.8	1.7	0.0	0.0
World Bank	0.0	0.1	0.0	0.2	0.2	0.7	1.2	0.4	0.7	0.3	0.3
IADB	0.5	1.3	0.6	0.5	0.5	0.7	0.7	1.4	0.5	0.4	0.4
CAF	0.4	0.5	0.5	0.4	0.5	0.5	0.9	0.5	0.7	0.6	0.6
Other multilaterals	0.6	0.0	0.0	0.0	0.0	-1.4	0.0	0.2	0.5	0.5	0.0
Bilateral	1.2	1.0	2.3	0.7	1.0	0.7	0.1	0.4	0.0	0.0	0.0
Private sector and others	2.7	1.9	3.9	7.3	4.5	4.2	1.5	0.0	0.7	1.0	1.5
Oil related financing	1.6	2.3	2.1	0.4	0.3	0.4	0.0	0.0	0.0	0.0	0.0
SDR allocation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Domestic bonds	1.3	2.8	5.9	6.3	0.8	1.0	0.5	0.8	0.7	0.7	0.7
Treasury certificates	1.0	1.7	4.8	2.1	1.7	2.0	2.3	2.3	2.3	2.3	2.3
Changes in deposits	-0.1	1.0	-1.4	-0.6	-2.0	-0.6	-0.9	-0.8	-3.0	-0.8	-0.8
Net arrears accumulation	1.0	1.5	0.5	-1.6	-0.8	1.5	1.1	-0.5	-0.1	-0.1	-0.1
Others and discrepancy	3.6	0.3	1.6	2.6	1.7	-0.4	0.2	0.0	0.0	0.0	0.0

Source: Central Bank of Ecuador, Ministry of Economy and Finance, International Monetary Fund, and staff's estimates

32. **This consolidation path will allow Ecuador to gradually reduce public sector financing needs and country risk.** The Non-Financial Public Sector gross financing needs were estimated to fall from 12.7 percent of GDP (US$12.7 billion) in 2020 to 6.1 percent (US$6.4 billion) in 2021 due to a lower fiscal deficit and lower external debt amortization, resulting from 2020 debt renegotiations with bondholders and, to a lesser extent, Chinese creditors. With the decision of not taping on advanced oil sales and delaying new bond issuances until fiscal consolidation cements confidence, the bulk of this financing need will be met by multilateral financing and, to a lesser extent, the recently approved special drawing right (SDR) allocation. In addition, the GoE expects to continue developing the local market to leverage financing from the local private and financial sector while looking for alternative sources of external funding that contribute to improving the debt service profile. After recent conversations with the Government of China, Chinese creditors received the green light to start talks on restructuring Ecuador's debt. In the future, Ecuador's ongoing fiscal consolidation is expected to reduce its financing needs to 4.2 percent (US$4.9 billion) by 2024, gradually reducing Ecuador's dependency on multilateral financing. As the consolidation is expected to reduce the country's sovereign risk premium,[17] the Government is expected to tap international bond markets in the medium term while developing the local public debt market. This process is critical for Ecuador to face the repayments on the restructured bonds, scheduled to come due from 2025.

33. **The fiscal consolidation is expected to enable a sizable reduction of public debt and the accumulation of some macroeconomic buffers.** Under the baseline scenario, public debt is projected to fall from a peak of 61 percent in 2022 to 48 percent in 2026, falling below the 2025 intermediate target of 57 percent set by the 2020 COPLAFIP reform, which ruled that the public debt to GDP ratio should fall below 40 percent by 2032. This reduction is crucial not only to reach the national debt ceiling but also to improve the still negative market perception about Ecuador's public debt, which reduces markets' tolerance to Ecuador's debt. This public debt reduction would result from the primary surplus and economic growth that are expected to more than offset the effect of increasing interest payments and the need to accumulate public sector's deposits at the Central Bank, thus helping to build the much-needed liquidity fiscal buffers and international reserves that are critical to enhanced private sector confidence and resilience to external and climatic shocks.

34. **The public debt trajectory is vulnerable to shock to the baseline assumption,** particularly if growth is lower than projected**.** The standardized interest rate and primary balance shock have a limited impact on public debt**.** A slower than expected fiscal consolidation would reduce public debt to 51 percent by 2026, 3.0 percent above the base case scenario. Similarly, an increase in the average interest of 654 basis points between 2022 and 2026 increases public debt by 3.1 percentage points of GDP by 2026 to 51 percent. Conversely, a drop of 2.7 percentage points in GDP growth in 2022 and 2023 (the 10-year historical standard deviation before the pandemic) would lead to a sharp increase in public debt to a peak of 65 percent of GDP in 2023 before declining to 57 percent in 2026, 8.4 percentage point about the base case scenario. Moreover, if all these stress tests are combined, public debt could rise to 67 percent of GDP by 2023, before falling to 61 percent by 2026, 13 percentage points above the baseline scenario.

[17] Despite the 2020 bond restructuring and the end of the electoral process, Ecuador's Emerging Market Bond Index (EMBI) has remained close to 830 basis points in recent months.

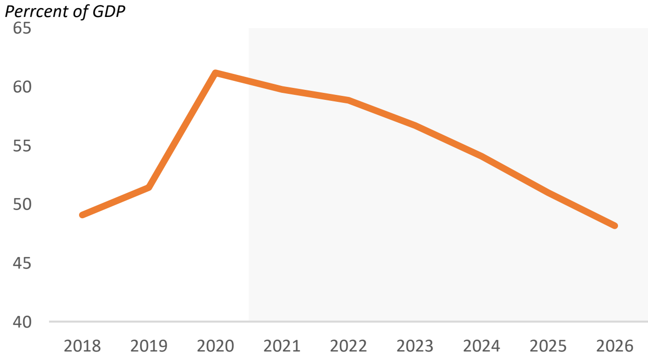
35. **Public debt sustainability is also exposed to other sources of vulnerability.** The materialization of contingent liabilities for about 10 percent of GDP in 2022 would increase public debt to a peak of 67 percent in 2023 before falling to 58 percent in 2026. Although the sound financial sector reduces the probability of a financial-crisis-related contingent liabilities crisis, Ecuador's public accounts are exposed to other contingent liabilities related to ongoing arbitration processes and natural disasters. Besides being exposed to fluctuations in international commodity prices and new infection waves, Ecuador is exposed to natural disasters, including worsening climate disasters related to ENSO, earthquakes, and volcano eruptions. Fiscal consolidation could also be undermined by the lack of reforms to address the pension system sustainability issues related to increasingly generous benefits, low contributions, aging population, and high informality. In the same vein, public accounts are exposed to a worse than expected performance of the more than 300 SOEs at different government levels, of which many are highly dependent on government transfers. However, the Government is taking steps to deal with these contingent liabilities by creating a fiscal risk management unit within the Ministry of Economy and Finance and reforming of SOEs legal framework.

Figure 1. Public debt sustainability analysis under standardized stress tests

Public sector is expected to start declining from 2021 …

Debt to GDP ratio under standarized stress tests

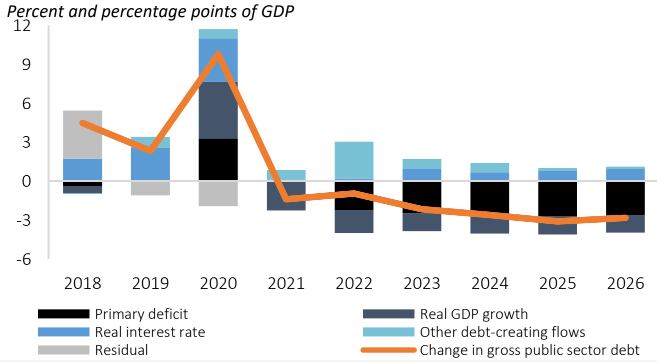
Perrcent of GDP



…on the back of primary surplus and economic growth.

Debt-creating flows

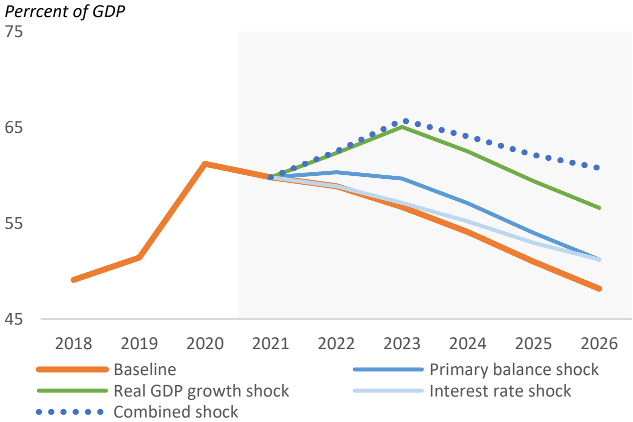
Percent and percentage points of GDP



However, public debt is still highly exposed to negative shocks on economic growth, …

Debt to GDP ratio under standarized stress tests

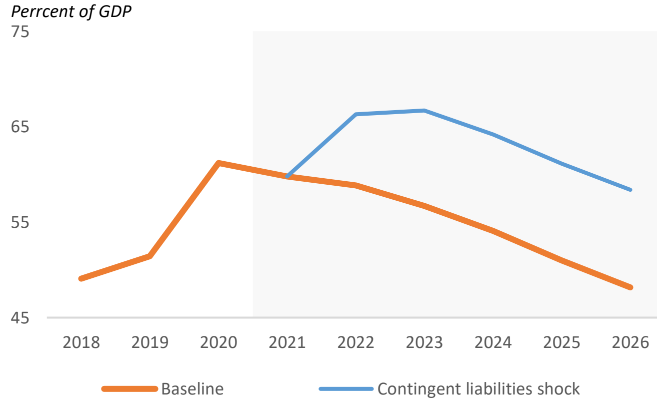
Perrcent of GDP



… the materialization of a large contingent liability

Debt to GDP ratio under standarized stress tests

Perrcent of GDP

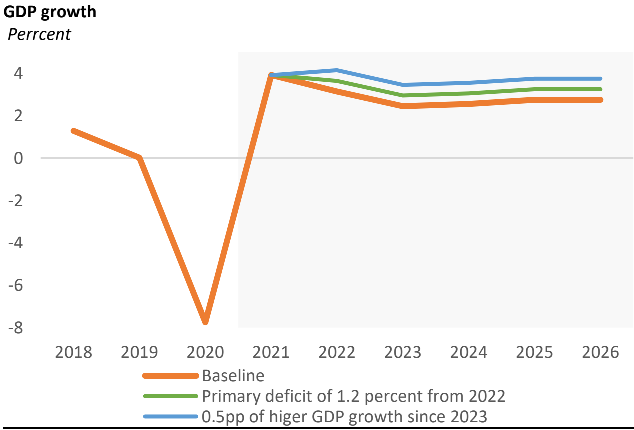


Source: International Monetary Fund and Staff estimates.

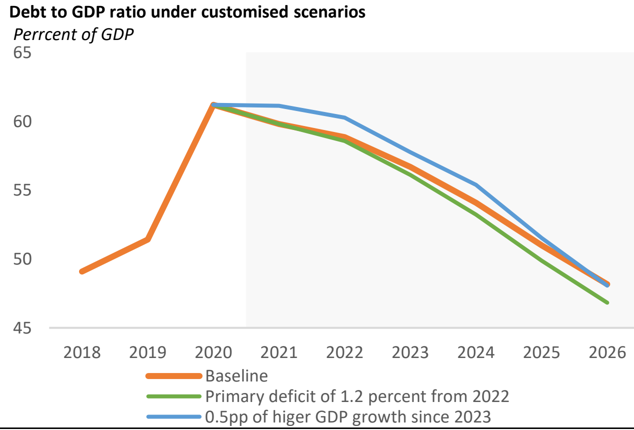
36. **Additionally, public debt is exposed to the upside risk of higher medium-term growth.** The previous analysis assumed that, after concluding the fiscal consolidation in 2024, economic growth will increase to a peak of 2.8 percent by 2026—a modest level due to the uncertainty about the magnitude and speed of the private sector reaction to ongoing government's efforts to improve the business environment. Although this conservative assumption is instrumental in evaluating fiscal sustainability, it also generates an upside risk previously pointed out that the private sector reacts better and quicker than expected. Two customized stress tests were estimated to assess this risk, assuming that GDP growth increased by 0.5 and 1.0 percentage points above the base case scenario from 2022. Increasing economic growth by 1.0 (0.5) percentage point reduces public debt to 46 (47) percent of GDP by 2026, 2.6 (1.4) percentage points below the base case scenario.

Figure 2. The effect of higher medium-term prospects on public debt sustainability

If medium-term growth prospects improve more than expected …



… public debt could decrease quicker.



Source: International Monetary Fund and Staff estimates.

37. **In sum, the macro framework is deemed adequate and sustainable over the medium term but exposed to substantial downside risks.** The Government is committed to reducing fiscal imbalance and macroeconomic vulnerabilities, fostering private sector investment, setting the ground for reigniting medium-term growth, and building some resilience to deal with adverse economic and climate shocks. The Government is likely to continue to receive financing from other IFIs, which will help contain the increase in interest payments over the forecasting period. These positive developments would help maintain public debt on a declining and sustainable path. However, limited macroeconomic buffers make Ecuador vulnerable to downside risks, including the still uncertain recovery from the pandemic, low or volatile oil prices, high international interest rates, potential carbon border tax adjustments, and US dollar appreciation. On the domestic front, natural disasters could generate additional stress to the macroeconomic framework, and a complex political context could impede or delay the implementation of some reforms. To mitigate political risk derived from the lack of a majority in the National Assembly, many of the reforms envisaged in the Government's program only require executive actions aiming at, for example, rationalizing public expenditure, introducing tax administration measures or reducing trade barriers. Moreover, the government is carefully selecting and tailoring the reforms submitted to the National Assembly to make them more likely to be passed.

2.3. IMF RELATIONS

38. **The IMF program has recently been adjusted to consider the new Government's priorities and is on track.** In October 2020, a 27-month arrangement under the EFF was approved to support the economic recovery from the pandemic, restore fiscal sustainability with equity, and generate sustainable growth with high-quality jobs. The first review was completed satisfactorily in December 2020. After a delay in approving the Organic Monetary and Financial Code and the electoral process triggered postponements of the second revision, the IMF completed the 2021 Article IV consultation and the combined second and third reviews under the EFF in September 2021. Most targets were met, except for the April target on non-financial public sector deposits, which was missed by a small margin. Notwithstanding some delays, there has been substantial progress on the structural reform agenda, including the reform to the Central Bank legal framework within the Organic Monetary and Financial Code. The new administration has committed to continue with the EFF-supported economic program to ensure environmental-friendly growth with high-quality jobs, promote transparent management of public resources, and ensure equity in the conduct of fiscally sustainable policies. The program has recalibrated the pace and composition of fiscal consolidation to reflect the new authorities' objectives and priorities, favoring a reduction of expenditures and higher taxation to the top of the income distribution. The structural agenda has been enhanced, including strengthening social safety nets, public financial management, transparency in the management of public resources, and the anti-corruption agenda. The next review under the EFF is expected in early 2022.

3. GOVERNMENT PROGRAM

39. **The NDP focuses on the country's medium and long-term development goals to reduce poverty and increase shared prosperity.** The plan has five pillars: economic, social, integral security, ecological transition, and institutional.

I. The Economic pillar's objectives are to: (i) increase and foster employment opportunities and labor conditions in an inclusive way; (ii) promote an economic system with clear rules that foster trade, tourism, investment, and the modernization of the national financial system; (iii) foster productivity and competitiveness in agriculture, manufacturing, aquaculture and fishing under a circular and climate-smart economy approach; and (iv) ensure that public finance is managed in a sustainable and transparent manner.

II. The Social pillar's objectives are to: (v) protect families, guarantee their rights and access to services, eradicate poverty, and promote social inclusion; (vi) guarantee the right to free, integral, and quality health service; (vii) enhance citizens' capacities and promote an innovative, inclusive and quality education; and (viii) create new opportunities and improve well-being in rural areas with an emphasis on towns and nationalities.

III. The Integral Security pillar's objectives are to: (xi) guarantee citizen security, public order and risk management; and (x) guarantee national sovereignty, territorial integrity and state security.

IV. The Ecological Transition pillar's objectives are to: (xi) conserve, restore, protect, and make sustainable use of natural resources; (xii) promote sustainable development models through climate change adaptation and mitigation measures; and (xiii) promote the integrated management of water resources.

V. The Institutional pillar's objectives are to: (xiv) strengthen state capacities with an emphasis on justice administration and efficiency in regulatory and control processes, (xv) promote public ethics, transparency and fight against corruption; and (xvi) promote regional integration, the strategic insertion of the country in the world, and guarantee the rights of people in situations of human mobility.

40. **Ecuador is a signatory of the Paris Accord on Climate Change and submitted its first Nationally Determined Contributions (NDC) in March 2019, which defines the policies, actions, and efforts to reduce GHG emissions, and to increase resilience and reduce vulnerability to adverse effects of climate change**. In its first implementation plan (NDC-PI), Ecuador set an unconditional GHG emission reduction target of 9 percent compared to a business-as-usual (BAU) scenario by 2030 and a conditional target of 20.9 percent from BAU by 2030. The plans provide a clear and realistic view of the milestones, outputs, domestic investments, and international support needed to meet climate and development targets. Mitigation measures identified in the country's NDC-PI target the energy, waste, industrial processes, agriculture, and land-use sectors. Adaptation measures focus on agriculture, health, human settlements and vulnerable populations, food safety, water, and natural heritage sectors.

41. **Ecuador, through Executive Decree No. 59 of 2021,[18] has committed to an ecological transition that promotes the balancing of economic growth with low-carbon development to protect the environment and social well-being**. As part of Ecuador's ecological transition, it is developing an economy-wide decarbonization plan[19] that will delineate a clear transition path towards reaching carbon neutrality by 2050. A key priority for both the ecological transition and the decarbonization plan is the development of clean energy, such as renewables, fostering energy efficiency and a net-zero transport sector, to help displace fossil fuels and achieve a carbon-neutral economy by 2050. The ecological transition and its decarbonization plan also focus on protecting and conserving land ecosystems and water resources for future generations, and public policies and public and private initiatives that promote less energy-intensive manufacturing activities to help Ecuador transition to a net-zero economy by 2050.

4. PROPOSED OPERATION

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

42. The proposed DPF is the first in a series of three operations supporting the Government's efforts to: (i) tackle selected structural challenges to foster growth, inclusion, job creation and climate resilience; and (ii) strengthen low-carbon development. Achieving macroeconomic stability and transitioning to a new, greener, resilient, and inclusive economic model is a priority for the Lasso Administration. The DPF series complements and reinforces the stabilization process by supporting measures to increase revenue mobilization and government spending efficiency, reducing trade barriers

[18] *https://www.fielweb.com/App_Themes/InformacionInteres/DE59AMFW.pdf*

[19] *https://www.ambiente.gob.ec/ministros-firmaron-pacto-hacia-la-descarbonizacion/*

to support global trade integration, and supporting the transition to cleaner energy while achieving climate change commitments, all essential measures for sustaining greener, more resilient growth. Similarly, a solid and updated social protection system will help protect the vulnerable during the adjustment process. A key priority of the Lasso administration is to tackle child malnutrition. The DPF series supports the Government's efforts in this area.

43. **The DPF series is broadly aligned with the GoE's program.** The pillars and actions reinforce the Government's priorities in the NDP and NDC:

- **Tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience**. The first pillar of the proposed series supports critical elements of the economic, social, and integral security pillars of the NDP that, among other things, aim to ensure public finance is managed in a sustainable and transparent manner, improve risk management, foster employment opportunities in an inclusive way, promote trade and investment, boost productivity and competitiveness, protect families, and promote social inclusion.

- **Strengthen low-carbon development**. The second pillar of the proposed operation is embedded in the ecological transition pillar of the NDP and the NDC that, among other things, aims to promote the integration of green growth measures through a low-carbon economy and climate change mitigation and adaptation measures.

44. **The implementation of the WBG's assistance program for Ecuador in recent years offers lessons that have been considered in preparing this DPF**. Three main lessons from prior DPFs are relevant and have been incorporated into the design of the current DPF series:

- **Strong analytical underpinnings and links to Bank investment lending provide the foundation for a well-designed operation.** Critical Advisory Services Analytics (ASAs) not only contributed to the design of previous lending operations but also helped shape the Government's reform efforts and supported a fruitful policy dialogue.
- **Strong links to other Bank technical capacity and investment operations are critical for the program's implementation.** Effective and timely execution of projects has been challenging due to weak institutional capacity for preparing and implementing projects and reforms. To help close this gap, this operation is being supported by Bank investment operations and technical assistance.
- **Strong cross-sectoral support is critical to address Ecuador's cross-cutting challenges to develop a green growth strategy**. The Bank's ability to provide support in a set of linked, cross-cutting reforms to support green growth challenges provides effective support for policy analysis to support country policy makers effectively in policy development, design and implementation.

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

45. **The programmatic DPF series proposes two pillars to support the government's agenda to address long-lasting structural challenges and foster low-carbon growth.** Pillar 1 supports efforts to strengthen the fiscal framework by increasing tax collection in an inclusive, transparent, and green way and improves the institutional structure to deal with climate-related challenges and NDC targets. It also

aims to support Ecuador's trade integration and competitiveness by reducing tariff and non-tariff barriers, enhancing formal job creation by easing rigidities in labor regulation, and closing the geographical divides in accessing digital technologies by promoting private investment in underserved regions. Pillar 2 supports the government's efforts to strengthen low-carbon development by mobilizing private capital to increase new sources of clean energy, fostering energy efficiency, and decarbonizing the transport sector. This pillar will also support the development of market-based mechanisms such as carbon trading, which should contribute to green growth and job creation through private capital mobilization. Together, these two pillars will help enhance the country's sustainability, competitiveness, productivity, and job creation, while promoting a low-carbon development pathway and greater economic resilience.

Pillar 1: Tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience

Mobilize tax revenues in an inclusive and green way through tax policy measures

Prior Action DPF1	Trigger DPF2	Trigger DPF3	Result Indicators
	T#1. The Borrower has enacted and issued the regulations to implement a Tax Reform that: (i) implements personal income tax reform, (ii) strengthens the beneficial ownership framework, and (iii) eliminates excises on purchasing electric vehicles.	**T#1.** The Borrower has implemented new measures to improve the efficiency, equity and transparency of the tax system as well as its green aspects.	**RI#1.** Increase in Central Government Tax revenues, excluding tariffs, US$ million. 2019= $13,072 2024= At least $14,000

46. **<u>Rationale and Background:</u> A broad tax reform will help anchor the country's fiscal sustainability.** Ecuador continues to be committed to reducing deficits to ensure sustainable public finances over the medium term by lowering the debt burden on future generations and reducing dependency on oil revenues in a de-carbonizing world. To reach this objective, the government relies on a mix of measures to improve expenditures efficiency and raise tax collections. On the expenditure front, it is working on reforms to enhance the efficiency of public procurement processes and foster fiscal discipline by affordable setting budget ceilings. On the revenue side, besides the positive impact of recovering oil prices and economic activity on fiscal revenues, the government moving ahead with selected tax policy and administration reforms to raise additional tax revenues.

47. **Ecuador's tax reform efforts have the potential to raise not only more but also better revenues by improving equity in the tax system and thus help tackle the increase in inequality caused by COVID-19.** Tax collection in Ecuador is lower than the average in the region (22.9 percent), with a tax-to-GDP ratio of 18.8 percent in 2019.[20] Weaknesses of the tax administration, including barriers to timely access to reliable and updated information, have a negative impact on the equity of the tax system by limiting the tax administration's control on tax avoidance and evasion and, consequently, reducing the fair contribution of the wealthiest individuals and large corporations. On the policy side, narrow tax bases

[20] On the policy side, narrow tax bases due to generous tax reliefs (tax exemptions, deductions, and credits) across all taxes and high levels of tax avoidance and evasion constitute important barriers for the country to achieve its revenue potential.

due to generous tax benefits (tax exemptions, deductions, and credits) across all taxes and high levels of tax avoidance and evasion constitute important barriers for the country to achieve its revenue potential. In particular, the personal income tax (PIT) paid by high-income groups is one of the lowest in the region, mainly driven by a high PIT threshold (which only taxes the top three income deciles and leads to at least 70 percent of the population not being subject to tax) and tax reliefs[21] that are among the highest (second after Paraguay) in Latin America.[22] The current design of the PIT is not only undermining tax collection but also the fairness and progressivity of the tax system.

48. **Revenue collection, efficiency, and fairness will be fostered by strengthening the tax administration's capacity to improve taxpayers' compliance.** Tax measures will target enforcement as well as enhancing taxpayers' services and boosting voluntary tax compliance, including through the establishment of a large taxpayer's unit (LTU)[23] and tax simplification reforms. The LTU was established in April 2021. An LTU can increase revenue collection by balancing enforcement and specialized taxpayers' services, allowing for developing closer relationships based on trust and mutual understanding with these taxpayers (known as "cooperative compliance").[24] This segment of taxpayers also plays a critical role by providing information on its owners, employees, suppliers, and customers, facilitating, therefore, the control function of the tax administration. While in the short run, the main focus will be on large taxpayers (corporations and wealthier individuals), this effort will be extended to cover all segments as part of the country's envisaged structural reform starting in 2023. The GoE estimates that the establishment of the LTU will yield about 0.1 percent of GDP in 2022 and about 0.2 percent from 2023 onwards. The establishment of the LTU will complement other measures aiming at enhanced international exchange of information, including the exchange of financial account information for tax purposes on an automatic basis,[25] which is also a critical tool to tackle tax avoidance and evasion and ensure that the wealthier individuals pay their fair share of taxes (see table below).

Table 5. Establishment of the legal framework for Automatic Exchange of Information (AEoI) under the Common Reporting Standard (CRS) in Ecuador: main timeline

April 5, 2017	Ecuador joins the Global Forum on Transparency and Exchange of Information for tax purposes (GF)
April 5, 2017	Commitment to AEoI
December 29, 2017	Umbrella legislative framework for the exchange of information (EOI) established
August 21, 2018 – Dec 26, 2019	Domestic legislation and regulation for AEoI (NAC-DGERCGC19-00000045, NAC-DGERCGC10-0694, NAC-DGERCGC19-00000065)

[21] Tax relief is any program or policy initiative designed to reduce the amount of taxes paid by individuals or businesses.
[22] IMF 2020: IMF Country Report No. 20/325
[23] Out of the 58 countries surveyed in 2017 by the Revenue Administration – Fiscal Information Tool (RA-FIT) survey, Ecuador was one of the 8 countries that did not have a large taxpayer's unit (LTU), which is known to be an effective tool for revenue collection. The establishment of the LTU is a prior action of the CAF budget support operation.
[24] A recent IMF analysis of large taxpayers in Ecuador showed that 55 percent of total income tax collection is concentrated in 500 taxpayers (IMF, December 2020).
[25] The lack of transparency of information on who owns what and where (beneficial ownership information) facilitates concealment of wealth, tax avoidance, tax evasion and money laundering. An effective implementation of strong beneficial ownership frameworks and Automatic Exchange of information facilitates fairer and more progressive taxation by supporting effective enforcement of income and wealth taxation, and enhancing countries' capacity to fight corruption, money laundering and other illicit financial flows.

October 29, 2018 August 26, 2019	Multilateral Convention on Mutual Administrative Assistance in Tax Matters (the "Convention") signed Convention ratified
October 29, 2018	Multilateral Competent Authority Agreement on Automatic Exchange of Financial Account Information (MCAA) signed
January 2021	Norms and procedures for the exchange of information established (Resolution NAC-DGERCGC21-00000006) Guidelines on AEoI issued (Instruction INS-IPG-INI-001-004)
March 2021	Norms on confidentiality issued (NAC-DGECCGC21-00000003)
September 2021	First exchanges take place with 61 international jurisdictions

49. **Triggers. In the future, these efforts to improve tax administration will be complemented by a tax reform, set as triggers for the upcoming two operations**. This reform seeks to mobilize additional resources with contributions from the wealthiest individuals. In particular, it would aim to eliminate selected personal income tax expenditures, improve VAT efficiency, and revise the environmental-related taxation framework. Additionally, this reform seeks to improve the ultimate beneficial ownership framework that, in conjunction with other measures to improve transparency, will not only contribute to mobilizing resources but also to tackling corruption, money laundering, and other illicit financial flows. Further reforms are envisaged, including improving VAT efficiency and revising the environmental-related taxation framework.

50. **Expected Results and Indicators. The above-mentioned tax reforms are expected to increase tax revenues by at least 0.9 percentage points of GDP in 2022 and 1.0 percentage points of GDP in 2023 and 2024, relative to the baseline.** Furthermore, these reforms will contribute to increasing the fairness and progressivity of the tax system (i) directly, by ensuring that everyone pays their fair share of taxes (accordingly to their capacity), as well as (ii) indirectly, by increasing the amount of resources that could be redistributed through government expenditures by targeting those with higher needs (e.g., expansion of social assistance). The proposed changes in personal income tax, indirect taxes, and transfers (including fuel subsidies), and the new entrepreneurship regime will reduce the Gini coefficient and moderate poverty by only 0.3 and 0.1 percent, respectively.

Strengthen the institutional framework to assess climate change mitigation and adaptation policies and risks to improve achievement in NDC Targets

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#1. To facilitate the mobilization, access and monitoring of public financing flows for climate change mitigation and adaptation programs, the Borrower has established an "Institutional Committee for Financing and Thematic Monitoring (*Comité Institutional de Financiamiento y*	**T#2**. The Borrower approved by inter-ministerial agreement the methodology for budget tagging of spending on climate change mitigation and adaptation within the framework of the commitments agreed by		**RI#2**. Increase in budget allocation linked to climate change objectives and targets using the new methodology, percent. 2020= 0 2024= At least 5

Seguimiento Temático) with the mandate of supporting the development, consolidation, coordination, and implementation of national strategies for accessing financing, and implementing economic and financial policies, for climate and sustainable development, as evidenced by Ministerial Agreement No.0097 issued by the Minister of Economy and Finance (October 15, 2021).	Ecuador in its NDC.		
	T#3. The Borrower enhanced the Ministry of Economy and Finance's ability to assess climate and disaster risks by establishing risk monitoring requirements for a dedicated fiscal risks unit.	**T#2**. The Borrower has approved a methodology to identify implicit and explicit contingent liabilities, its financial obligations, and how the government will address these liabilities, as described in the Disaster Risk Financing Strategy, including climate and disaster risks.	**RI#3**. Increase in the number of new financial instruments implemented to manage disaster risk and emergencies in accordance with the Disaster Risk Financing Strategy. 2020= 0 2024= At least 2

51. <u>Rationale and Background</u>**: Ecuador is among the 10 countries in the world with the highest risks from natural disasters (to assets and well-being) and is vulnerable to a wide range of natural hazards that can generate important losses for the economy**. Natural hazards range from geologic events like earthquakes and volcanic eruptions to climate-driven hydrometeorological events that made one out of seven people already exposed to floods.[26] The economic losses generated by these hazards are significant, as mentioned in the introduction. Moreover, impacts from a changing climate are expected to intensify in the coming years with rising temperatures and erratic rainfall, affecting not only sectors such as agriculture, fishery, forestry and livestock the most but also hydroelectricity production.

52. **Ecuador is increasingly committed to addressing climate change challenges**.[27] In 2012, the country enacted the first National Climate Change Strategy (2012-2025), establishing parameters for sector plans for mitigation and adaptation. The national efforts are aligned with international commitments under the Paris Accord on Climate Change. Ecuador established the Institutional Committee

[26] Hallegatte, Stephane, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg. 2017. Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1003-9.

[27] The Executive Decree No. 1815 of July 1, 2009 declared mitigation and adaptation to climate change as State policy which triggered the creation of the Undersecretariat of Climate Change (SCC) within the Ministry of the Environment (now the Ministry of the Environment, Water and Environmental Transition), as the entity in charge of climate change management in the country.

on Climate Change (CICC) under MAATE's Undersecretary for Climate Change to coordinate climate-related policies across sectors, including the ministries of economy and finance, foreign relations, agriculture and livestock, transport, and energy. In 2019, Ecuador presented its first NDC to the United Nations Framework Convention for Climate Change (UNFCCC). The same year, through Presidential Decree No. 840, the commitments under the NDC were declared mandatory for all entities related to the sectors that are part of the initiative. Ecuador, through the MEF, led the launch of the global Coalition of Ministries of Finance for Climate Action in 2019, which aims to enhance the institutional capacities to mainstream climate action in all public investments through the deployment of instruments such as green budget tagging, green investments, climate risk and economic assessments, and alignment of climate finance to country climate goals.

53. **The Government has recently developed a climate and disaster risk financing strategy**. On February 23, 2021, the government approved the National Climate Financing Strategy of Ecuador (EFIC per its acronyms in Spanish) aimed at identifying, mobilizing, and managing financial resources for the implementation of cross-cutting climate change actions at the national and sub-national levels. In addition, to increase Ecuador's resilience to natural hazards and climate change, the MEF developed its first Disaster Risk Financing (DRF) Strategy in 2020-1 with support from the World Bank.

54. **Despite substantial progress in developing and advancing a solid regulatory and policy framework for environmental sustainability, considerable challenges remain.** In particular, Ecuador needs to further strengthen its financial response capacity to manage the impacts of natural disasters and climate change and advance in decarbonizing the economy and developing climate resilience.

55. <u>Substance of the Prior Action (PA#1)</u>. The MEF aims to strengthen its capacity to provide a cross-sectoral strategy to better manage Ecuador's climate change and disaster risks. The MEF, one of the key actors leading the climate change agenda, has adopted a two-pronged approach: (i) reinforce its institutional capacity to facilitate the mobilization, access, and monitoring of public financing flows for climate change mitigation and adaptation programs to advance commitment set forth in the country's national climate strategies and policies; and (ii) better manage the cost of disasters and ensure predictable and timely access to critical resources.

56. **MEF created a body to strengthen its institutional capacity and internal coordination to advance the national strategies on climate change issues and facilitate climate financing for adaptation and mitigation actions, a prior action for this operation**. As evidenced by Ministerial Order 0097 (October 15, 2021), it created an Institutional Committee for Financing and Thematic Monitoring (CIFST as per its acronyms in Spanish[28]), responsible for the alignment of climate policies, strengthening institutional capacities, and supporting the development and implementation of financing and investment instruments to achieve the ambitious goals outlined in the national climate agenda and the Sustainable Development Goals (SDGs). The CIFST is a national committee[29] providing internal coordination within MEF and providing strategic finance for the compliance of Ecuador's NDC, NDP 2021-2025, and SDGs across the

[28] Comité Institucional de Financiamiento y Seguimiento Temático per its name in Spanish
[29] In Ecuador a committee has a higher rank than an internal unit within a Ministry, and given the inter-institutional character of climate policy, the establishment of such a committee provides the needed legal mandate for its actions to implemented by the different sectors as needed.

country's economy-wide sectors. The CISFT will also have a central role on the internal coordination to align fiscal and financial policies and actions needed for the country to achieve its NDCs in targeted mitigation[30] and adaptation[31] sector and to contribute to the realization of the objectives set forth in its EFIC.

57. **The CISFT will be responsible for defining and implementing the climate finance policies and strengthening MEF's institutional capacity on climate action**. The CIFST will provide the strategic economic vision for climate action and coordinate within MEF and with sectorial ministries for designing economic and financial strategies to access and mobilize financing from national and international resources. It will also have attributions for designing instruments to access, mobilize, manage and monitor climate finance to achieve NDC, NDP and SDGs. The latter includes instruments to improve the financial sustainability of climate change and SDG actions, and to promote the use of climate finance and sustainable development data to inform policy making and planning.[32] The CIFST is also trusted with advising, managing, and supporting the identification of sources for climate change financing and leading the project selection process that will be subject to national and international funding.

58. **The MEF will create the Fiscal Risk Unit responsible for increasing financial protection, preparedness, responsiveness, and recovery from large-scale disasters and implementing the Disaster Risk Fiscal Strategy.** It will define the structure and operational budget for creating the Fiscal Risks Unit to provide governance and overall coordination to increase financial protection, preparedness, responsiveness, and recovery from large-scale climate events and natural disasters. This will improve the country's resilience to natural hazards and climate change. The MEF has also committed to implementing the DRF strategy and improving the management of natural and climate disaster risks.

59. **Expected Results and Indicators**. **By strengthening Ecuador's institutional capacity to promote and manage climate financing, the prior action will reduce emissions, encourage adaptation, and build a resilient and sustainable economy**. In the short-term, the creation of the CIFST will help ensure that Ecuador's macro-fiscal policies and practices align with its climate goals and adopt a budgeting approach that prioritizes climate-responsive investments and moves from greening projects to greening the economy. It will also strengthen MEF's internal capacity to gain access to private and public financial resources and implement financial-related measures for advancing Ecuador's ambitious climate change agenda and the achievement of the NDC. Data generated through the different climate change related mechanisms designed by the CISFT, such as climate change budget tagging, will help inform policy and practice reforms, help identify funding gaps, and mobilize domestic and international resources. The Prior Action will result in the implementation of budget tagging in priority areas under pilot projects starting 2023 with a result indicator of at least 5 percent of the total budget expenditures linked to climate change objectives and targets by 2024. The goal will be to expand across other sectors starting in 2024.

60. **The establishment of the Fiscal Risk Unit, one of the triggers, would put in place the human, financial, legal, and administrative resources to strengthen fiscal risk management, including those related to climate change and climate disasters.** The Fiscal Risk Unit would lead the implementation of

[30] Mitigation sectors include energy, waste, industrial processes, agriculture, and land use.
[31] Adaptation sectors include agriculture, health, human settlements, food safety, water, and natural heritage.
[32] Articles 5.10 and 5.11 of the Ministerial Agreement 0097.

the DRF Strategy to help reap the benefits of a more strategic approach to financial protection against disasters and climate change. The analysis of contingent liabilities will lay the groundwork for determining the appropriate mix of risk financing instruments to ensure the country has immediate access to funds for the response, recovery, and reconstruction phases following disasters caused by natural hazards, including climate change. As a result, the Government will rely on well-defined resources to support the poor promptly during emergencies, without reallocating resources from other social programs. Additionally, implementing the DRF strategy will increase Ecuador's resilience to disasters. In this context, by 2024, the Fiscal Risk Unit is expected to implement at least 2 new financial instruments to manage climate and disaster risk and emergencies per the Disaster Risk Financing Strategy.

Improving Trade and Competitiveness

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#2. To reduce trade barriers, the Borrower has: (i) reduced the tariffs of 796 tariff lines, as evidenced by the following resolutions of the Foreign Trade Committee (*Comité de Comercio Exterior*) (COMEX): Resolution No. 007-2021 adopted on May 20, 2021 and effective May 31, 2021; and Resolution No. 009-2021 adopted July 9, 2021 and fully effective as of October 1, 2021; and (ii) in accordance with the recommendation of Informe Técnico No. MPCEIP-CTCE-008-2921 approved by the COMEX on July 22, 2021, eliminated one or more pre-import control documentation requirements with respect to 1,466 tariff subheadings, as evidenced by COMEX Resolution 010-2021 adopted on July 22, 2021, as published in the Official Register (*Suplemento*) No. 527 on August 31, 2021**.**	**T#4.** The Borrower has issued a new tariff schedule to reflect subheadings subject to reduced import duty treatment.	**T#3.** The Borrower has issued standards for green labeling of products with environmentally sustainable production.	**RI #4.** Increase in the percentage of imports benefiting from the measures (reducing tariffs and non-tariff measures). 2020=0 2024=At least 30

61. **<u>Rationale and Background</u>: Ecuador's integration into global value chains (GVCs) is limited partially due to high trade barriers.** The average import tariff was 12.3 percent in 2020, well above the 5.3 percent of comparator countries in the Pacific Alliance, comprised by Chile, Colombia, Mexico and Peru. Based on 2018 data, 56 percent of HS 6-digit product codes are subject to at least one non-tariff measure (NTM). To address these challenges, over the last few years, the Government has advanced negotiations in many trade agreements, reduced import tariffs for many products, and streamlined

specific non-tariff measures. It emphasized the liberalization of intermediate inputs and capital goods to insert enterprises into GVCs better, bolster investment, and increase the economy's competitiveness and productivity, including the country's exports.

62. <u>Substance of the Prior Action (PA#2):</u> **This operation supports the Government's efforts to spur competitiveness by reducing trade frictions restricting private sector-led growth.** Presidential Decree 68/2021 of June 2021 reduced a number of tariff and non-tariff barriers to facilitate trade and production and enhance competitiveness. Resolution 009-2021 (July 2021) of the Foreign Trade Committee mandates the reduction or elimination of import duties in 667 tariff lines in the tariff schedule. This resolution expands the previous tariff liberalization made by Resolution 007-2021 (May 2021) that eliminated import tariffs for 128 tariff lines, so that in the aggregate, 795 tariff lines are liberalized. Among the liberalized tariff lines, the average tariff rate was reduced from 10.8 percent to 1.5 percent, with most reductions implying a reduction of tariffs to zero. The largest share of liberalized products falls in chapter 84 for machinery, mechanical appliances, and parts. Some representative tariff headings include imported electric motors and generators, machine tools, vehicles, electrical apparatus, computers, and telecommunications equipment. Additionally, Resolution 010-2021 (July 2020) codifies and updates the goods importations subject to Prior Control Documents. These updates include the streamlining of several redundancies related to non-tariff measures and the exclusion of 1,862 tariff lines from prior control, with any controls to take place ex-post at the establishment level, thus facilitating customs processes. Going forward, the Government plans to continue reducing import costs via free trade agreements and further reductions in non-tariff measures.[33] To further boost export competitiveness on a sustainable basis and proactively prepare for cross-border carbon measures, the Government plans to improve its national quality system by introducing standards that identify products that comply with environmental sustainability criteria (green labeling).

63. <u>Expected Results and Indicators</u>: **The results indicator is the share of goods imports, by value, subject to reduced tariffs or removal from prior controls.** The liberalization reforms can bolster private investment as they reduce the cost imported capital goods such as machinery and mechanical appliances. They can also be particularly beneficial for firms that import inputs as they can substantially reduce uncertainty and trade costs, increase efficiency, and boost firm competitiveness.

Improve access to digital technologies

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
.	**T#5.** The Borrower has: (i) modified the telecommunication regulations to allow service providers to pay up to 50%	**T#4.** The Borrower has issued regulations to define the criteria, methodology and process to approve in-kind	**RI#5.** Increase in the percentage of homes in rural areas with internet access. 2020 =34.7

[33] Resolutions 007-2021 entered into force in May 2021, and Resolution 009-2021 entered into force in July of 2021. Resolution 010-021 entered in force in July 2021, but it is facing technical delays in its full implementation. The Government plans to solve this issue by February 2022.A reduced number of tariff reforms related to imports of vehicles, motorcycles, stoves and car radios in CKD form for domestic assembling will enter into force in October 2021.

	of the spectrum license tariffs and of the 1% universal service mandatory contribution via implementing investment plans or providing telecommunication services in prioritized zones (including climate risk zones) or vulnerable segments of the population included in the Universal Service Plan, with the prior authorization of the competent national authorities and complying with obligations agreed with the regulator (ii) issued regulations to remove barriers (e.g., regulatory sandbox, reduction in tariffs for digital devices and network equipment, infrastructure-sharing) to improve access, coverage, and adoption of internet services.	payments for investments by operators of networks and telecommunication services in exchange of their contribution to the universal service fund towards closing the digital gap.	2024=At least 38

64. <u>Rationale and background</u>**: Accelerating progress towards an inclusive digital ecosystem can contribute to achieving the World Bank Group's twin goals of poverty reduction and shared prosperity and increasing population resilience by improving access to information on climate-related hazards.** Widespread adoption of digital technologies by households, firms, and governments can contribute significantly to shared prosperity by boosting access to information, productivity and innovation, international competitiveness, and exports. It can also increase the resilience of the population and firms by facilitating their access to climate-related information and services, thereby improving their risk management and resilience during extreme climate events and pandemics. Applications of digital technologies in sectors such as energy, urban, transport and agriculture are creating new possibilities for climate change mitigation and adaptation strategies.[34] Digital technologies are essential to ensure a more efficient delivery of social safety nets, including their response to emergencies. Also, they allow for faster and efficient provision of documentation needed to become eligible. A well-developed digital ecosystem

[34] Digital technologies are also playing an increasingly important role for climate change mitigation and adaptation across many different sectors. A few examples are better availability of real time data, modelling and analysis on the impact of climate change in different geo-locations and for specific purposes – for example planning of urban and infrastructure, adaptation of crops and precision farming methods, early warning and emergency response, inclusion and empowerment.

will help reduce search and transaction costs, bringing down the country's high level of informality[35] and promoting inclusive and faster economic growth.[36] This, in turn, leads to greater employment and higher income for all segments of the population, reducing poverty and boosting the consumption levels of the bottom 40 percent of the distribution.[37]

65. **The COVID-19 crisis has increased the reliance of households and firms on digital communications and transactions, making Ecuador´s digital infrastructure access gap more evident, particularly in rural areas.** About 70 percent of the population uses the internet; however, access to broadband services is low; less than 50 percent for fixed internet broadband, and there is a stark rural/urban divide. Only 35 percent of rural households have access to fixed internet at home, compared to 60 percent in urban areas.[38] In addition, Ecuador also faces a gender gap in the digital sphere, with 72 percent of internet use by men compared to 69.5 percent by women and a similar gap exists regarding smartphone ownership.[39] Regarding mobile, 4G connections are used by only half of the market population, although its signal reaches more than 80 percent of the population.

66. **The risks of digital transformation are diverse and must also be addressed.** Uneven access to and adoption of digital technologies can exacerbate rather than mitigate high levels of inequality and social exclusion in LAC, widening the gap between the new participants of the digital economy and those left behind. Adopting digital technologies also introduces risks related to personal data protection, cybersecurity, and cybercrime. Cyber-threats are increasing worldwide, and they require appropriate legal and regulatory safeguards to make sure online risks are minimized while increasing users' trust in digital services. To address these issues, the Ecuadoran government recognizes this challenge and is already drafting a cybersecurity law to allow a more secure digital transformation, which is expected to be discussed at the National Assembly in 2022.

67. **Triggers. To tackle these challenges, the GoE accelerated the implementation of bold reforms and innovative programs.** Since June 2021, various efforts to increase internet access, close coverage gaps, and update the existing legal and regulatory framework were undertaken. This new wave of reforms builds on the broader sector modernization policy and investment agenda, laid out in the *Agenda Digital Ecuador* 2021-2022. They apply to various aspects of the digital industry and its application to several economic sectors by reducing duties on the import of devices, restructuring the universal service fund mechanisms, and establishing legal safeguards to tackle the increasing cyber threats.

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[35] Abstract: Digital technology is the representation of information in bits. This technology has reduced the cost of storage, computation, and transmission of data. Research on digital economics examines whether and how digital technology changes economic activity. In this review, we emphasize the reduction in five distinct economic costs associated with digital economic activity: search costs, replication costs, transportation costs, tracking costs, and verification costs. https://www.aeaweb.org/articles?id=10.1257/jel.20171452

[36] A ten percent increase in fixed broadband penetration translates into a 1.38 percent increase in GDP for developing countries. World Development Report 2016. https://documents1.worldbank.org/curated/en/178701467988875888/pdf/102955-WP-Box394845B-PUBLIC-WDR16-BP-Exploring-the-Relationship-between-Broadband-and-Economic-Growth-Minges.pdf

[37] https://www.itu.int/en/myitu/Publications/2020/03/05/14/53/Econometric-modelling-for-the-Americas

[38] MINTEL requested Bank's technical and financial support to help close the digital gap. The Bank is currently implementing an ASA focusing on universal access policies. Additional investment and policy reforms are needed to close the digital gap. Currently, there are no other initiatives.

[39] National Multipurpose survey. Statistics and Census Institute. 2020. https://www.ecuadorencifras.gob.ec/tecnologias-de-la-informacion-y-comunicacion-tic/

68. **The GoE is advancing in its reform of the digital ecosystem, and some key reforms have already been approved.** The GoE will modify telecommunication regulations to allow service providers to pay up to 50 percent of the spectrum license tariffs and of the mandatory 1 percent of annual revenues universal service contribution via implementing investment plans or providing telecommunication services in prioritized zones (including climate risk zones) or vulnerable segments of the population with the prior authorization of the competent national authorities, and complying with obligations agreed with the regulator. Digital technologies are playing a pivotal role in addressing the COVID-19 pandemic and climate crisis by enabling business continuity and facilitating access to public services, including health and education, disaster responses, and early warning systems. In addition, improving households' access to digital technologies and services can help reduce inequality, promote job creation, and support economic performance. The triggers will also cover regulatory incentives and remove barriers (e.g., regulatory sandbox, reduction in tariffs for digital devices and network equipment, infrastructure-sharing) to improve the access, coverage, and adoption of internet services, as well as define the methodology and criteria to approve in-kind payments for investments by operators of networks and telecommunication services in exchange for their contribution to the universal service fund. Together these policy reforms and incentives are expected to make a tangible contribution to closing the digital divide in terms of access and adoption of the internet by sustainably fostering private sector investments.

69. **The primary benefit is for poor households in rural and marginalized areas to benefit from all that is offered by the broadband access** (e.g., improve access to online education and vocational training, health, financial and public services, remote employment opportunities, information-sharing, social protection programs, etc.). The implementation of reforms aimed at increasing internet access are likely to have a significant impact on the country improving social and spatial inclusion and diminishing inequality. Restructuring the mechanism behind the universal service fund will improve the resources allocated to the areas of the country not reached by the internet, specifically in rural and marginalized urban areas, helping close the digital gap.

70. **The trigger will unlock significant opportunities for the private sector by opening new markets currently not reached by digital technologies**. Not only will telecommunication operators benefit from offering their services to new users, but the availability of the internet will create the basis for private-sector-led growth. Digital inclusion leads to more opportunity and economic advancement, as demonstrated by how private companies are heavily investing in connecting the unconnected (e.g., Google and Facebook).[40] Moreover, the improved connectivity across the country, as a result of the trigger, will bring new business opportunities to all those Ecuadorians who were left behind in the fourth industrial revolution and will boost the digital ecosystem for small and medium-sized enterprises (SMEs) (e.g., telecom vendors, internet service providers, IT manufacturing) in rural and marginalized urban areas. This latter aspect is crucial in tackling country inequality and supporting more inclusive growth.

71. **<u>Expected Results and Indicators</u>. The triggers aim at improving Ecuador's digital ecosystem.** A first key step in this direction would be an increase in the number of internet users. Increasing access to meaningful connectivity can also help improve people's resilience and adaptation to extreme climate

[40] https://www.weforum.org/agenda/2021/06/the-private-sector-is-taking-the-lead-on-enabling-digital-inclusion-here-s-how/

events, access to early warning systems and risk management approaches. The triggers will contribute to closing the digital gap, specifically focusing on the most pressing and prioritized urban/rural divide, by increasing the percentage of people and households accessing the internet in rural and marginalized urban areas from 34 percent to 38 percent in 2024. These triggers will also help to reduce the digital gap for the low-income population and women by increasing their access to and usage of digital services and making broadband-enabled devices and services more affordable. Digital technologies can play a critical role in supporting the transition to a low-carbon development pathway and adapting to climate change.[41]

Reduce rigidities in labor regulation

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
	T#6. The Borrower has promoted formal job creation by: (i) improving the function of the Council of Employment and Wages and transparency of its decisions on statutory earnings parameters; and (ii) enacted a law or decree of Job Opportunities to facilitate formal employment creation.	**T#5.** The Borrower has regulated new provisions on contract types and requirements to facilitate formal employment.	**RI#6** Increase the percentage of working youth and women with access to social security. 2020= Women =39.8 percent, Youth= 20.9 percent 2024=At least 42 for women, and 23 percent for youth

72. <u>**Rationale and background:**</u> **To reduce compliance costs for firms and improve monitoring and enforcement of labor regulations, the Government has simplified key regulatory procedures for hiring and dismissal.** Restrictive regulations can have a detrimental impact on the competitiveness of product and factor markets as they discourage firms from formalizing and growing. Thus, overly stringent labor regulations are a deterrent to investment in achieving scale or adopting new technologies, hindering economic growth and formal job creation.

73. Recent reforms simplified the formal registration of employment relationships, inspections, and dismissals (e.g., long verification time by inspectors, legal fees). The government has increased enforcement and reduced transaction costs in complying with labor regulations. Decree 123 also increased the Ministry of Labor's administrative and enforcement capacity and instructed it to change

[41] The World Outlook Report 2050 emphasizes the role of digital technologies in addressing climate change by providing development solutions, supporting a shift to low-carbon infrastructure, and responding to market shifts and consumer preferences. "It is clear that technology and the data it generates will have a key role to play in the long term by providing development solutions, supporting a shift to low-carbon infrastructure, and responding to market shifts and consumer preferences. There is a great opportunity to leverage the digital revolution to drive low-carbon and resilient economic growth". (Mukhi, N. et al. World Bank Outlook 2050: Strategic Directions Note. Supporting Countries to Meet Long-term Goals of Decarbonization. World Bank, Washington, DC, 2020, p.76).

secondary legislation, administrative and operational processes to promote private formal employment, particularly for youth and women. The government has further improved the administrative process for determining whether a dismissal has been made with "just cause" by reducing the time for inspectors to make their determinations and lowering the legal fees employers and employees incur in lengthy disputes. Finally, it introduced a random assignment of labor inspectors to reduce the room for discretion and increase compliance with labor regulations.

74. <u>**Triggers.**</u> **A proposed new Law [Decree] of Job Opportunities (Indicative Trigger #6) expected in November 2021 builds upon Decree 123 with a comprehensive, simplified package of employment regulation.** The new law [decree] would introduce changes to labor market regulation that lower the costs to firms of making formal employment offers and complying with worker protection requirements. These changes should provide employers and workers more freedom to agree on formal employment relationships that are better suited to the needs and preferences of vulnerable segments of the labor force (e.g., women, youth, elderly) while fostering enterprises formalization. The proposed law is expected to be particularly beneficial to youth and women.

75. **Indicative Trigger #6 also includes changes in the structure and transparency in policy decision-making of the Wage Council.** The *Consejo Salarial* is Ecuador's principal "tripartite" institution for social dialogue and employer-labor relations. The main function of the Wage Council is to determine the Basic Unified Wage (*salario basico unificado* or SBU), which acts as the national statutory wage floor and the minimum wage matrices for certain sectors, occupations, and seniority levels. Traditionally workers have been represented by labor unions. However, as unionization has been declining, unions now represent only about 5 percent of formal workers. The interest of unionized workers can differ significantly from other segments of the labor force that are nonetheless affected by statutory wage floors. Finding ways to increase the participation of younger workers, women, self-employed, and entrepreneurs could improve the negotiation process to set the minimum wages. In addition, increased transparency of negotiation and the information used to make decisions about key parameters of labor regulation should be a priority. This can be done by making publicly available all technical reports presented by different parties in the negotiation process, academia, and other stakeholders.

76. <u>**Expected Results and Indicators.**</u> **The expected medium-term outcome of these reforms is to increase the formal employment offers made by private businesses, particularly to youth and women.** In this context, the result indicator for this policy area is the share of working youth and women with access to social security, which is expected to increase by about 3 percentage points by 2024.

Strengthen the social protection mechanisms to protect the most vulnerable

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#3. To protect vulnerable populations, the Borrower has: (i) modified Executive Decree No. 712 of April 11, 2019, which established the Social Registry and its related administrative units, by	**T#7**. The Borrower has: (i) approved an interministerial agreement to adapt the institutional and legal framework to allow for an immediate	**T#6.** The Borrower has implemented the regulatory framework to	**RI#7**. Increase in total number of women from households nucleus from deciles 1 to 3 included in the social registry and thus potentially eligible to

enhancing the management of the Social Registry by targeting and including households and individuals (in addition to families) as well as the most vulnerable groups including those without administrative data, the future establishment of a model for permanent updating of the Social Registry, and mandating public executive agencies to provide their registers of data requested by the Social Registry Unit (e.g., on identity, tax, social security, socioeconomic status) to help keep the Social Registry updated and generate inputs for social protection policies and programs, and raising the profile of the Social Registry Unit by attaching it to the Presidency, as evidenced by Executive Decree No. 228 issued on October 20, 2021, as published in the Official Register (Suplemento) No. 575 on November 11, 2021; and (ii) (A) approved the implementation of a prioritized package of goods and services for pregnant women and children under 24 months of age to combat child and maternal malnutrition and (B) mandated an annual statistical survey of chronic child malnutrition rates, as evidenced by Executive Decree No. 1211 issued on December 15, 2020, as published in the Official Register (*Suplemento*) No. 356 on December 23, 2020..	vertical and horizontal expansion of social programs in the event of a disaster; (ii) issued the regulatory norms for the functioning of the Performance Stimulus Fund Mechanism(*Mecanismo de Fondo de estímulo al desempeño)* (linked to the Decree of *Uso de Excedentes Petroleros*), and (iii) issued a Decree granting regular migration status to more than 150,000 Venezuelan migrants and update their registry, as well as establishing procedures to protect victims of human trafficking and natural disasters via the implementation of a humanitarian visa.	harmonize the norms of the non-contributory social protection system	multiple programs. 2021=911,776 2024= More than 1.5 million. **RI#8.** Increase in the percent of boys and girls living in the 90 prioritized cantons who received their first attention from the Growing Up with our Children (*Creciendo con Nuestros Hijos*, or CNH) services before reaching 90 days of life and whose date of birth was after the day [30] of the month of [August] of the year [2020]. 2020= 0 2024= at least 60 percent of the boys and girls

Social Registry

77. **<u>Rationale and Background</u>: The Social Registry of Ecuador (SRE) has improved its overall coverage and inclusion of the poor in the last 2 years.** Between 2019 and July 2021, 1.02 million households-nucleus[42] were vetted and included in the SRE. SRE has increased the coverage of the bottom

[42] Nuclear households are made up of households with a head, a spouse and children, households with a head (male or female)

three deciles from less than 18 percent in 2019 to 90 percent in August 2021 through massive data collection and methodological index improvement.[43] The current main challenge is updating this data regularly to ensure continuous, high-quality targeting. This registry could be joint with the Social Registry of Victims (SRV), which captures the people affected by natural disasters. This combination allows for preemptive identification of potential victims and proper response of social assistance networks for a disastrous event (especially those more frequent extreme weather related to climate change).

78. The SRE is the cornerstone to improve equity in social assistance programs. By August 2021, close to 80 percent of poor people benefited from social assistance programs. Between July 2020 and August 2021, 2.6 million new people from the bottom three deciles were included in the SRE, and 51 percent were women. In the same period, around 300.000 poor women from the bottom three deciles began receiving social assistance through cash transfers programs, 71 percent of the new beneficiaries. The greatest coverage increases occurred in *Bono de Desarrollo Humano* (BDH) and *variable Bono de Desarrollo Humano* BDH-V programs, which are focused mainly on mothers from the bottom three deciles—about 83 percent of BDH and BDH-V beneficiaries are women from these deciles.

79. **The SRU needs to improve its data collection procedures to keep up to date.** By law, data on household-nucleus expires two years after it is collected; 15 percent of registries will expire in 2021, and 70 percent will do so by 2023. The SRE coverage needs to increase to at least 75 percent of household-nucleus to have enough information to properly target social programs in sectors such as water and sanitation, education, and health. However, a new massive data collection process will be expensive and time-consuming. The SRU is planning for a new an institutional model to update the social registry to allow better targeting with two pillars to: (i) involve the national statistical office (INEC) and universities to update existing records and include new ones; and (ii) use administrative data such as tax and social security records to capture the data from the highest deciles.

80. Coordination between the SRE and the Single Registry of Victims (SRV) can enhance the resilience of the social protection system. In the event of a natural or climate-related disaster, the information provided by the SRE should feed the SRV, facilitating the provision of timely relief to the most vulnerable. Moreover, the social protection programs offer an opportunity to obtain information about the beneficiaries' exposure to disasters, which can help the Risk Management System.

81. **Improving and updating the SRE coverage is critical to reaching vulnerable and poor women, who were disproportionally affected by the COVID-19 crisis**. The December 2020 National Labor Force Survey showed that only 32.1 percent of households with female heads in the lowest two quintiles are beneficiaries of any conditional transfers (i.e., *Bono de Desarrollo Humano or Joaquín Gallegos Lara*). Even though three-quarters of beneficiaries of social programs in Ecuador are women, approximately 350,000 women-headed households in the bottom two quintiles are excluded. Therefore, all efforts to increase and update the SRE coverage promote the inclusion of the most vulnerable women as potential

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and children, and households with only a head and a spouse. They exclude other types of households, such as unipersonal, extended, or compounded households.

[43] Improvement in density function and other minor changes of algorithm of INDEX SR 2018 has allowed a better classification.

beneficiaries of social assistance programs, including those living in areas exposed to climate risks. This is particularly important considering that the pandemic hit women the most. Almost one-third (30.7 percent) of women workers lost their job and are currently unemployed or inactive, 18 percentage points higher than men.[44] Additionally, nearly half of women reported an increase in the time allocated to help school-age children with their educational activities, 16 percentage points higher than men. Moreover, women and girls have been exposed to an increase in abuse.[45]

82. Substance of the Prior Action (PA#3(i)). **Reform to Executive Decree 712 established a model to guarantee keeping the current 80 percent of poor people covered by social assistance programs.** This model will establish mechanisms to allow the SRE to use administrative such as tax and social security records to capture information from the highest quintiles, which is critical to improving the targeting instruments. This will allow overcoming the structural problems of biases in identifying beneficiary households of social assistance programs due to the aging of the socio-economic information of the households. Additionally, it opens the possibility to involve, among other entities, INEC and universities in updating existing records and adding new ones based on transparency and social accountability mechanisms that may include local governments as, for example, a public information window. Better registries will increase low-income women's access to social protection programs. The Poverty and Social Impact Assessment (PSIA) shows that addressing inclusion and exclusion error in social programs could reduce extreme (moderate) poverty by 2 to 3 (3 to 4) percentage points among women-headed households.

83. **After having improved the SRE, the government expects to create a Single Registry of Victims and harmonize the norms of the non-contributory social protection system.** The government plans to issue an interministerial agreement to adapt the institutional and legal framework (covering the Risk Secretariat, Ministry of Environment, Ministry of Economic and Social Inclusion, and the SRE) to allow for an immediate vertical and horizontal expansion of social programs in the event of a disaster. As part of this process, the government expects to use the SRE to update the Single Registry of Victims to assist people better and gather information to improve the SRE. This would allow social programs to protect the consumption and assets of potentially affected households against the two most frequent extreme climate change events: floods and forest fires. Ministerial and inter-ministerial legal arrangements are needed to harmonize the rules (eligibility, entry, exit, grievances) of the different programs of the sector to effectively target the poor and vulnerable (**T#6 DPF3**). Complementary efforts may include the expansion and generalization of the use of the SR index and data across programs.

84. Expected Results and Indicators. **The number of women from households-nucleus from deciles 1 to 3 included in the social registry and thus potentially eligible to multiple programs will increase from 911,776 in 2021 to more than 1.5 million in 2024.** This will be possible due to the increase

[44] World Bank and UNDP (2021) High Frequency Phone Surveys, Round 1, Washington DC.

[45] Seven out of ten women in Ecuador have suffered violence (psychological, sexual, physical) at some point and the most common perpetrator of violence is the woman's partner (INEC, 2011, 2019). ONU mujeres (2020) https://ecuador.unwomen.org/es/noticias-y-eventos/articulos/2020/11/impacto-de-la-pandemia-covid-en-violencia-contra-las-mujeres; Tuija Veintie (2020) "Current issues on gender-based violence and discrimination – reports from Ecuador and the world", https://blogs.helsinki.fi/ecocultures-ecuador/2020/11/25/current-issues-on-gender-based-violence-and-discrimination-reports-from-ecuador-and-the-world/; Espinoza Carvajal A (2020) COVID-19 and the Limitations of Official Responses to Gender-Based Violence in Latin America: Evidence from Ecuador https://doi.org/10.1111/blar.13188

in the SRE valid records from 3 million household-nucleus in 2021 to 4 million by the end of 2024. The valid records for the three lowest deciles would increase from 1 million in 2021 to 1.3 million at the end of 2024, and the Single Registry of Victims will register up to 4 million household-nucleus by the end of 2024.

Chronic Child Malnutrition

85. **Rationale and background: The prevalence of Chronic Child Malnutrition has been decreasing in Latin America, except in Ecuador, Guatemala, and Haiti, where high rates persist**. In 2012, 25.3 percent of children under five years in Ecuador suffered from chronic malnutrition. This was more than in countries with lower GDP per capita, such as Paraguay, El Salvador, Dominican Republic and Bolivia.[46] Seven years later, in 2019, the rate remained at around 23 percent. The provinces of Morona Santiago, Chimborazo, Santa Elena, Bolívar, and Pastaza have the highest stunting prevalence: between three and four out of every ten boys and girls show low height-for-age. Between 2006 and 2014, there was a significant increase in the number of boys and girls suffering from malnutrition in specific areas of large cities such as Quito and Guayaquil. The trend observed in children under 6 months old is worrying since malnutrition increased from 10 percent in 2012 to 22 percent in 2019. A similar trend is observed in the group aged from 6 to 12 months, where rates increased from 14 percent in 2006 to 22.7 percent in 2019. These trends show that essential health and nutrition measures are not being adopted during the first year of life. Moreover, interruptions in the healthcare system and reductions in family income, among others, pushed twenty thousand children into a situation of malnutrition during the pandemic, particularly among the most vulnerable before COVID-19. Tackling malnutrition is essential for future growth and productivity.

86. **There are three main reasons for the limited success in combatting chronic malnutrition in Ecuador over the last 20 years.** First, there is a lack of information on nutrition at different levels. At the national level, there is no systematic process for the collection of relevant data. The health and nutrition survey (ESANUT) began only recently (2018), and anthropometry data is fairly ad hoc as well (gathered since 2004 in the national health survey ENDEMAIN, and only sporadically in the living conditions survey, the last one from 2014). There is also a lack of disaggregated data by provinces and families regarding children's growth and development. Second, there is a suboptimal allocation of resources for proven and cost-effective interventions in the areas with the highest prevalence of nutritional disorders, both in terms of supply (nutritional package, early childhood development, and hygiene and sanitation services) and demand (interventions that increase the use of services and parental knowledge of nutritional status, as conditional cash transfer –Bono de Desarrollo Humano). And third, there are coordination issues that are impeding access to comprehensive health/nutrition packages for families due to the lack of individualized information and monitoring services for both intermediate (coverage, services provided) and final (stunting, anemia) results.

87. **In addition, climate-related impacts are affecting food security and nutritional values of staple crops.** Climate change is expected to have a mixed impact on yields.[47] Ecuador is currently a net food

[46] WB and UN
[47] Future Foodscape 2020, The World Bank Group.

importer for most crops and could also be harmed by a surge in global food prices. Higher food prices could lead to an increased rate of malnutrition. Increasing the funding of food safety net programs and building a food security strategy can also improve food security and reduce malnutrition.

88. **The 2018 WB study[48] remarks that improving articulation and harmonization of activities and strategies among stakeholders providing services could reduce malnutrition and anemia**. The Ministry of Economic and Social Inclusion (*Ministerio de Inclusión Económica y Social, or* MIES) will provide the following key services: parent counseling on Early Child Development through the Growing Up with our Children (*Creciendo con Nuestros Hijos*, or CNH) program, and health conditional cash transfers through the Human Development Bonus (*Bono de Desarrollo Humano, or* BDH) program. In addition, the Ministry of Public Health (*Ministerio de Salud Pública*, or MSP) will provide child and pregnancy preventive controls, nutritional supplementation, and vaccination services, and subnational governments will provide water and sanitation services. These services and programs need to be monitored on the vulnerable population at the household level with accurate information from the Civil Registry (ID), the National Institute of Statistics and Census (*Instituto Nacional de Estadísticas y Censos*, or INEC, that provides annual surveys on anthropometric, water quality, and service/program coverage), and MEF (where there are gaps on budget allocation at the level of the executing unit for each program or service provided).

89. **Substance of the Prior Action (PA#3 (ii)). Executive Decree 1211 established the National Strategy "Ecuador grows without child malnutrition" to reduce malnutrition and resilience among children under two years old.** To implement this flagship policy, the current government has created a new National Secretariat which has coordinated the preparation and launching of the Intersectoral Strategic Plan for the Prevention and Reduction of Chronic Child Malnutrition, committing to reduce 6 pp of chronic child malnutrition in the government period. It mandates that all boys and girls under the age of two and pregnant women will receive a Prioritized Package of Healthcare, Hygiene, and Nutrition Services. This package includes preventive benefits starting at pregnancy, the timely administration of immunizations, counseling to promote the adoption of healthcare, hygiene, feeding and parenting practices, information and guidance on a climate-related increase of vector-borne diseases,[49] and access to safe water services, among others. The second stage is to establish the "*Fondo de Estimulo al Desempeño*", which will be funded by oil price excedents starting in 2022, through which incentives would be granted as a reward for the management and coverage indicators improvements of the Prioritized Package. Additionally, this decree mandated an annual statistical survey of chronic child malnutrition rates that would help to monitor progress and better target the prioritized package and other measures to tackle malnutrition.

90. **Executive Decree 1211 also establishes the implementation of a results-based budget scheme and, thus, the possibility of building an incentives approach that might accelerate the implementation of the Prioritized Packages.** In the short term, the objective is to ensure precise budget allocation and execution rules for products of the National Strategy "Ecuador grows without malnutrition". Progressively, MEF and the Technical Secretariat for -*Ecuador Crece sin Desnutrición* will establish a fund (*Fondo de Estimulo al Desempeño*) through which incentives would be granted as a reward for the improvements in

[48] Gutierrez, Nelson; Ciuffardi, Tomas; Rokx, Claudia; Brousset, Hugo; Gachet, Nicholas;.2018. *Apuntando Alto: Retos en la Lucha contra la Desnutrición Crónica*. Washington, D.C.: World Bank Group.
[49] Jimenez, S., CEPAL 2012.

the management and coverage indicators of the Prioritized Package. Moreover, these comprehensive Priority Packages increase the resilience of the targeted population, as otherwise the likelihood of increased extreme events and long-term warming in Ecuador could lead to conditions that favor the spread of mosquito-borne diseases, including dengue, zika, and chikungunya, increasing the overall vulnerability of the population and lowering their adaptive capacity.

91. **Expected Results and Indicators**. It is expected that by the end of 2024, at least 60 percent of the boys and girls living in the 90 prioritized cantons who received their first attention from the CNH services before reaching 90 days of life and whose date of birth was after the day [30] of the month of [August] of the year [2020] and mothers will enhance their capacity to learn and prevent development risks from environmental impacts.

Migration

92. **Rationale and Background: The magnitude of the Venezuelan exodus is unprecedented in recent Latin American and Caribbean history.** As of September 2019, it is estimated that 4.3 million Venezuelans have left their country, fleeing from an economic, social, and political crisis and increasing impacts from recurrent droughts and floods. It is estimated that approximately 1.9 million Venezuelans have passed through Ecuador since 2016. Most have continued their journey to countries further south, although around 430,000 have chosen to settle in Ecuador. In addition, climate-induced migration has triggered internal migration in several parts of Latin America beyond Venezuela. Increasing drought, recurrent floods, and extreme heat are contributing to migration patterns as adaptation options. The search for better conditions, integration, options for regularization, personal connections, and economic opportunities seem to be the main pull factors that influence the decision of Venezuelans to remain in Ecuador.

93. **Even though the impacts of migration on Ecuador's economy are generally modest, the volume and velocity of arrivals from Venezuela represent a shock to Ecuadorian society.** The migrant population represents 2.3 percent of the country's population, causing an impact of less than one percentage point of GDP. Despite its limited fiscal impact, the massive arrival of people from Venezuela in a short period poses challenges for Ecuador's institutional, legal, and service delivery structures. In addition to providing a humanitarian reception, the government of Ecuador has to provide for migrants' and refugees' needs and livelihoods, ranging from social assistance to health, education, and housing. While some Venezuelan households have successfully been included in the Social Registry, many are not.

94. **Ecuador does not have a single integrated registry of administrative information on migrants, and current data collection is fragmented, hosted by different government organizations, and not up to date**. For those who attained a regular status, the civil registry has some information, the migrant registry (from the previous regularization process) contains others, while the Social Registry has socioeconomic data. Information on migrants from these beneficiary registry systems is neither currently interoperable nor has an established transfer or sharing process.

95. **Despite Ecuador's rights and legal protections to migrants and refugees, 54 percent of Venezuelans remain in irregular legal status due to a lack of documentation or other hurdles.** This means

that Venezuelan migrants struggle to access social services, enter the formal workforce, and get quality jobs. Venezuelans in human mobility tend to work longer hours, earn less, and have worse conditions than Ecuadorians. These outcomes are even worse for migrant women. For example, female Venezuelan workers receive an hourly wage 49 percent lower than Ecuadorian women with similar characteristics. According to the May 2021 migrants needs assessment survey, over 70 percent of the households interviewed reported food insecurity, including households with children, pregnant and lactating women, and adolescent mothers. Additional vulnerabilities such as trafficking and sexual exploitation disproportionally affect Venezuelan women in irregular migrant conditions.

96. <u>**Trigger (T#3 DPF2 (iii)**</u>**. The government has been implementing a series of actions to reduce the vulnerability of Venezuelan migrants.** It has recently announced a new extraordinary regularization process, led by the Ministry of Foreign Affairs, and the operationalization of the reforms to the Human Mobility Law. The regularization process, divided into three phases, will allow for irregular Venezuelan migrants to gain a regular migratory status, including access to a national identification card and other documents allowing them to enter formal employment, access banking, secure housing, and other financial services, benefit from social assistance, and ease their access to several services and protections. The operationalization of the reform to the Human Mobility law will allow for secondary legislation, including the humanitarian visa for victims of human trafficking and exploitation and victims of natural disasters. An up-to-date registry of Venezuelan migrants that also documents their main areas of vulnerability will enhance the Government's capacity to plan, secure financial and infrastructure resources, and support a better quality of life and access to opportunities for vulnerable populations residing in the country.

97. The update of the social registry, together with the migrant registry, offers an important opportunity for the integration of data. Registration will also facilitate the identification, socioeconomic characterization, and targeting of migrants eligible for services such as education, health, emergency shelter and response in the event of a disaster, and social protection programs, reducing their exposure to risks (including climate-related ones) and vulnerability.

98. **The Government of Ecuador will issue the regulation to the Reform of the Organic Law of Human Mobility through an Executive Decree**, which will create both the exceptional temporary residency visa, a humanitarian visa, and a path to extraordinary migratory regularization. In addition, **the first phase of the extraordinary regularization process will be enacted through an Executive Decree**, which will create an exceptional temporary residency visa –*Visa de Residencia Temporal de Excepcion*, VIRTE–, providing a migratory amnesty and access to the formal labor market for a period of two years and subject to renewal, prioritizing Venezuelan migrants. The Migrant Registry will be created to register all migrants applying to the regularization.

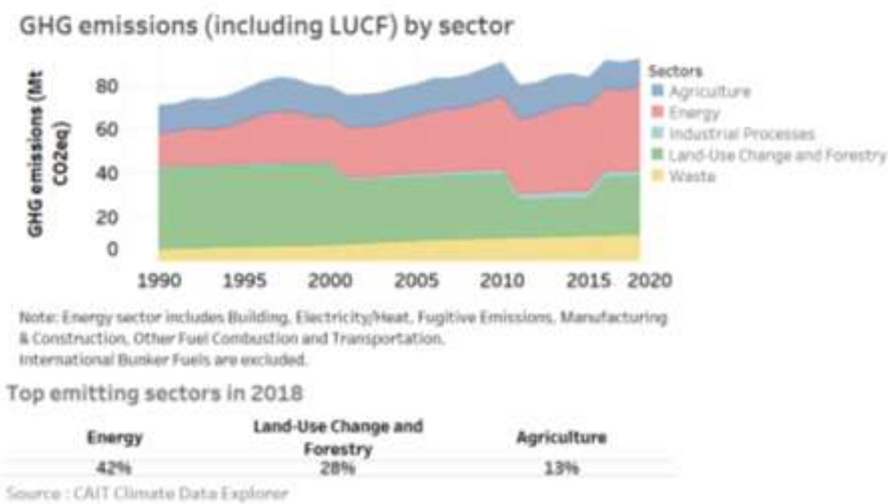
99. <u>**Expected Results and Indicators**</u>**. The first phase of the extraordinary regularization process aims to include approximately 211.000 Venezuelan migrants,** including 128.000 who entered the country through official entry points but have an irregular status, 28.000 Union of South American Nations (UNASUR) visa holders, and 56.000 Temporary Residence Visa for Exception for Humanitarian Reasons (VEHRU) visa holders. This regularization will enable the Ecuadorian government to have an updated registry of Venezuelan migrants settled in the country and will allow migrants to access the formal labor

market and social services

Pillar 2 Strengthen low -carbon development

100. **Actions under Pillar 2 focus on supporting Ecuador's low-carbon transition by fostering a greener and resilient energy sector, including the transport sector, and strengthening of measurement and reporting of GHG emissions to foster mitigation initiatives, such as for carbon trading, to foster private capital mobilization, green growth, and local green job creation.** A key sector to decarbonize in Ecuador is the energy sector that accounts for 42 percent of national emissions, including the emissions from transport sector (Figure 3). It is important to clarify that although joint GHG emissions from the agriculture sector and land-use change and forestry account to 41 percent of emissions, a closer policy assessment is underway where the World Bank would be identifying priority policies and investments needed to support the government mitigate the agriculture and land-use change and forestry sector emissions. Therefore, reforms under pillar 2 will focus on mitigation recovery measures with potential for a green recovery by promoting private investment in NCRE energy, fostering energy efficiency and decarbonization of the transport sector, and strengthening of measurement and reporting of GHG to foster carbon trading programs that can help mitigate the country's GHG emissions.

Figure 3. GHG emissions by Sector



Facilitate Low-Carbon Development

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#4. To facilitate private investment in energy generation (including from non-conventional renewable sources) and electromobility, the Borrower has enacted the Organic Law Reforming the Law of the Public Electric Energy	**T#8.** The Borrower has issued a regulation to establish the payment prioritization to make renewable energy projects bankable and		**RI #9**. Increase in clean energy generation capacity awarded to private sector-owned power plants, percent of

Service (*Ley Orgánica Reformatoria a la Ley Orgánica del Servicio Público de Energía Eléctrica*) which removes certain obstacles to private financing of non-conventional renewable electric generation and electric vehicle charging projects (e.g., clarifies operation license and concession termination events, lowers barriers to transfers of minority interests, provides for the authorization and regulation of commercial electric vehicle charging, and allows security interests in immovable project assets and transferability of license rights in favor of financiers), as published in the Official Register (***Suplemento***) No. 452 on May 14, 2021.	foster the participation of the private sector to develop clean energy.		total capacity. 2020= 2.5 2024= 12 **RI #10**. Increase in renewable energy generation capacity awarded (MW). 2020= 310 2024= at least 1200
PA#5 To increase the penetration of renewable energy, the Borrower, through the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, has issued the regulatory framework for the qualification, connection, installation and operation of small (less than 1 MW) renewable distributed generation systems for self-supply, as evidenced by Resolution No. ARCERNNR-013/2021 (containing Regulation No. ARCERNNR-001/2021) (April 5, 2021).		**T#7.** The Borrower has issued regulations to determine requirements and remuneration for the surplus energy produced by self-generators to be sold to the electricity system.	

Mobilizing private capital for clean energy provision

101. __Rationale and background.__ **Ecuador has been able to 'green' its electricity matrix, and now needs to increase its resilience while opening opportunities for private investment and green growth.** Ecuador's generation capacity increased 68 percent between 2011 and 2020, led by hydropower generation, which grew its participation in the electricity matrix from 54 percent to 78 percent,[50] displacing diesel-based thermal generation. However, most hydroelectric plants do not have reservoirs (i.e., they are run-of-river), which poses resilience challenges for the power sector. For instance, regressive erosion of the Coca River, coupled with other civil works issues, could temporarily put the large run-of-river hydroelectric plant, Coca-Codo Sinclair, out of service for maintenance for some time. During water scarcity situations, the system may revert to diesel-based thermal generation, with higher generation costs borne by the public sector and increased carbon emissions.

[50] *https://www.controlrecursosyenergia.gob.ec/estadisticas-del-sector-electrico-ecuatoriano-buscar/*

102. **The development of NCRE will be important to increase the resilience of a hydroelectric-based power system to the likely impacts of climate change while also opening to the private sector and green growth opportunities.** Complementing the hydroelectricity-based system with NCRE and storage will be increasingly important to displace existing fossil fuel-based generation and increase the resilience and adaptation to climate change impact on hydrology. In its National Electricity Plan, Ecuador has included two 500 MW blocks of renewable energy to be auctioned under public bidding processes called *Procesos Públicos de Selección* (PPS) in the next two years. The first 500 MW block has already been announced by the government and is expected to attract private investment, provided bankable conditions are established. The private sector is actively developing NCRE globally, including in neighboring countries such as Argentina, Chile, Colombia, and Peru and is likely to be interested in entering the electricity sector in Ecuador. The development of renewable energy has a strong job multiplier effect with 7.49 full-time direct jobs created from US$1 million spent in renewables compared with 2.65 full-time direct jobs in fossil fuels [51] and can be an opportunity for the development of green jobs in Ecuador.

103. Distributed generation, that provides on-site or decentralized generation,[52] can help increase the reliability of the electric system, promote private sector participation and harness available local renewable energy resources. Although the National Transmission System (NTS) reliability is good, there are several areas of the country that are connected to the national electricity grid that face risks of shortages due to the failure of various radial systems. This risk can be mitigated with distributed generation. The introduction of distributed generation can help reduce energy losses, delay reinforcements in the distribution network, and improve service in places where distribution companies have reliability and quality problems. It also opens a market segment for attracting investment, transferring technology and generating new green employment opportunities. The introduction of regulation to determine the remuneration for self-generators for green surplus energy supplied to the electricity grid will be important to promote distributed generation. Moreover, the incorporation of distributed generation with renewable technologies would make it possible to take advantage of available clean energy resources while contributing to the fulfillment of the country's climate change commitments.

104. **Ecuador can also replace fossil fuel consumption with electricity in important sectors of the economy, such as agro-industry and transport sector, to support a low-carbon development and improve its competitiveness.** With over 70 percent of its generation coming from hydropower, Ecuador has the potential to electrify important sectors of the economy to displace fossil fuels and support the creation of cleaner value chains. For instance, the shrimp industry is the leading export product for Ecuador; however, it consumes much diesel for powering its 147,000 hectares of cultivation pools as 61 percent of its 2,800 farms are not connected to the electricity grid.[53] Connecting these farms to the electricity grid can help replace diesel consumption with green electricity, lowering the industry's production costs, and increasing its efficiency. The development of green value chains in productive

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[52] Distributed generation (also called on-site generation or decentralized generation) refers to the generation of electricity for use on-site, rather than transmitting energy over the electric grid from a large, centralized facility. When connected to the electric utility's lower voltage distribution lines, distributed generation can help support delivery of clean, reliable power to additional customers and reduce electricity losses along sub -transmission and distribution lines.
[53] SENPLADES – *Transformacion de la Matriz Productiva*.

sectors is likely to increase their competitive edge in the export market as the country adapts productive export activities to future carbon border adjustments. Similarly, electrification of other agro-industrial activities, such as banana production, which accounts for 2 percent of GDP, could foster a greener low-carbon development. In addition, as transport accounts for 48.5 percent of energy sector emissions, increasing its electrification will be critical to displace fossil fuel consumption and decarbonize the energy sector.

105. **Substance of the Prior Action (Prior Action #4**). The government issued the Organic Reform Law to the Organic Law for Public Service of Electricity (LOSPEE) to reform the sector to facilitate private investment in energy generation, including NCRE and electromobility charging infrastructure. The Organic Reform Law to LOSPEE, approved in May 2021, opens the electricity sector to private sector participation through public bidding processes (PPS). To this end, the Organic Reform Law clarifies operation license and concession termination events, lowers barriers to transfers of minority interests, and allows security interest in immovable project assets and transferability of license rights in favor of financiers. It facilitates private investments in NCRE and provides the authorization and regulation of electric vehicle charging infrastructure to help decarbonize the economy and support the shift toward a low-carbon economy while increasing power sector resilience. The government will also issue regulation to establish the payment prioritization for the renewable energy projects that would enable the creation of an escrow account to enhance credibility of timely payments to private clean energy generation projects **(T#8, DPF2)**. These are important reforms for the energy transition, as well as to increase electricity matrix resilience, reduce GHG emissions, and leverage private sector resources to support the ecological transition and decarbonization plan.

106. **Substance of the Prior Action (Prior Action #5). The government issued a regulation to establish the framework of distributed generation for self-consumption for regulated electricity customers to enable the use of NCRE at the local level**. Existing regulations[54] for distributed generation were ineffective to scale up its deployment, and the government thus reviewed participation conditions and requirements in the regulation to increase the uptake of this innovative clean energy technology with self-consumption systems of up to 1 Megawatt (MW). The energy sector regulator, ARCERNNR, issued regulations No. ARCERNNR 013/2021[55] "Regulatory framework of Distributed Generation for self-consumption of regulated electricity consumers" to promote the development of distributed generation in residential, commercial and industrial regulated customers scaling up to 1MW. Moreover, ARCERNNR would issue a regulation **(T#7, DPF3)** to determine requirements and remuneration for the surplus green energy produced by self-generators to be supplied to the electricity system that can increase the deployment of distributed renewable generation.

107. **Expected Results and Indicators (Prior Action #4).** The issuance of the Organic Reform Law to LOSPEE will increase the participation of the private sector in the provision of NCRE. The share of NCRE by the private sector will increase from 2.5 percent to at least 12 percent, and the additional installed capacity of NCRE awarded by public bidding processes (PPS) will increase from 310 MW to at least 1,200

[54] In 2018, the regulator ARCONEL issued the Regulation No. 003/18, "Photovoltaic generation for self-consumption of electricity", that established the provisional participation conditions for residential customers with installations up to 300kW and industrial and commercial customers with installations up to 1000kW (1 MW).
[55] ARCERNNR issued regulations No. ARCERNNR 013/2021 containing Regulation No. ARCERNNR-001/2021.

MW by the end of the DPF series.

108. **Expected Results and Indicators (Prior Action #5).** The issuance of the "Regulatory framework for Distributed Generation for self-consumption of regulated electricity consumers" will increase distributed generation with renewable sources by the residential, commercial, and industrial sector in Ecuador to at least 300 MW by the end of the DPF series.

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#6. To promote consumer-side energy efficiency and reduction of GHG emissions, the Borrower has issued the General Regulations of the Organic Law on Energy Efficiency (*Reglamento General de la Ley Orgánica De Eficiencia Energética*), establishing the roles and responsibilities of the National Committee on Energy Efficiency (CNEE); the selection criteria, functions and governance for the CNEE's Advisory Council consisting of representatives from interested energy consumers, academia, professional unions, productive sectors, and civil society; the classification of energy consumers by sector and energy use (large, medium and small); obligations of large energy consumers to report periodically on their energy use, energy efficiency measures implemented and the results thereof, and to implement in their operations and (starting 2025) obtain certification under ISO 50001 (Energy Management) standards; requirements for entities to register as Energy Auditors, Energy Managers (under ISO	**T#9**. The Borrower has issued the methodology for energy efficiency tariffs in selected sectors as per the PLANEE.	**T#8.** The Borrower has issued energy efficiency tariffs in selected sectors to promote energy consumption reductions in the different sectors, including electromobility	**RI #11.** Decrease in energy consumption as per NDP 2021-2025, kBOE. 2020 = 0 2024=3,000

50001), or Energy Service Companies in the national Catalog of Energy Services Providers; mechanisms for the promotion of energy efficiency projects and the methodology for prioritizing and evaluating them; and policy mechanisms for meeting the targets in the national energy efficiency plan (such as "energy efficient" labeling of products and buildings, and issuing "energy savings" certificates to projects that demonstrate energy savings or carbon emissions avoided, entitling them to benefits such as lower tariffs), as evidenced by Executive Decree No. 229 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021.

Fostering Energy Efficiency

109. **<u>Rationale and background.</u> The government has identified energy efficiency as an important tool to accelerate low-carbon development**. Ecuador has significant opportunities to improve its energy efficiency (EE) and displace fossil fuels. Energy (in the power, buildings and transport sectors) is the main source of GHG emissions (46 percent) in Ecuador.[56] Emissions from the transport sector are estimated to have increased by 34 percent during the 2011-2018 period, and the buildings sector accounts for almost 10 percent of Ecuador's GHG emissions.[57] Moreover, there are relevant EE opportunities in the agro-industrial sectors whereby increasing electrification in these productive activities could displace fossil fuels and improve their cost-effectiveness. In addition, EE has important job multiplier impacts, as it can generate 7.72 full-time jobs in energy efficiency from US$ 1 million spent (compared with 2.65 full-time jobs from US$1 million spending in fossil fuels).[58] Reducing fossil fuel consumption in these end-use

[56] Institute for Transportation and Development Policy (ITDP) and CAIT.
[57] World Bank. Forthcoming. Climate Change Action Plan for Ecuador.
[58] Energy Policy Institute (EPI). 2013. Employment Estimates in the Energy Sector: Concepts, Methods and Results; accessed at: *https://www.ourenergypolicy.org/wp-content/uploads/2015/06/employment-estimates-in-the-energy-sector-concepts-methods-and-results.pdf*,
According to the American Council for an Energy-Efficient Economy (ACEEE), US$1 million invested in energy efficiency will create 1,320 new employments (direct and indirect) in the first year and 1,020 net jobs year after year for the next 19 years; https://www.aceee.org/files/pdf/fact-sheet/ee-job-creation.pdf

sectors is critical to achieving the country's NDCs and improving the competitiveness of productive sectors and EE has therefore been included in the NDP 2021-2025.

110. **Ecuador enacted the Organic Law on Energy Efficiency (LOEE, 2019) to create the national institutional framework and objectives for a multisector approach to EE**. The LOEE provides an intersectoral approach and establishes the overall framework for a national energy efficiency system. A key entity responsible for cross-sector coordination, engagement with all relevant stakeholders, and policy development is the National Energy Efficiency Committee (CNEE). The CNEE oversees the achievement of EE goals through progress of the National Plan for Energy Efficiency (PLANEE 2017-2035).[59] The LOEE also establishes a framework to promote the use of energy service provider companies (ESCO) to support energy management systems in the industrial and commercial sector. In the transport sector, it prioritizes the development of carbon-neutral transport modes to reduce fossil fuel consumption, as well as a vehicle scrapping plan, and mandates that new public transport buses be electrically powered starting 2025. The LOEE focuses on promoting a shift from fossil fuels to cleaner energy consumption in critical end-use sectors, including the agro-industrial sectors. A critical step to enable the implementation of the LOEE is the enactment of associated regulations.

111. **Substance of the Prior Action. The issuance of the secondary legislation to the LOEE is critical to enable its implementation and help spur investments in EE across sectors and lower GHG emissions**. The issuance of LOEE's regulation defines roles, responsibilities, incentives, and processes for the CNEE, its Advisory Council, and general oversight of PLANEE's implementation. It provides classification of energy consumers by sector and energy use (large, medium and small), including the obligation for large energy consumers to report periodically on their energy use, energy efficiency measures and their results, and starting 2025 obtain energy management certification. It also defines the requirements to register as energy auditors, certification processes for energy service companies (ESCOs) and a catalog of certified ESCOs to provide EE services to end-users. It also establishes policy mechanisms for meeting the targets in the PLANEE, such as "energy efficient" labeling of products and buildings, the implementation of energy management systems and issuing "energy savings" certificates to projects that demonstrate energy savings or carbon emissions avoided, . Importantly, it promotes the issuance of energy efficiency tariffs in selected sectors that would benefit end-users that have demonstrated energy savings or avoided carbon emissions (T#8, DPF3).

112. **Expected Results and Indicators.** The PA will contribute to increasing the implementation of the PLANEE by reducing energy consumption by at least 3,000 barrels of oil equivalent (kBOE) by 2024 from a business-as-usual (BAU) scenario. In addition, EE investments can have substantial spillover effects on job creation, private ESCO development, and emission reductions to transition to a low-carbon economy.

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#7. To promote a more efficient, greener and safer road transport	**T#10.** The Borrower has taken measures	**T#9**. The Borrower has taken measures	**RI # 12.** Decrease in CO2 emissions from land

[59] The PLANEE is the long-term EE policy established by the government and updated every 2 years. It is currently being updated by the Viceministry of Electricity at MERNR and is expected to be completed by December 2021.

sector, the Borrower has enacted the Organic Law Reforming the Organic Law on Land Transportation, Transit and Road Safety (*Ley Orgánica Reformatoria de la Ley Orgánica de Transporte Terrestre, Tránsito y Seguridad Vial*) that establishes incentives for the use of sustainable, environmentally-friendly means of transportation (including walking, bicycle use, and zero emissions vehicles), "green" labeling of license plates of electric/zero-emission vehicles to give effect to the applicable incentives, and enhanced measures for road safety, as published in the Official Register (*Suplemento*) No. 512 on August 10, 2021.	to spur the decarbonization of the transport sector by issuing a regulation to distribute national resources to subnational governments fostering safer and greener public transport modes.	to improve air quality by increasing air emission and efficiency standards for technical vehicle inspections on emissions and for the import of both new and used vehicles.	transportation, percentage change. 2020=0 2024=More than 3.5

Decarbonizing the Transport Sector

113. **<u>Rationale and Background.</u> Ecuador has around 2.4 million vehicles with an average age of 16 years, making it an old, polluting and unsafe flee**t.[60] The number of registered vehicles almost tripled from 918,908 in 2008 to 2,403,651 in 2018, while the population grew from 14.5 million to 17.1 million during the same period. The lack of vehicle inspection centers and the disorderly transfer of competencies to sub-national entities has meant that the mandatory approval of the vehicle technical inspection prior to obtaining the authorization for circulation is not being carried out correctly and, ultimately, lacks any functionality. In some municipalities, the review is only visually due to the lack of centers and qualified personnel. This limited technical vehicle inspection systems (VIS), coupled with a lack of renewal and maintenance, translates into low levels of vehicle safety, an increase in traffic accidents, and GHG emissions.

114. With 48.5 percent of total energy GHG emissions, transport represents the largest share of all energy sectors emissions.[61] Private vehicles are the transport mode that emits the highest CO2 emissions per traveler and per km, with emissions up to 6 times higher than that of a bus.[62] Reducing transport related GHG emissions requires more efficient urban mobility, more efficient interurban transport and logistics, and less polluting vehicles**.**

115. **Public transport faces structural challenges in Ecuador, and the financial sustainability of the sector has been further affected by the COVID-19 pandemic** due to: (i) reduction in demand, which

[60] National Institute of Statistics and Censuses, 2019
[61]t"Estrategia Nacional de Electromovilidad para Ecuador" (BID, 2021)
[62] "Emisiones de CO2: hechos y cifras" (European Parliament, 2019)

collapsed by up to 80 percent at the beginning of the crisis and is now recovering slowly; (ii) increased costs due to supply restrictions; and (iii) increased costs due to the implementation of disinfection and cleaning protocols. Financial losses are estimated at US$50 million per month and reflected in a drop of 90 percent in fleet renovation.[63] These numbers are especially important considering that modal shift (from private to public transport) is the major driver for reducing GHG emissions in urban transport. After the decentralization process started in 2008, transportation, transit control, and road safety responsibilities were assumed by subnational governments, for which the national government provides financial support. However, the current formula to share resources is based on the number of private vehicles in a given city, representing a perverse incentive to increase the number of cars. The national government also lacks reliable data to monitor the transit and road safety responsibilities assumed, given that the information received from the municipalities is low quality and not homogenized. The national government needs quality data to implement sound management decisions and policy actions and regulations to promote cleaner, greener, and safer public transportation through the allocation of transfers to subnational government, which in turn is required to encourage modal shift and reduce GHG emissions.

116. **Previous transport sector legislation (Organic Law of Land Transport, Traffic and Road Safety) was focused only on traffic control and speed management**. A change of approach is needed to tackle the issues of sustainability, safety and addressing low-carbon and resilient transportation measures, all of which are widely interlinked.

117. **<u>Substance of the Prior Actions</u>. A new Organic Law Reforming the Organic Law of Land Transport, Traffic and Road Safety was issued in August 2021, introducing new concepts on sustainable mobility, road safety, and the promotion of zero-emission vehicles.** The new law prioritizes sustainable modes of transport based on the following principles: (i) equity of access to transport infrastructure services; (ii) free mobility of people in the different modes of transport recognized by law; and (iii) sustainable development, seeking a balance between economic, environmental and social aspects. The new Organic Law also promotes economic development and job creation by fostering large-scale community cargo transportation systems for agricultural products, which allow small farmers to transport and sale their products without an intermediary.

118. **The new Organic Law brings a much-needed approach based on efficient, greener, and safer transportation**. The new law regulates active transport systems, promotes local mobility plans, and prioritizes actions to improve the vehicles' technical review system. Additionally, the new law promotes transport decarbonization by setting incentives for efficient and green transport modes, such as electromobility. Some of the incentives to promote zero-emissions vehicles include zero parking fees or no vehicle transit restriction during peak-and-plate to electric cars. These new concepts are in line with Ecuador's recently approved NDP. This new law also proposes implementing activities to improve air quality and energy-efficient mass public transport models. Finally, it proposes better road safety management through control actions undertaken by municipal and national traffic entities and the generation of public policy to reduce road-accident-related deaths. Through these actions, the

[63] "Efectos financieros en el transporte público del Ecuador en el contexto del COVID-19" (Cercana, 2020). Consultancy commisioned by the World Bank

government intends to reduce the use of private transportation and promote greener and safer public transportation alternatives.

119. **The prior action will allow the national government to tackle the transport sector's deficiencies, allowing for a more decarbonized and safer development.** Under the new Organic Law, low-emission mobility will be incentivized, including a badge (green labeling) to allow the identification of electric or zero-emission vehicles. The reform to the regulation to allocate transfers for urban mobility to subnational governments will foster safer and greener public transport, including electric public transportation and thereby disincentivizing the use of private transport modes. The PA will also enable improving air quality by including efficiency standards for vehicles technical inspections and vehicle imports. The implementation of these new efficiency and technical standards will enable removing the most polluting vehicles from roads and promoting fleet renewal. Similarly, the incentives to promote zero and low-emission vehicles will allow for a technological shift to cleaner modes for new fleet.

120. **Expected Results and Indicators.** The PA is expected to reduce GHG emissions generated by the land transportation sector from a BAU scenario. The expected results will be achieved in terms of the accumulated percentage reduction of CO2 emissions from the land transportation sector from 2020 to 2024. Given the annual increase of public and private vehicles in Ecuador, GHG emissions are expected to continue increasing in a BAU. Nevertheless, the proposed policy reforms are intended to reduce such an increase. Considering as a baseline the data from the 2019 Ecuadorian National Energy Balance report and estimating GHG emissions for the next 4 years, in a BAU scenario, emissions are expected to reach 21,274 ktons by 2024 (an annual average increase of 3.4 percent). However, given the policy reforms, GHG emissions will only increase to 20,433.48 ktons by 2024, representing an annual average growth of 2.4 percent. Thus, the land transportation CO2 emissions will be reduced by at least 3.5 percent from 2020 to 2024.

Enhance measurement and reporting of GHG mitigation initiatives

Prior Action DPF1	Triggers DPF2	Triggers DPF3	Result Indicators
PA#8: To strengthen the ability of different sectors to collect and report information on GHG, and of the Borrower to prepare national GHG inventories and monitor progress on its NDCs in relation to GHG reduction the context of the Enhanced Transparency Framework of the Paris Agreement, the Borrower, through the Ministry of Environment, Water and Ecological Transition (MAATE) and with participation and input from relevant sector stakeholders, has issued and made public on its website four new technical guides containing updated procedures and methodologies for the collection,	**T#11.** The Borrower has issued the regulation to establish a measurement, reporting and verification (MRV) of GHG mitigation in productive sectors of the economy and compensation mechanism for PECC**.**	**T#10.** The Borrower has established a National Emissions Registry to be used by the compensation mechanism under PECC.	**RI # 13.** Increase in the number of Public and Private institutions that registered their mitigation measures under the PECC. 2020=0 2024=150

assessment, and management of data required for the preparation of national greenhouse gas inventories, for the following sectors: (i) agriculture; (ii) waste; (iii) industrial processes and product use (mineral products category); and (iv) energy (fuel combustion in manufacturing and construction subcategory), as confirmed by Circular No. MAAE-MAAE-2021-0228-C dated October 20, 2021 from the Minister of Environment, Water and Ecological Transition to the Minister of Agriculture and Livestock, the Minister of Energy and Non-Renewable Natural Resources, the Minister of Production, Foreign Trade, Investment and Fisheries, and the Undersecretary of Environmental Quality of MAATE. **Prior Action #9.** To foster greenhouse gas emission reductions in all productive sectors of the economy, the Borrower has created the Ecuador Carbon Zero Program (*Programa Ecuador Carbono Cero*) (PECC), which establishes the processes and requirements for private and public institutions to quantify, reduce and offset/compensate their carbon emissions, and obtain one of three different "green" certifications for their climate change mitigation and adaptation actions (i.e., carbon footprint quantification; carbon reduction; or carbon neutrality) and its associated benefits, as evidenced by Ministerial Agreement No. MAAE-2021-18 issued by the Ministry of Environment and Water on May 6, 2021.

121. <u>**Rationale and Background:**</u> **Developing transparent and strong low-carbon and resilience data collection and management can help ensure that the MRV methodologies for the different sectors are robust, updated and avoid double counting**. A robust and transparent data collection and management

system requires strengthening of the institutional capacities to standardize data collection and management, including the appropriate procedures, methodologies and capacity building. This is the basis to develop monitoring, reporting, and verification (MRV) methodologies for all sectors of the economy to collect and provide information to monitor NDC progress and for the preparation of national emission registries inventories. Ultimately, the development of transparent and robust climate data collection and management is essential for informing the constituencies, to feed into national registry on emissions for the development of carbon markets and international reporting (under UNFCCC climate dialogues), and accessing climate financing such as green bonds.

122. In Ecuador climate reporting by national entities, autonomous decentralized agencies (GADs), academia, and private sector is mandated by the Environment Organic Code Regulation (article 720), however the architecture for climate data collection and management needs to be updated and strengthened to ensure adequate monitoring of NDC progress and for a robust national GHG accounting inventory. Ecuador's methodology for GHG accounting was developed following Intergovernmental Panel on Climate Change (IPCC 1996), which has a different methodology from the current one under IPCC 2006,[64] collecting information under six sectors instead of the aggregated four Ecuador needs to report on. The current methodology has an outdated framework to assess GHG emissions insofar as it (i) has a lower quality control in terms of consistency in the analytical quantification, data integrity, correctness and completeness, (ii) lacks guidance to identify and address errors and omissions, and (iii) lacks guidance on documenting and archiving inventory updates material and recording quality control activities. Furthermore, the institutional arrangements and flow of information for data collection and traceability is outdated and strengthening of capacities in the different sectors is needed to collect and manage climate data in a systematic way according to IPCC 6. By developing the IPCC 6 UNFCCC framework for transparency and updating its methodologies in the collection of energy, industrial processes and product use (IPPU), agriculture and land use, land-use change and forestry (LULUCF), and waste management data,[65] Ecuador will gain an improved vision of the actions to address climate change and a mechanism to monitor progress made concerning NDCs.

123. Moreover, to achieve Ecuador's NDCs within the framework of the Paris Agreement and the fulfillment of the SDGs, the government needs to prioritize reductions in GHG emissions from the energy sector.[66] The development of a voluntary carbon program can contribute to achieving carbon neutrality. These voluntary programs propose compensating initiatives implemented by public, private, community, or mixed entities that reduce or remove GHGs from the atmosphere under a transparent and verifiable scheme. This scheme will allow entities to register and report their activities and commitments and access environmental incentives through the quantification, reduction, and neutralization of GHGs emitted. In addition, these voluntary carbon trading programs allow economic sectors and public services

[64] IPCC 2016 aggregated data collection in four sectors which are: Industrial Processes and Products Use (IPPU), Land use and Land use change and Forestry (LULUCF), Energy and Waste.

[65] Ecuador needed to update its data management and collection to be able to report as per IPCC 2006 that established new reporting for energy, industrial processes and product use (IPPU), agriculture and Land Use, Land Use Change and Forestry (LULUCF), and land-use, and waste. This is fundamental to prepare UNFCCC communications and to strategically allocate climate finance to the different sectors,

[66] The energy sector includes electricity/heat, fugitive emissions, building, manufacturing and construction, other fuel combustion and transport.

to align themselves to more demanding green global standards and certifications, and potential future carbon border adjustments to exports.[67] These programs also support changes in consumers' behavior patterns towards low-carbon and sustainable production and use of goods. Similar programs in other countries, such as Chile and Peru, have resulted in almost 1,200 registered organizations, 90 percent from the private sector, with more than 3,000 people trained in developing GHG mitigation strategies, and almost 700 certifications provided, all of which support lowering carbon footprint of the participating entities. The program requires the creation of standardized and verifiable Emission Compensation Units (UCEs), registered with the Ministry of the Environment, Water, and Ecological Transition (MAATE). Such units undergo validation and/or verification by a Compliance Assessment Body duly accredited.

124. **Substance of the Prior Action (Prior Action # 8). To strengthen the ability of the key sectors as per IPCC 2006 to collect and provide information on GHG, and to prepare national GHG inventories and monitor its NDCs in the context of the Enhanced Transparency Framework of the Paris Agreement, the government has published four technical guides to improve the transparency in climate data collection and management.** This has entailed the revision of GHG accounting methodologies as per IPPC 2006, revising the institutional capacities, accountability, and quality processes to provide relevant and traceable information from the four different sectors, including energy, IPPU, LULUCF, and waste, and specific emission factors for each subcategory. The definition and publication of these four technical guides on procedures and methodology to collect and manage climate data is important to systematize and standardize climate information across sectors and will be a critical input to build the national GHG emission registry and MRVs across sectors. The GoE plans to create a National Register of Climate Change under the supervision of the Climate Change Undersecretariat of the MAATE (T#10, DPF3) and among the activities to be tagged to this new agency are those related to the development of procedures, guidelines, and technical tools for development and implementation of the MRV system to monitor and verify sectorial information by the relevant actors (T#11 DPF2). This will include, for example, the tagging of incentives to increase the use of electric vehicles and machinery and emphasize actions that promote carbon sequestration and the use of renewables.

125. **Substance of the Prior Action (Prior Action # 9). The government has established the voluntary *Ecuador Carbon Zero Program (PECC)* to foster GHG emission reductions in all productive sectors of the economy (approved by ministerial agreement No. MAAE-2021-18 on May 6, 2021).** The implementation of PECC will enable the different sectors of the economy to increase their standards in the face of more demanding trade regimes worldwide, consecutively awarding the quantification, reduction, and neutrality of GHG emissions through incentives. The ministerial agreement sets forth the guidelines and criteria for the implementation of the PECC and includes specific provisions on: (i) the creation of a national GHG emissions and organizational carbon footprint inventory; and (ii) the potential to certify, monitor, and compensate actions for reducing GHG emissions and compensations for those emissions that have not been able to be reduced, to reach carbon neutrality. Moreover, the ministerial agreement includes dedicated provisions on the processes to be followed for the verification of the requirements of each level of application of the "Green Point" certification (or Punto Verde as per its name in Spanish) incentives, as

[67] This will include the awarding of honorific distinctions within categories of action. These include 'Green Initiative Badge - Carbon Footprint, Green Certification - Carbon Reduction and Carbon Neutrality Green Certification Badge".

well as the validation processes and / or verification of the compensation proposed initiatives of the PECC. Additional measures to support its implementation include issuing of regulations to establish a MRV system for GHG mitigation and a compensation mechanism for PECC (T#11, DPF2) and the establishment of a National Emissions Registry to monitor climate progress and support emission compensation mechanisms under PECC(T#10, DPF3).

126. **Expected Results and Indicators (Prior action #9 and #10). The publishing of the technical guidelines for climate data collection and management, together with the approval of the PECC, will enable monitoring, reporting, and verification of activities from public and private entities that are pursuing the implementation of low-carbon and sustainable activities.** Prior actions 9 and 10 will materialize in a result indicator of having at least 150 public and private entities registered in the PECC program by 2024.

127. Table of DPF Prior Action and Analytical Underpinnings (See Annex 6).

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

128. **The DPF series plays a central role in the World Bank Group's engagement with Ecuador and is fully aligned with the WBG's FY19-FY23 Country Partnership Framework (CPF, report no. 135374-EC, June 2019).** The CPF constitutes the first full-fledged WBG Strategy for Ecuador since 2007. It focuses on achieving the WBG's twin goals—ending extreme poverty and boosting shared prosperity—through three interdependent areas: (i) Supporting Fundamentals for Inclusive Growth, (ii) Building Human Capital and Protecting the Poor, and (iii) Enhancing Institutional and Environmental Sustainability. Pillar 1 of the proposed DPF series supports CPF objectives under results area (i), (ii), and (iii), and Pillar 2 supports CPF objectives under results area (iii).

129. **The DPF series is closely linked with the Social Safety Net (SSN) Project (P167416), the principal instrument to support the social protection system.** The project supports improvements in the targeting process of SSN beneficiaries and the provision of integrated, relevant social protection packages. Pillar 1 of the proposed DPF supports regulatory reforms to support the implementation of the SSN Project.

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

130. **All legal reform proposals are made publicly available online and have two open consultation phases of a minimum of 30 days in the National Assembly.** The first round takes as its base the initial reform proposal. It includes key actors affected by the initiative but is open to the public at large. A second-round takes place if there is a presidential veto of a law approved by the National Assembly, and there are further revisions to the law.[68]

[68] A veto may happen when the President expresses concern or disagreement with aspects of a law after the first approval by the National Assembly. In this event, the law returns to the National Assembly and these aspects are revised.

131. **Collaboration with other Development Partners.** This DPF forms part of a package of coordinated financial assistance from international partners, including the IMF, IDB, and CAF. The staff of the institutions has met regularly to coordinate efforts and align messages. Strong complementarities exist in selected areas of support. These derive from coordinated technical assistance activities. Under Pillar 1, frequent discussions have been held with the IMF, CAF, and IADB, to ensure coordination on tax policy and tax administration reform, and Child Malnutrition Program, Under Pillar 2, discussions have been held with the Latin American Development Bank (CAF), United Nations Development Program (UNDP), and the Interamerican Development Bank (IADB) to ensure coordination with ongoing support on climate change (UNDP) and the energy transition (CAF and IADB).

Table 4. Overview of the IFI's support to the Government's Green and Resilient Recovery Agenda.

Reform area covered by the DPF	IFIs involved	Type of support
Tax reform	WB	Technical assistance on incidence analysis
Tax policy	WB, IADB, IMF, UNDP	Financial and technical assistance
Institutional Committee for Financing and Thematic Monitoring	IADB WB	Technical assistance Technical assistance and financial
Fiscal Risk Unit	WB IADB	Financing Technical assistance
Disaster Risk Management	WB	Technical assistance
Trade Policy	WB	Technical assistance
Access to Digital Technologies	WB	Technical assistance and financing
Social Registry and social programs	WB IMF	Financing and technical assistance Financing
Child Malnutrition	CAF, WB	Technical assistance and financing
Migration	WB US, IOM UNHCR UNDP UNICEF,EU	Technical assistance Technical assistance
Law of the Public Electric Energy Service	WB	Technical assistance
National Energy Efficient System	WB	Technical assistance
Transport Sector Reforms	WB	Technical assistance
National Emission Registry	WB	Technical assistance
Programa Ecuador Carbono Cero	WB	Technical assistance

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1. POVERTY AND SOCIAL IMPACT

132. **The prior actions supported by the proposed operation are expected to have positive or neutral impacts on poor households and vulnerable groups in the short run and overall positive implications in the medium and long term**. The PSIA follows Bank guidelines and analyzes the potential distributional impacts of the Government's program. It covers poverty and shared prosperity implications and other welfare-related outcomes such as household income and expenditures, employment, and prices. The policies supported by this operation, such as measures for enhancing efficiency in the mobilization and transparency in the management of public resources and strengthening the disaster risk

and social protection management systems, are expected to improve the Government's fiscal position. Also, prior actions to reduce regulatory constraints for private-sector-led growth, increase digital connectivity and create jobs are designed to facilitate private sector investment, social inclusion and enhance Ecuador's competitiveness. Finally, the measures for promoting low-carbon developments are expected to improve the overall resilience of the economy. The expected impacts are based on quantitative analysis, a review of academic literature, and additional information gathered during the preparation of the operation.

133. **Policies under Pillar 1 would have neutral or positive impacts on households' welfare in the short run and overall positive effects in the long run**. The measures to mobilize revenues will not negatively affect the poor nor the bottom 40 households' welfare in the short run. In the medium to long run, indirect positive impacts on welfare could be expected conditional on how additional revenues are translated to strengthening budget management, defining priorities, and improving service delivery, especially for the vulnerable populations. The measures to facilitate the mobilization, access, and monitoring of public financing flows for targeted climate change mitigation and adaptation programs would not significantly impact equity and poverty in the short term. Indirect positive welfare impacts could prevent losses from climate change risks in the medium to long run. Measures to maintain an updated Social Registry will benefit the poor and vulnerable populations. Poor and vulnerable women will benefit directly by including them as potential beneficiaries of social assistance programs. Policies to overcome malnutrition will have positive impacts on poverty reduction in the long run. The improvement of the nutritional status of children, from conception and during the first two years of life, will guarantee the necessary conditions for physical and mental development that will improve people's health, intellectual capacity, psychosocial abilities, and productivity and earnings later in life. In the medium to short run, moderate positive welfare impacts are expected given the time frame necessary for implementing policies and reaching beneficiaries. The measures to reduce trade barriers will likely have no significant welfare effects in the short run. These policies might indirectly positively impact welfare in the medium-long run through economic growth, higher labor incomes, and lower consumer prices.

134. Prior actions under Pillar 2 are expected to have neutral or positive distributional effects in the short-run and overall positive in the long run. Promoting private sector investments in renewable energy is not expected to affect welfare in the short run. Yet, positive impacts on household welfare are expected in the medium and long run by increasing private sector investment in renewable energy projects, reducing generation costs, providing environmental benefits, and creating more jobs. The measures to promote consumer-side energy efficiency and reducing GHG emissions are expected to affect households' welfare and other dimensions of living conditions positively across the distribution. Measures to strengthen capacities and improve the information systems are not expected to impact welfare directly. However, increased access to more transparent information may contribute to better monitoring climate targets, better design of evidence-based climate policies, enhancing decision-making processes and resource allocation. With the voluntary nature of the PECC and the fact that other technical and administrative regulations are still pending to implement the program, no significant impacts on poverty and shared prosperity are expected in the short run. In the medium to long run, impacts depend on proper program implementation, especially the compensation mechanisms, and on the interaction between this program and other environmental policies applied in the country and whether these take a pro-poor approach and efforts are made to counter potential negative effects.

5.2. ENVIRONMENTAL, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

135. The Prior Actions supported through the EGARR DPF are likely, in aggregate, to have a positive impact on Ecuador's environment, forests, or other natural resources:

- **Pillar 1 – *Tackle structural challenges to strong, green, resilient, and inclusive growth*** – deals largely with tax mobilization, strengthened social protection programs, institutional safeguards against child malnutrition, strengthened disaster risk management, tariff reduction, improving access to digital technologies and reduced rigidities in the labor market. These are expected to be environmentally neutral. PA#1 aims to support the establishment of an Institutional Committee for Financing and Thematic Monitoring to support the achievement of Ecuador's Nationally Determined Contribution (NDC) in fulfillment of the country's commitments under the United Nations Framework Convention on Climate Change (UNFCCC). Ecuador's NDC (March 2019) sets out measures and actions to encourage adaptation and enhance the natural environment, namely, to increase forest cover and invest in conservation strategies in the water sector. With specific regard to the proposed Prior Action to strengthen disaster risk management, there may be potentially positive environmental impacts, based on an assessment of good practice in other jurisdictions where disaster risk resilience and management is predicated on a healthy and stable natural environment, often relying on regulatory ecosystem services, for example for storm and flood protection.

- **Pillar 2- Strengthen low-carbon development**– is likely to result in positive impacts for Ecuador's environment, forests, and natural resources. PA#10, the establishment of Ecuador's Carbon Zero Program, supports economy-wide mitigation measures, resulting in the reduction of greenhouse gas (GHG) emissions and positive spillover impacts on the natural environment locally and as a global public good, more broadly. Similarly, PA#8 – the introduction of energy efficiency legislation – serves to support mitigation efforts and reduce pressure on the natural environment, including forests. PA#9, the enactment of the Organic Law Reforming the Organic Law on Land Transportation, Transit and Road Safety, will support to reduced emissions in the transport sector with co-benefits for human health from improved air quality. The projected impact of PA#7 on Public Power Service will be assessed more closely once the draft regulatory frameworks are made available but given its focus on smaller generation systems will likely incentivize investment in off-grid and renewable energy. This would serve to reduce national dependence on fossil fuels and will likely have positive impacts on the natural environment while supporting GHG mitigation and diversification in the energy sector.

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

136. **Overview of Public Financial Management (PFM) in Ecuador**. During the last decade, Ecuador has gradually implemented several reforms aimed at the modernization of its PFM framework, triggered by the enactment in October 2010 of the Organic Code of Planning and Public Finances (COPLAFIP), including the introduction of a single treasury account, accrual government accounting, streamlined budget preparation and approval, improved fiscal transparency, and internal control. Most recently, the

National Assembly approved in July 2020 a reform to the COPLAFIP, which introduced key reforms[69], including: (i) a four-year medium-term fiscal framework (MTFF); (ii) scaling-up the scope of fiscal rules; (iii) reduced the margin for approving changes to the central government budget; and (iv) better integration of the public investment operations into annual budgets. However, the full operationalization of such reforms remains a challenge.

137. **The most recent Public Expenditure and Financial Accountability (PEFA) assessment (April 2019) concluded that PFM in Ecuador is partially aligned with international best practices.** Its main strengths are a robust regulatory framework and the fact that the Government's operations and transactions are systematically registered in an integrated financial management system used at the central government level (known as e-Sigef). The annually approved budget and its execution reports are made publicly available on the internet site of the Ministry of Economy and Finance. The main challenges were, inter alia: (i) the need to strengthen the transparency of public finances; (ii) weaknesses in asset and liability management; (iii) lack of aggregate fiscal discipline; (iv) need to improve fiscal strategy and the budget management and control framework; (v) overall lack of transparency on state-owned entities; and (vi) need to improve internal control and external oversight of the public finances.

138. **Budget predictability, reporting, and control.** The general government budget is made publicly available.[70] Policies and priorities are explicit in the regulatory framework (including the Constitution, the COPLAFIP, and the NDP). Nevertheless, the budget-policy link is weakened since budget planning and preparation has generally followed an inertial trend and a bottom-up approach, along with several weaknesses in the macro-fiscal planning, which are aimed to be addressed through the implementation of a Medium-Term Fiscal Framework and other reforms noted earlier. The COPLAFIP requires budget projections for the next four years, prepared on a rolling annual basis. The 2020 budget proforma included 2020-2023 forecasts fiscal aggregates based on economic classification.

139. **Treasury.** The central Government's resources are managed through a Single Treasury Account (STA), which has an adequate level of control thanks to the use of the e-Sigef system. However, there are still some weaknesses, mainly due to limitations for preparing adequate cash projections and the establishment of ceilings. MEF has established additional layers of control over payments related to fixed assets and transfers to avoid liquidity constraints. There is room to improve control over cash payments by exercising centralized control and improving cash forecast mechanisms. The PFM reform plan also covers these issues.

140. **Government Accounting and Financial Reporting.** Public accounting records in Ecuador are prepared on an accrual basis. Ecuador is pursuing convergence to International Public Sector Accounting Standards (IPSAS) and has put a comprehensive plan in place to that end. The Government's goal is to produce financial statements in accordance with IPSAS by the year 2022. Although this is an ambitious

[69] Some of these reforms were supported through previous DPF operations, including: First Inclusive and Sustainable Growth DPF (P169822), Second Inclusive and Sustainable Growth (P171190) and the Third Inclusive and Sustainable Growth Development Policy Loan (P174115).

[70] The central government budget is available at the MEF's website while the subnational level budget is made available at the website of each subnational government. The reform of COPLAFIP approved in July 2020, requires all government entities to submit their budgets to the MEF for their publication.

objective, MEF is accompanying the intended reform by upgrading the e-Sigef. The implementation of the new software would require complementary activities to reach the intended objectives.

141. **Public Procurement System**. Public procurement is governed by the *Ley Organica del Sistema Nacional de Contratacion Publica* ("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 in relation to control under the direction of the General Comptroller. Recently, the President approved a new decree (Decree No. 155) which establishes the requirement for the country's Supreme Audit Institution (*Contraloria General del Estado*, CGE) to issue a pertinence report for public procurements, before they can be initiated. The Government has prepared a reform to the Public Procurement Law, which is currently under discussion in the National Congress. Additionally, after numerous consultations with several sectors, the National Procurement Entity (SERCOP) has drafted a new regulation of the Public Procurement Law and is expected to be approved in the coming months. On the other hand, for public procurement, the electronic procurement system (*Compras Publicas*) is mandatory, easily accessible, and free for all user levels, providing information on contracting procedures and opportunities. A recent self-evaluation analysis performed by the Government using the MAPS methodology reflected a very high score of compliance for each of the four pillars, identifying some measures of improvement that can be undertaken. Therefore, no significant procurement risks related to the implementation of the Prior Actions are expected.

142. **External scrutiny of public expenditures**. The country's normative framework establishes the obligation to present the Government's financial statements to the country's Supreme Audit Institution (CGE). Nevertheless, there is no specific date requirement for such a presentation, and the CGE has no obligation to issue an opinion on the financial statements.

143. **Foreign exchange management**. Ecuador's official currency is the USD. The Central Bank of Ecuador (CBE) legal framework presents some weaknesses due to the lack of independent and capable oversight and control mechanisms. In particular, the financial reporting framework departs from International Financial Reporting Standards (IFRS). However, following recommendations from the 2019 IMF safeguards assessment, under the Extended Fund Facility (EFF) agreed with the IMF, the CBE is in the process of introducing structural reforms to improve its governance arrangements, including, among others, the creation of an audit committee, strengthen its internal audit, and the implementation of IFRS. As an additional mitigating factor, the resources will be channeled through the Borrower's STA system, which has an adequate level of control due to the level of automation of the e-Sigef system.

144. **Disbursement Arrangements.** Once the loan is approved and declared effective, based on the Borrower's request, the World Bank will disburse the loan proceeds into the bank account held by the CBE denominated in U.S. dollars that forms part of the country's official foreign exchange reserves[71]. The funds will be then immediately transferred into the STA managed by the Ministry of Finance and into a specific

[71] Such account is also referenced in the Section 2.03 (a) of the General Conditions for IBRD Financing: Development Policy Financing (General Conditions).

account internally designated as "CX". Such account will be tagged in the e-Sigef system using a specific code that allows for the identification of each specific loan and financier. Overall, the STA has an adequate level of control as it can manage virtually segregated accounts where the Government can track the use of funds through the e-Sigef system. The Borrower, within 30 days after the withdrawal of the loan from the loan account, shall report to the World Bank: (i) the exact sum received into the account referred to in the General Conditions; (ii) the details of the account to which the equivalent of the loan proceeds will be credited; and (iii) the record that an equivalent amount has been accounted for in the Borrower's budget management systems.

145. **Auditing arrangements.** Upon the Bank's request, the Borrower shall: (i) have the account referred to in Section 2.03 (a) of the General Conditions audited by independent auditors acceptable to the Bank, in accordance with consistently applied auditing standards acceptable to the Bank, (ii) furnish to the Bank as soon as available, but in any case not later than four (4) months after the date of the Bank's request for such audit, a certified copy of the report of such audit, of such scope and in such detail as the Bank shall reasonably request, and make such report publicly available in a timely fashion and in a manner acceptable to the Bank; and (iii) furnish to the Bank such other information concerning the account referred to in Section 2.03 (a) of the General Conditions and their audit as the Bank shall reasonably request.

5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

146. The Ministry of Economy and Finance will be the main coordinating agency for monitoring and evaluation among other participating ministries. The Prior Actions detailed in this operation are the prime responsibility of the following ministries and agencies: MEF, MERNNR, Ministry of Labor, Ministry of Production, Investment, Commerce and Fisheries, National Planning Agency, Ministry of Economic and Social Inclusion, Ministry of Foreign Affairs and Human Mobility, Ministry of Water, Environment and Ecological Transition (MAATE), Internal Revenue Service, Economic and Financial Analysis, and the Office of the Presidency. MEF will coordinate with other ministries to monitor the results indicators based on publicly available information. The World Bank will monitor the implementation of the DPF through regular supervision missions and the preparation of the DPF 2.

147. The program outcomes will be monitored by measuring the progress toward the achievement of results indicators included in the policy and results matrix (Annex 1). It will be evaluated following the disbursement of the first DPF. MEF will be responsible for presenting the information related to the reform implementation and progress made toward results on time upon request and in a format satisfactory to the World Bank.

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

6. SUMMARY OF RISKS AND MITIGATION

149. **The overall risk of this operation is assessed as Substantial**. There are key risks that could affect the achievement of this DPF series. They include political and governance risks, domestic and external macroeconomic risks, institutional capacity, fiduciary and stakeholder risks. While the program's design incorporates risk-mitigation measures, some risks cannot be fully extenuated. The political dynamics could also affect the Government's ability to mobilize congressional support to approve some of the reforms supported by the DPF series. If macroeconomic risks materialize, it could also affect the Government's ability to implement and sustain some reforms and make the outcome achievement more difficult even if the measures are effectively applied. The DPF reform program has the flexibility to be adjusted going forward in case some of these risks materialize. Specific risks, along with mitigation measures, are discussed below.

150. **Political and governance factors pose High risks to this DPL series.** Despite ongoing efforts to build consensus with both the Legislative branch and the Civil Society, the approval of structural reforms proposed could take longer than anticipated, particularly the labor reform supported by the second operation. Despite the results achieved during its first 100 days in office (e.g., the effective vaccination of more than 60 percent of the population; mobilize financing through a revised program with the IMF and more moderate targets; foster trade with different countries, improve business climate; and enactment of a tax reform that includes permanent measures to help reduce the medium-term fiscal deficit), the Executive faces large opposition in the National Assembly. This risk is particularly important for the second operation's trigger related to the labor reform that would need the Government to build consensus to attain a majority at the National Assembly. To mitigate these risks, the GoE launched a communications strategy to socialize these reforms to the youth and broad public and explain the expected results for the most vulnerable. The World Bank and IFIs have reiterated their willingness to provide just-in-time technical assistance and support communications strategies. Although this political context entails high risks for some triggers of the DPF series, the Government has made an effort to mitigate the effect of this political challenge on its overall reform agenda by relying on executive action to improve tax administration, rationalize expenditures and implement some investment climate improvement. The government is tailoring the labor reform, so they tackle only those issues where reaching enough political consensus in the National Assembly is possible. Moreover, if reaching these political consensuses proved more difficult than expected, the government is open evaluate other options to move forward with the reform agenda to the extent possible. For instance, President Lasso announced the option of calling national consultations whether the National Assembly fails to propose an effective alternative.

151. **Macroeconomic risks are Substantial.** Despite a rebound in trade, capital inflows, and oil prices, global uncertainty remains high. Despite the successful vaccination campaign, the country is still exposed to risks resulting from the spread of new COVID-19 variants and their potential effects on the global

economy. If the health crisis is overcome and inflation continues increasing in developed economies, Ecuador could be hit by increasing international interest rates. Tightening external financial conditions may not only make the Government's re-entry into international capital markets more challenging but also dampen the recovery of commodity prices. The main threat on the domestic front lies in the potential difficulties in forming a consensus at the National Assembly to advance reforms in support of the ongoing fiscal consolidation process and foster private investment. Some of the actions supported by this DPF series aim to mitigate these risks by, for example, supporting measures to improve labor regulation, and foster competition**.** Moreover, as it was pointed out in the assessment of political and governance risks, the government has made a significant effort to mitigate the effect of this political challenge on the overall macroeconomic framework by relying on executive actions to achieve most of the fiscal consolidation objectives and tailoring the tax and labor reforms to make the required political consensuses at the National Assembly feasible.

152. **Sector Strategies and Policy risks are Substantial**. Even though that the programmatic series support significant steps forwards in a key area such as labor reform, risks remain substantial that due to a negative reaction that has occurred in the past around the world. The authorities have taken steps to mitigate these risks, by developing a communications strategy to reduce the risk of misunderstanding of the reform.

153. **Stakeholder risks are Substantial**. While the selection of prior actions included in the reform agenda has factored in local political economy considerations, political and social tensions can block the successful implementation of the overall government reform agenda. This operation seeks to mitigate stakeholder risks by assessing the scope of potential opposition extending beyond the specific operation. The Government mitigates these risks through consultations and develops communication plans to ensure that critical reforms are well communicated and understood.

154. **Institutional Capacity for Implementation and Sustainability risks are Substantial.** While the Government has a strong commitment to the proposed program, implementation capacity is low in several areas partly due to the lack of experience in public management. The authorities have mobilized technical assistance, including from the World Bank, in many areas supported by this operation to mitigate these risks. This includes the design of the expansion of social assistance, the incidence analysis of tax reforms, tax transparency, and the publication of the debt bulletin. Other multilateral donors also offer significant technical support (Annex 5). The World Bank’s overall dialogue is supported by, and closely coordinated with, the IMF and the IDB to avoid duplication and enhance synergies. The World Bank's teams will intensify the virtual meeting to support the government in moving forward its reforms agenda, which will be reinforced by in-situ missions as soon as travel conditions are restored.

155. **The overall fiduciary risk to this operation arising from Ecuador’s public financial management (PFM) system, the use of budget resources, and its foreign exchange environment, as controlled by the Central Bank of Ecuador (CBE), is Substantial.** The main drivers of such risk are the need for greater controls over the foreign exchange internal control environment, budget execution, cash payments, and the need for strengthened external scrutiny of public expenditures. Nevertheless, it is also worth noting that the Government has made some progress in lowering fiduciary risks, given its commitment to a credible PFM reform action plan and improving the CBE's internal control environment. In addition to possible mitigating measures that would be considered part of preparation of the operation, these factors

contribute to reasonably containing the identified weaknesses, ensuring that they do not pose material risks to the development objectives of this operation.

Table 6: Summary Risk Ratings

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

ANNEX 1: POLICY AND RESULTS MATRIX

	Prior actions and Triggers			Results		
Objective	Prior Actions under DPF 1	Triggers for DPF 2	Triggers for DPF 3	Indicator Name	Baseline 2020	Target 2024
Pillar 1- Tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience						
1. Make the fiscal management more inclusive and resilient by increased tax collection in an inclusive, transparent, and green way to support the ongoing fiscal consolidation and to strengthen the institutional framework to deal with climate-related challenges		Trigger #1 The Borrower has enacted and issued the regulations to implement a Tax Reform that: (i) implements personal income tax reform, (ii) strengthens the beneficial ownership framework, and (iii) eliminates excises on purchasing electric vehicles.	Trigger #1. The Borrower has implemented new measures to improve the efficiency, equity and transparency of the tax system as well as its green aspects.	RI#1. Increase in Central Government Tax revenues, excluding tariffs, US$ million.	2019=13,072	At least 14,000
	Prior Action #1. To facilitate the mobilization, access and monitoring of public financing flows for climate change mitigation and adaptation programs, the Borrower has established a " Institutional Committee for Financing and Thematic Monitoring (*Comité Institutional de Financiamiento y Seguimiento Temático*)" with the mandate of supporting the development, consolidation, coordination, and implementation of national strategies for accessing financing, and implementing economic and financial policies, for climate and sustainable development, as evidenced by Ministerial Agreement No.0097 issued by the	Trigger #2. The Borrower approved by inter-ministerial agreement the methodology for budget tagging of spending on climate change mitigation and adaptation within the framework of the commitments agreed by Ecuador in its NDC.		RI#2. Increase in budget allocation linked to climate change objectives and targets using the new methodology, percent.	0	At least 5
		Trigger #3. The	Trigger #2. The		0	At least 2

and improve achievement in NDC targets	Minister of Economy and Finance (October 15, 2021).	Borrower enhanced the Ministry of Economy and Finance's ability to assess climate and disaster risks by establishing risk monitoring requirements for a dedicated fiscal risks unit.	Borrower has approved a methodology to identify implicit and explicit contingent liabilities, its financial obligations, and how the government will address these liabilities, as described in the Disaster Risk Financing Strategy, including climate and disaster risks.	RI#3. Increase in the number of new financial instruments implemented to manage disaster risk and emergencies in accordance with the Disaster Risk Financing Strategy.		
2.Foster growth and labor opportunities by reducing trade barriers, promoting private investment in reducing geographical divides in	Prior Action #2. To reduce trade barriers, the Borrower has: (i) reduced the tariffs of 796 tariff lines, as evidenced by the following resolutions of the Foreign Trade Committee (*Comité de Comercio Exterior*) (COMEX): Resolution No. 007-2021 adopted on May 20, 2021 and effective May 31, 2021; and Resolution No. 009-2021 adopted July 9, 2021 and fully effective as of October 1, 2021; and (ii) in accordance with the recommendation of Informe Técnico No. MPCEIP-CTCE-008-2921 approved by the COMEX on July 22, 2021, eliminated one or more pre-import control documentation requirements with respect to 1,466 tariff	Trigger #4. The Borrower has issued a new tariff schedule to reflect subheadings subject to reduced import duty treatment.	Trigger #3 The Borrower has issued standards for green labeling of products with environmentally sustainable production.	RI#4. Increase in the percentage of imports benefiting from the measures (reducing tariffs and non-tariff measures).	0	At least 30

access to digital technologies, and reduce rigidities in the labor regulation to foster formal jobs creation	subheadings, as evidenced by COMEX Resolution 010-2021 adopted on July 22, 2021, as published in the Official Register (*Suplemento*) No. 527 on August 31, 2021.					
		Trigger #5. The Borrower has: (i) modified the telecommunication regulations to allow service providers to pay up to 50% of the spectrum license tariffs and of the 1% universal service mandatory contribution via implementing investment plans or providing telecommunication services in prioritized zones (including climate risk zones) or vulnerable segments of the population included in the Universal Service Plan, with the prior	Trigger#4. The Borrower has issued regulations to define the criteria, methodology and process to approve in-kind payments for investments by operators of networks and telecommunications services in exchange of their contribution to the universal service fund towards closing the digital gap.	RI#5. Increase in the percentage of homes in rural areas with internet access.	34.7	At least 38

		authorization of the competent national authorities and complying with obligations agreed with the regulator (ii) issued regulations to remove barriers (e.g., regulatory sandbox, reduction in tariffs for digital devices and network equipment, infrastructure-sharing) to improve access, coverage, and adoption of internet services.				
		Trigger #6. The Borrower has promoted formal job creation by: (i) improving the function of the Council of Employment and Wages and transparency of its decisions on statutory earnings parameters; and (ii) enacted a law or decree of Job Opportunities to facilitate formal employment creation.	Trigger #5. The Borrower has regulated new provisions on contract types and requirements to facilitate formal employment.	RI#6 Increase in the percentage of working youth and women with access to social security.	Women= 39.8 Youth= 20.9	Women= At least 42 Youth= At least 23
3. Strengthen	Prior Action #3. To protect vulnerable populations, the Borrower has: (i) modified	Trigger#7. The Borrower has: (i)	Trigger #6. The Borrower has	RI#7. Increase in	2021=911,776	More than 1.5 million

mechanisms to support the most vulnerable groups such as people at the bottom of the income distributions, exposed to malnutrition, and in human mobility.	Executive Decree No. 712 of April 11, 2019, which established the Social Registry and its related administrative units, by enhancing the management of the Social Registry by targeting and including households and individuals (in addition to families) as well as the most vulnerable groups including those without administrative data, the future establishment of a model for permanent updating of the Social Registry, and mandating public executive agencies to provide their registers of data requested by the Social Registry Unit (e.g., on identity, tax, social security, socioeconomic status) to help keep the Social Registry updated and generate inputs for social protection policies and programs, and raising the profile of the Social Registry Unit by attaching it to the Presidency, as evidenced by Executive Decree No. 228 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021 ; and (ii) (A) approved the implementation of a prioritized package of goods and services for pregnant women and children under 24 months of age to combat child and maternal malnutrition and (B) mandated an annual statistical survey of chronic child malnutrition rates, as evidenced by Executive Decree No. 1211 issued on December 15, 2020, as published in the Official Register (*Suplemento*) No. 356 on December 23, 2020.	approved an interministerial agreement to adapt the institutional and legal framework to allow for an immediate vertical and horizontal expansion of social programs in the event of a disaster; (ii) issued the regulatory norms for the functioning of the Performance Stimulus Fund Mechanism (*Mecanismo de Fondo de estímulo al desempeño)* (linked to the Decree of *Uso de Excedentes Petroleros*), and (iii) issued a Decree granting regular migration status to more than 150,000 Venezuelan migrants and update their registry, as well as establishing procedures to protect victims of human trafficking and natural disasters via the implementation of a humanitarian visa.	implemented the regulatory framework to harmonize the norms of the non-contributory social protection system.	total number of women from household's nucleus from deciles 1 to 3 included in the social registry and thus potentially eligible to multiple programs. RI#8 Increase in the percent of boys and girls living in the 90 prioritized cantons who received their first attention from the CNH services before reaching 90	21	At least 60 of the boys and girls

				days of life and whose date of birth was after the day [30] of the month of [August] of the year [2020].		
Pillar 2- Strengthen low-carbon development						
4. Facilitate a low-carbon development by mobilizing private capital for clean energy provision, fostering energy efficiency, and decarbonizing the transport sector.	Prior Action #4. To facilitate private investment in energy generation (including from non-conventional renewable sources) and electromobility, the Borrower has enacted the Organic Law Reforming the Law of the Public Electric Energy Service (*Ley Orgánica Reformatoria a la Ley Orgánica del Servicio Público de Energía Eléctrica*) which removes certain obstacles to private financing of non-conventional renewable electric generation and electric vehicle charging projects (e.g., clarifies operation license and concession termination events, lowers barriers to transfers of minority interests, provides for the authorization and regulation of commercial electric vehicle charging, and allows security interests in immovable project assets and transferability of license rights in favor of financiers), as published in the Official Register (*Suplemento*) No. 452 on May 14, 2021.	Trigger #8. The Borrower has issued a regulation to establish the payment prioritization to make renewable energy projects bankable and foster the participation of the private sector to develop clean energy.		RI#9. Increase in clean energy generation capacity awarded to private sector-owned power plants, percent of total capacity. RI#10. Increase in renewable energy generation capacity	2.5 310	At least 12 At least 1,200

	Prior Action#5. To reduce energy costs, increase productivity and create jobs, the Borrower, through the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, has issued the regulatory framework for the qualification, connection, installation and operation of small (less than 1 MW) renewable distributed generation systems for self-supply, as evidenced by Resolution No. ARCERNNR-013/2021 (containing Regulation No. ARCERNNR-001/2021) (April 5, 2021).		Trigger #7. The Borrower has issued regulations to determine requirements and remuneration for the surplus energy produced by self-generators to be sold to the electricity system	awarded (MW).		
	Prior Action #6. To promote consumer-side energy efficiency and reduction of greenhouse gas emissions, the Borrower has issued the General Regulations of the Organic Law on Energy Efficiency (*Reglamento General de la Ley Orgánica De Eficiencia Energética*), establishing the roles and responsibilities of the National Committee on Energy Efficiency (CNEE); the selection criteria, functions and governance for the CNEE's Advisory Council consisting of representatives from interested energy consumers, academia, professional unions, productive sectors, and civil society; the classification of energy consumers by sector and energy use (large, medium and small); obligations of large energy consumers to report periodically on their energy use, energy efficiency measures implemented and the	Trigger #9. The Borrower has issued the methodology for energy efficiency tariffs in selected sectors as per the PLANEE.	Trigger #8. The Borrower has issued energy efficiency tariffs in specific sectors to promote energy consumption reductions in the different sectors, including electromobility	RI#11. Decrease in energy consumption as per NDP 2021-2025, (kBOE).	0	3,000

	results thereof, and to implement in their operations and (starting 2025) obtain certification under ISO 50001 (Energy Management) standards; requirements for entities to register as Energy Auditors, Energy Managers (under ISO 50001), or Energy Service Companies in the national Catalog of Energy Services Providers; mechanisms for the promotion of energy efficiency projects and the methodology for prioritizing and evaluating them; and policy mechanisms for meeting the targets in the national energy efficiency plan (such as "energy efficient" labeling of products and buildings, and issuing "energy savings" certificates to projects that demonstrate energy savings or carbon emissions avoided, entitling them to benefits such as lower tariffs), as evidenced by Executive Decree No. 229 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021.					
	Prior Action #7. To promote a more efficient, greener and safer road transport sector, the Borrower has enacted the Organic Law Reforming the Organic Law on Land Transportation, Transit and Road Safety (*Ley Orgánica Reformatoria de la Ley Orgánica de Transporte Terrestre, Tránsito y Seguridad Vial*) that establishes incentives for the use of sustainable, environmentally-friendly means of transportation (including walking, bicycle use, and zero emissions vehicles), "green" labeling	Trigger #10. The Borrower has taken measures to spur the decarbonization of the transport sector by issuing a regulation to distribute national resources to subnational governments fostering safer and greener public	Trigger #9. The Borrower has taken measures to improve air quality by increasing air emission and efficiency standards for technical vehicle inspections on	RI # 12. Decrease in CO2 emissions from land transportati on	0	More than 3.5

	of license plates of electric/zero-emission vehicles to give effect to the applicable incentives, and enhanced measures for road safety, as published in the Official Register (*Suplemento*) No. 512 on August 10, 2021.	transport modes.	emissions and for the import of both new and used vehicles.	(percentage change).		
5. Enhance measurement and reporting of GHG mitigation initiatives	Prior Action #8: To strengthen the ability of different sectors to collect and report information on greenhouse gas emissions, and of the Borrower to prepare national greenhouse gas inventories and monitor its nationally determined contributions in relation to GHG reduction in the context of the Enhanced Transparency Framework of the Paris Agreement, the Borrower, through the Ministry of Environment, Water and Ecological Transition (MAATE) and with participation and input from relevant sector stakeholders, has issued and made public on its website four new technical guides containing updated procedures and methodologies for the collection, assessment and management of data required for the preparation of national greenhouse gas inventories, for the following sectors: (i) agriculture; (ii) waste; (iii) industrial processes and product use (mineral products category); and (iv) energy (fuel combustion in manufacturing and construction subcategory), as confirmed by Circular No. MAAE-MAAE-2021-0228-C dated October 20, 2021 from the Minister of Environment, Water and Ecological Transition to the Minister of Agriculture and Livestock, the Minister of Energy and Non-Renewable Natural Resources, the Minister of	Trigger #11. The Borrower has issued the regulation to establish a measurement, reporting and verification (MRV) of GHG mitigation in productive sectors of the economy and compensation mechanism for PECC.	Trigger #10. The Borrower has established a National Emissions Registry to be used by the compensation mechanism under PECC.	RI#13. Increase in the number of Public and Private institutions that registered their mitigation measures under the PECC.	0	150

	Production, Foreign Trade, Investment and Fisheries, and the Undersecretary of Environmental Quality of MAATE Prior Action #9. To foster greenhouse gas emission reductions in all productive sectors of the economy, the Borrower has created the Ecuador Carbon Zero Program (*Programa Ecuador Carbono Cero*) (PECC), which establishes the processes and requirements for private and public institutions to quantify, reduce and offset/compensate their carbon emissions, and obtain one of three different "green" certifications for their climate change mitigation and adaptation actions (i.e., carbon footprint quantification; carbon reduction; or carbon neutrality) and its associated benefits, as evidenced by Ministerial Agreement No. MAAE-2021-18 issued by the Ministry of Environment and Water on May 6, 2021.					

ANNEX 2: FUND RELATIONS ANNEX

Ecuador—Assessment Letter for the World Bank

Documentation to support the proposal on "Ecuador: First Green, Resilient and Inclusive Development" Development Policy Financing

December 22, 2021

A $6.5 billion 27-month Extended Fund Facility was approved in September 2020. With the completion of the Second and Third Reviews in September 2021, a total of $4.8 billion has been disbursed. Since then, the economy continues to show improvements and risks to the outlook remain balanced. While most quantitative targets for the Fourth Review appear to have been met and a tax reform was enacted in November, the suspension of the fuel price reform announced in October has a fiscal impact that warrants further analysis and, depending on the results, may require durable and growth-friendly compensatory measures ahead of the next review.

1. **The Executive Board of the IMF concluded the Second and Third Reviews under the 27-month Extended Fund Facility in September.** In concluding the combined reviews and the 2021 Article IV, Directors supported a more gradual fiscal consolidation to accommodate urgent pandemic-related spending needs this year, to expand social assistance programs, and to support the economic recovery. They underscored the need to make progress on structural reforms to improve competitiveness, enhance the business environment, and accelerate environmentally friendly growth led by the private sector. They noted that reducing the dependence on oil would help prepare Ecuador for the global transition to reduce carbon emissions while also promoting the development of other sectors.

2. **Macroeconomic data releases since the last Executive Board meeting show continued signs of recovery**. Backed by a successful vaccination campaign and declining COVID-19 fatalities, economic reopening continues. Second quarter real GDP growth was above expectations at 8.4 percent (y/y). Available monthly data for the second half of the year on tax revenues, retail sales, imports, oil production, and credit growth indicate higher-than-expected economic activity. Gross international reserves stood above $7 billion at the end of November, well above the levels seen over the last several years.

3. **Preliminary data show that all but one of the September targets were met.** The quantitative performance targets on the overall budget balance and nonfinancial public sector (NFPS) deposits appear to have been met with large margins, as were the indicative targets on the NFPS non-oil primary balance including subsidies, NFPS overall balance, and net international reserves. The indicative target on expanding the number of low-income families that receive social assistance was missed by a very small margin due to continuing challenges with updating the social registry.

4. **Risks to the outlook are broadly balanced.** The macroeconomic factors described above suggest 2021 growth will likely be well above the 2.8 percent projected at the time of the last review.

Further increases in oil prices would raise liquidity buffers, reserves, and improve growth prospects. Strong program implementation going forward would further lower sovereign risk and allow Ecuador to re-access international capital market earlier or under better terms than expected. Ecuador's efforts to encourage private sector participation and foreign investment could succeed in raising potential growth and improve competitiveness. On the other hand, subsequent waves of the pandemic could result in further closures or supply shortages, slowing consumption and economic activity. A weaker-than-anticipated global growth could reduce trading partner demand and strain the external position. Lower oil prices could reduce liquidity buffers, impede reserve build up, and dampen growth prospects. Tighter global financing conditions, e.g., in case of inflation risks, could dampen market financing prospects. Failure to implement structural reforms or measures to firmly anchor fiscal sustainability could weaken confidence and growth prospects.

5. **The tax bill that was enacted in late November is a progressive reform that will generate important revenues to the government.** The bill is expected to generate 0.7 ppt of GDP in permanent policy measures and 1.2 ppt of GDP cumulatively over 2022-23 in temporary taxes. Notwithstanding the delay in enacting the bill compared to initial plans, the permanent yield is in line with the authorities' Fund-supported program objectives. The temporary component is 0.7 ppt of GDP higher and will support the fiscal balance, albeit with measures that could weigh on investment. These revenues will help the government achieve its goal of making public finances more sustainable, supporting their expenditure-led consolidation strategy while increasing social spending for low-income families.

6. **Progress on the rest of the structural agenda continues.** The authorities have initiated the public bank asset quality reviews by agreeing on a terms of reference and issuing instructions to the banks. Publication of ultimate beneficiary ownership information on public procurement participants continues. A National Control Subsystem has been established to coordinate procurement among relevant agencies. The national procurement agency, SERCOP, is preparing a draft regulation to generate efficiency gains in public procurement. Work on the terms of reference for the independent financial audits of the oil companies is ongoing. The creation of the National Fiscal Coordination Committee, as per the organic budget code, and the publication of a methodology for estimating arrears have been delayed.

7. **The fuel price freeze that was announced in October has delayed the Fourth Review that had been planned for December.** The fuel price reform that had been in place since July 2020 had gradually raised domestic gas and diesel prices towards import costs, generating significant savings for the budget and supporting the authorities' fiscal consolidation plans. Until the reform is restored, its suspension will have a fiscal impact. Over the next two years, this fiscal cost is expected to be covered by the temporary taxes legislated in November. Given the policy change, a thorough assessment of its macroeconomic impact is needed that may result in a need for compensatory durable, growth-friendly, and predictable fiscal policy measures.

8. **The minimum wage was increased by over 6 percent on December 13.** The minimum wage was raised by $25 to $425. The economic impact of the decision requires further analysis.

9. **Staff and the authorities are actively discussing the macroeconomic framework and policies as described above that can set the basis for the completion of the next review.** Fund staff visited Quito in November to work closely with the authorities in reaching a common diagnosis of the impact of the fuel subsidy change, the latest fiscal data, and the macroeconomic outlook. Joint work continues intensely in a virtual environment.

ANNEX 3: LETTER OF DEVELOPMENT POLICY

República del Ecuador

Ministerio de Economía y Finanzas

MEF-DM-2021-0025-O
Quito, December 21, 2021

Mister
David Malpass
President
World Bank Group
Washington D.C.

Ecuador: First loan of the Green and Resilient Recovery Program under the Development Policy Loan (DPL) framework.

Dear Mr. Malpass,

I want to send my warmest greetings and thank you for the determined support that the World Bank Group is giving Ecuador. Technical and financial assistance from the international community is key to sustaining and leveraging the ambitious reform agenda that we are implementing. Our goal is to take Ecuador towards a path of development based on equity, sustainability, and social justice that enables employment generation for all, in a way that is harmonious with the planet.

The scale of the crisis caused by the pandemic is daunting. Its impact has extended to almost all aspects of development and will have effects in the medium-term, which we have not yet fully quantified, but are beginning to observe. Increased poverty and hunger are at the top of the list, and we anticipate seeing impacts in education, basic infrastructure, and preventive health as well. We are committed to minimizing those effects and making up for lost time by focusing on protecting the most vulnerable of our population and creating opportunities for all.

To that end, we have targeted much of our attention and resources on an effective, equitable, and transparent vaccination process. As of December 2021, more than seventy percent of the population is fully vaccinated, including children of ages five and older. We continue to closely monitor the evolution of the pandemic, but with our first goal already met, we hope to reopen schools and we trust that services - and the lives of our citizens - will gradually regain normalcy. High-frequency economic indicators are encouraging, showing that production and consumption are recovering. Moreover, we believe that with determination, effective management, and international support, much more can be achieved.

We are firmly advancing two of our priorities: stability and transparency, showing concrete achievements. Ecuador, a dollarized economy which had experienced a fragile macroeconomic situation, had limited space to engage in countercyclical policy during the pandemic. For that reason, we are also focused on reducing current and future macroeconomic vulnerabilities. In the real sector, we have

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República del Ecuador

Ministerio de Economía y Finanzas

MEF-DM-2021-0025-O

Quito, December 21, 2021

prioritized structural reforms to increase competitiveness, private investment, and job creation. On fiscal matters, we are restoring balances in a progressive and equitable manner, while we work on debt sustainability and make the conditions of our external obligations transparent. We just approved a progressive tax reform aimed at raising around 1% of GDP, requesting an additional effort from less than four percent of the population, those with the highest income and wealth. We are working to achieve our fiscal consolidation goals, in accordance with the current program with the International Monetary Fund. We aim at improving the non-oil balance by 4.5 percentage points of GDP until 2025, with a combination of measures that increase income in a structural way and reduce permanent expenditures, maintaining a healthy level of growth, containing indebtedness, and prioritizing social spending.

Climate action is another of the pillars that guide our policies. We believe that the recovery must be green and we have taken advantage of the pause that the entire world had during the pandemic to rethink and redirect our policies. Ecuador now has the goal of becoming carbon-neutral by the year 2050 and, since this administration began, it has taken decisive actions in this area, such as placing the ecological transition at the center of intersectoral public policy. For this reason, we are proud that the program that we are presenting to your Board of Directors today has an important climate component.

Along the same lines, we have reduced the level of fossil fuel subsidies from 3.1% of GDP in 2018 to 2% in 2021. Gasoline is currently sold at close to international prices, while diesel has doubled in value since the beginning of policy. In addition to tax benefits, reducing fossil fuel subsidies encourages the use of cleaner energy. We recently increased and froze fuel prices and made decisions regarding the minimum wage because we believe that the cost and benefit of the reforms should be equitably distributed, that the pace of convergence should be in line with the situation of the economy and should enable structural reforms that have been postponed for decades but are part of our agenda.

I want to celebrate the coincidences we share with the World Bank in all these objectives because they have allowed us to work closely and advance with this programmatic loan that consists of three operations. The program has two pillars that I detail below, it includes actions already completed for this first operation and the policy direction for future operations.

The first pillar focuses on structural barriers to inclusive, resilient, and sustainable growth; both in matters of the real and fiscal sectors, as well as in human capital. It includes actions to improve fiscal sustainability by increasing tax revenues in a progressive, transparent manner, aligned with our climate objectives. We will mobilize resources from those who have more. We have strengthened the transparency of the tax system with clear rules for the final beneficiary and created a unit of large taxpayers. We have also signed information exchange agreements to

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improve tax collection, as well as the effectiveness and control of the tax administration.

Likewise, based on the experience gained as founding members of the Coalition of Finance Ministers for Climate, we have created a committee tasked with mainstreaming climate action in all the functions of the Economy and Finance Ministry, including plans to label the budget, assess climate risks, and design and implement green and blue financing instruments.

Structural reforms in competitiveness include reducing barriers to trade, simplifying processes, and reducing tariffs. The agenda to reduce the digital divide has also been a focal point of this administration. Therefore, we have implemented tariff reductions and regulatory measures to increase service coverage and reduce cybersecurity risks.

We have also advanced the strategy against chronic childhood malnutrition, identifying the programs with the greatest impact that will have a protected budget to generate rapid results. Ecuador has one of the worst indicators of child malnutrition in the region. Addressing this problem is one of the most important commitments of this Government and we want to replicate the success achieved in vaccination. Likewise, we have consolidated the social registry and its model of permanent updates in adherence with modern principles of information management, use of administrative data, and enhanced use of data for targeting decisions.

We are pursuing a labor reform that will be based on a broad social consensus and contribute to creating employment for the vast majority who currently cannot access a formal job. Along this path, we have already reduced transaction costs, improved the labor inspection system, providing it with increased transparency to guarantee the rights of workers and employers and have a more dynamic and fair market.

The second pillar of the program lays the foundation for the decarbonization of the economy. We have implemented actions to: (i) promote renewable energies allowing distributed generation; (ii) generate energy efficiency; (iii) facilitate infrastructure for electric mobility and encourage low-emission transportation; and (iv) create mechanisms to account for greenhouse gas emissions, a necessary basis for carbon markets and to monitor compliance with our goals in the Paris Agreement.

In summary, with this program we are attacking in parallel four major objectives. First, improve social inclusion and reduce child malnutrition. Second, advance the structural reform agenda to generate employment, opportunities, and equity, based on private investment. Third, achieve fiscal stability and transparency to correct vulnerabilities for the present and the future. And fourth, move towards the

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decarbonization of the economy, not only as a national commitment, but also as a contribution to the care of the global public goods that are in our custody.

This program, under the Development Policy Loan modality, will be implemented through a first operation with a disbursement of seven hundred million US dollars (USD 700,000,000). The program executor will be the Ministry of Economy and Finance, the portfolio that I preside, in coordination with the entities and ministries that implement the actions described.

I want to reiterate that we consider the World Bank Group a key ally in achieving these objectives and that its technical and financial assistance will allow us to move rapidly towards achieving them. Thank you for supporting us with this ambitious and challenging agenda.

Yours truly,

SIMON
CUEVA

Simón Cueva Armijos
Minister of Economy and Finance
MINISTRY OF ECONOMY AND FINANCE OF ECUADOR

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ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior Actions	Significant positive or negative environment effects	Significant poverty, social or distributional effects positive or negative
Operation Pillar 1: *Tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience*		
PA#1. To facilitate the mobilization, access and monitoring of public financing flows for climate change mitigation and adaptation programs, the Borrower has established the Institutional Committee for Financing and Thematic Monitoring (*Comité Interinstitutional de Financiamiento y Seguimiento Temático*) with the mandate of supporting the development, consolidation, coordination, and implementation of national strategies for accessing financing, and implementing economic and financial policies, for climate and sustainable development, as evidenced by Ministerial Agreement No.0097 issued by the Minister of Economy and Finance (October 15, 2021).	Likely significant positive environmental effects through centralized governmental oversight of financing mobilized for climate mitigation (with local positive environmental effects in terms of clean technology deployment, as well as positive effect in terms of global public good from reduced carbon intensity) and climate adaptation (which promotes economy-wide resilience through enhanced management of forest and water resources to enhance adaptation).	Policies under PA# 1 are not expected to impact equity and poverty in the short term significantly. In the medium to long-term, indirect positive welfare impacts could prevent losses from climate change risks.
PA#2. To reduce trade barriers, the Borrower has: (i) reduced the tariffs of 796 tariff lines, as evidenced by the following resolutions of the Foreign Trade Committee (*Comité de Comercio Exterior*) (COMEX): Resolution No. 007-2021 adopted on May 20, 2021 and effective May 31, 2021; and Resolution No. 009-2021 adopted July 9, 2021 and fully effective as of October 1, 2021; and (ii) in accordance with the recommendation of Informe Técnico No. MPCEIP-CTCE-008-2921 approved by the COMEX on July 22, 2021, eliminated one or more pre-import control documentation requirements with respect to 1,466 tariff subheadings, as evidenced by COMEX Resolution 010-2021 adopted on July 22, 2021, as published in the Official Register (*Suplemento*) No. 527 on August 31, 2021..	No likely environmental effects / environmentally neutral	The effects on welfare of the international trade facilitation policies are expected to be mostly indirect, operating through channels such as general economic growth, higher labor incomes, and lower consumer prices. However, there is mixed evidence on the impacts of trade liberalization on growth and poverty reduction, while impacts on inequality seem to be somber.

PA#3. To protect vulnerable populations, the Borrower has: (i) modified Executive Decree No. 712 of April 11, 2019, which established the Social Registry and its related administrative units, by enhancing the management of the Social Registry by targeting and including households and individuals (in addition to families) as well as the most vulnerable groups including those without administrative data, the future establishment of a model for permanent updating of the Social Registry, and mandating public executive agencies to provide their registers of data requested by the Social Registry Unit (e.g., on identity, tax, social security, socioeconomic status) to help keep the Social Registry updated and generate inputs for social protection policies and programs, and raising the profile of the Social Registry Unit by attaching it to the Presidency, as evidenced by Executive Decree No. 228 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021; and (ii) (A) approved the implementation of a prioritized package of goods and services for pregnant women and children under 24 months of age to combat child and maternal malnutrition and (B) mandated an annual statistical survey of chronic child malnutrition rates, as evidenced by Executive Decree No. 1211 issued on December 15, 2020, as published in the Official Register (*Suplemento*) No. 356 on December 23, 2020.	No likely environmental effects / environmentally neutral	Part 1 of Prior Action 4 is expected to positively impact poverty and inequality in the short and long run by improving targeting and expanding the coverage of social programs among the poorest deciles. Poor and vulnerable women will be the primary beneficiaries of improving targeting and expanding the coverage of social programs. Part 2 of PA# 4 is expected to have positive impacts on poverty reduction in the long run through the improved nutritional status of children, from their conception and the first two years of life, guaranteeing the necessary conditions for physical and mental development that will improve people's health, intellectual capacity, psychosocial abilities, and their productivity and earnings later in life (Gertler et al., 2015; Thangavelu, 2017; World Bank, 2019). In the medium to short-run, moderate positive welfare impacts are expected given the time frame necessary for implementing policies, reaching beneficiaries, and materializing benefits.
Operation Pillar 2: ***Strengthen low-carbon development***		
PA#4. To facilitate private investment in energy generation (including from non-conventional renewable sources) and electromobility, the Borrower has enacted the Organic Law Reforming the Law of the Public Electric Energy Service (*Ley Orgánica Reformatoria a la Ley Orgánica del Servicio Público de Energía Eléctrica*) which removes certain obstacles to private financing of non-conventional renewable	Likely significant positive effects through the greening and decarbonization of Ecuador's energy matrix and transport sector, with direct co-benefits in terms of public health from improved air quality.	Promoting private sector investments in renewable energy is not expected to affect welfare in the short run. Yet, positive effects are expected in the medium and long run by increasing private sector investment in renewable energy projects, reducing generation costs, providing environmental benefits, and creating more jobs.

electric generation and electric vehicle charging projects (e.g., clarifies operation license and concession termination events, lowers barriers to transfers of minority interests, provides for the authorization and regulation of commercial electric vehicle charging, and allows security interests in immovable project assets and transferability of license rights in favor of financiers), as published in the Official Register (*Suplemento*) No. 452 on May 14, 2021.		
PA#5. To reduce energy costs, increase productivity and create jobs, the Borrower, through the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, has issued the regulatory framework for the qualification, connection, installation and operation of small (less than 1 MW) renewable distributed generation systems for self-supply, as evidenced by Resolution No. ARCERNNR-013/2021 (containing Regulation No. ARCERNNR-001/2021) (April 5, 2021).	Likely significant positive effects through the greening and decarbonization of Ecuador's energy matrix	Developing a comprehensive framework of distributed generation for small self-generation and mid-size systems could positively affect the medium and long run by reducing energy costs, increasing productivity, and creating jobs.
PA#6. To promote consumer-side energy efficiency and reduction of greenhouse gas emissions, the Borrower has issued the General Regulations of the Organic Law on Energy Efficiency (*Reglamento General de la Ley Orgánica De Eficiencia Energética*), establishing the roles and responsibilities of the National Committee on Energy Efficiency (CNEE); the selection criteria, functions and governance for the CNEE's Advisory Council consisting of representatives from interested energy consumers, academia, professional unions, productive sectors, and civil society; the classification of energy consumers by sector and energy use (large, medium and small); obligations of large energy consumers to report periodically on their energy use, energy efficiency measures implemented and the results thereof, and to implement in their operations and (starting 2025) obtain certification under ISO 50001 (Energy	Likely significant positive effects through reduced GHG emissions and enhanced efficiency, which has dual benefits in terms of cleaner air while reducing the intensity of fossil fuel and natural resource use in energy generation.	Promoting consumer-side energy efficiency and reducing GHG emissions is expected to affect welfare and other dimensions of living conditions positively across the distribution

Management) standards; requirements for entities to register as Energy Auditors, Energy Managers (under ISO 50001), or Energy Service Companies in the national Catalog of Energy Services Providers; mechanisms for the promotion of energy efficiency projects and the methodology for prioritizing and evaluating them; and policy mechanisms for meeting the targets in the national energy efficiency plan (such as "energy efficient" labeling of products and buildings, and issuing "energy savings" certificates to projects that demonstrate energy savings or carbon emissions avoided, entitling them to benefits such as lower tariffs), as evidenced by Executive Decree No. 229 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021.		
PA#7. To promote a more efficient, greener and safer road transport sector, the Borrower has enacted the Organic Law Reforming the Organic Law on Land Transportation, Transit and Road Safety (*Ley Orgánica Reformatoria de la Ley Orgánica de Transporte Terrestre, Tránsito y Seguridad Vial*) that establishes incentives for the use of sustainable, environmentally-friendly means of transportation (including walking, bicycle use, and zero emissions vehicles), "green" labeling of license plates of electric/zero-emission vehicles to give effect to the applicable incentives, and enhanced measures for road safety, as published in the Official Register (*Suplemento*) No. 512 on August 10, 2021.	Likely positive effects through reduced emissions in the transport sector with co-benefits for human health from improved air quality.	Promoting a more efficient, greener, and safer road transport sector by establishing the obligation for green labeling and including provisions for incentivizing zero-emissions vehicles is expected to have neutral effects on the welfare of the poor and vulnerable populations.
PA#8: To strengthen the ability of different sectors to collect and report information on greenhouse gas emissions, and of the Borrower to prepare national greenhouse gas inventories and monitor its nationally determined contributions in the context of the Enhanced Transparency Framework of the Paris Agreement, the Borrower, through the Ministry of	Likely positive effect through enhanced management, measurement, and verification of GHG emissions as a necessary enabling condition to account for economy-wide GHG reductions.	Policies under PA#9 will strengthen capacity and improving information systems but it would not have a direct impact on welfare. However, increased access to more transparent information may contribute to better monitoring climate targets, better design of evidence-based climate policies, and enhancing decision-making processes and resource allocation.

Environment, Water and Ecological Transition (MAATE) and with participation and input from relevant sector stakeholders, has issued and made public on its website four new technical guides containing updated procedures and methodologies for the collection and management of data required for the preparation of national greenhouse gas inventories, for the following sectors: (i) agriculture; (ii) waste; (iii) industrial processes and product use (mineral products category); and (iv) energy (fuel combustion in manufacturing and construction subcategory), as confirmed by Circular No. MAAE-MAAE-2021-0228-C dated October 20, 2021 from the Minister of Environment, Water and Ecological Transition to the Minister of Agriculture and Livestock, the Minister of Energy and Non-Renewable Natural Resources, the Minister of Production, Foreign Trade, Investment and Fisheries, and the Undersecretary of Environmental Quality of MAATE.		
PA#9. To foster greenhouse gas emission reductions in all productive sectors of the economy, the Borrower has created the Ecuador Carbon Zero Program (*Programa Ecuador Carbono Cero*) (PECC), which establishes the processes and requirements for private and public institutions to quantify, reduce and offset/compensate their carbon emissions, and obtain one of three different "green" certifications for their climate change mitigation and adaptation actions (i.e., carbon footprint quantification; carbon reduction; or carbon neutrality) and its associated benefits, as evidenced by Ministerial Agreement No. MAAE-2021-18 issued by the Ministry of Environment and Water on May 6, 2021.	Likely positive effect through enhanced management, measurement, and verification of GHG emissions as a necessary enabling condition to account for economy wide GHG reduction, incentivizing fossil fuel and natural resource use efficiency across public and private sectors.	Policies under PA#10 would not have impacts on equity and poverty in the short run. The voluntary nature of the PECC and the fact that other technical and administrative regulations are still pending to implement the program, no important impacts on poverty and shared prosperity are expected in the short run. In the medium to long run, impacts depend on proper implementation of the program itself, especially the compensation mechanisms. Impacts also depend on the interaction between this program and other environmental policies applied in the country, and whether these take a pro-poor approach and efforts are made to counter potential negative effects.

POVERTY AND SOCIAL IMPACT ASSESSMENT (PSIA)

156. **The prior actions supported by the proposed operation are expected to have positive or neutral impacts on poor households and vulnerable groups in the short run and overall positive implications in the medium and long term**. The poverty and social impact assessment (PSIA) follows Bank guidelines and analyzes the potential distributional impacts of the Government's program. It covers poverty and shared prosperity implications and other welfare-related outcomes such as household income and expenditures, employment, and prices. The policies supported by this operation, such as measures for enhancing efficiency in the mobilization and transparency in the management of public resources and strengthening the disaster risk and social protection management systems, are expected to improve the Government's fiscal position. Also, prior actions to reduce regulatory constraints for private-sector-led growth, increase digital connectivity and create jobs are designed to facilitate private sector investment, social inclusion and enhance Ecuador's competitiveness. Finally, the measures for promoting low-carbon development are expected to improve the overall resilience of the economy. The expected impacts are based on quantitative analysis, a review of academic literature, and additional information gathered during the preparation of the operation.

157. **Policies under Pillar 1 are aimed at tackling structural challenges to support strong, green, resilient, and inclusive growth would have neutral or positive impacts on households' welfare in the short run and overall positive effects in the long run.** The measures to improve revenues and public debt transparency and establish budget ceilings will not negatively affect the poor nor the bottom 40 households' welfare in the short run. In the medium to long run, indirect positive impacts on welfare could be expected conditional on how additional revenues and enhanced debt transparency are translated to strengthening budget management, defining priorities, and improving service delivery, especially for the vulnerable populations. The measures to facilitate the mobilization, access, and monitoring of public financing flows for climate change mitigation and adaptation programs would not significantly impact equity and poverty in the short term. Indirect positive welfare impacts could prevent losses from climate change risks in the medium to long run. Measures to maintain an updated Social Registry will benefit the poor and vulnerable populations. Poor and vulnerable women will benefit directly by including them as potential beneficiaries of social assistance programs. Policies to overcome malnutrition will have positive impacts on poverty reduction in the long run. The improvement of the nutritional status of children, from conception and during the first two years of life, will guarantee the necessary conditions for physical and mental development that will improve people's health, intellectual capacity, psychosocial abilities, and productivity and earnings later in life. In the medium to short run, moderate positive welfare impacts are expected given the time frame necessary for implementing policies and reaching beneficiaries. The measures to reduce trade barriers will likely have no significant welfare effects in the short run. These policies might indirectly positively impact welfare in the medium-long run through economic growth, higher labor incomes, and lower consumer prices.

158. **Prior actions under Pillar 2 are expected to have neutral or positive distributional effects in the short-run and overall positive in the long run**. Promoting private sector investments in renewable energy is not expected to affect welfare in the short run. Yet, positive impacts on household welfare are expected in the medium and long run by increasing private sector investment in renewable energy

projects, reducing generation costs, providing environmental benefits, and creating more jobs. The measures to promote consumer-side energy efficiency and reducing GHG emissions are expected to affect households' welfare and other dimensions of living conditions positively across the distribution. Measures to strengthen capacities and improve the information systems are not expected to impact welfare directly. However, increased access to more transparent information may contribute to better monitoring climate targets, better design of evidence-based climate policies, enhancing decision-making processes and resource allocation. With the voluntary nature of the PECC and the fact that other technical and administrative regulations are still pending to implement the program, no significant impacts on poverty and shared prosperity are expected in the short run. In the medium to long run, impacts depend on proper program implementation, especially the compensation mechanisms, and on the interaction between this program and other environmental policies applied in the country and whether these take a pro-poor approach and efforts are made to counter potential negative effects.

PILLAR 1: TACKLE SELECTED STRUCTURAL CHALLENGES TO FOSTER GROWTH, INCLUSION, JOB CREATION, AND CLIMATE RESILIENCE

Prior Action 1: *To facilitate the mobilization, access and monitoring of public financing flows for climate change mitigation and adaptation programs, the Borrower has established the Institutional Committee for Financing and Thematic Monitoring (Comité Institutional de Financiamiento y Seguimiento Temático) with the mandate of supporting the development, consolidation, coordination, and implementation of national strategies for accesing financing, and implementing economic and financial policies, for climate and sustainable development, as evidenced by Ministerial Agreement No.0097 issued by the Minister of Economy and Finance (October 15, 2021).*

159. **Prior Action 1 is not expected to have significant impacts on equity and poverty in the short term**. **In the medium to long-term, indirect positive welfare impacts could result from preventing losses from climate change risks**. Prior Action 3 aims to strengthen Ecuador's institutional framework to achieve low-carbon development and resilience goals by creating the Institutional Committee for Financing and Thematic Monitoring (CIFST) within the Ministry of Economy and Finance (MEF). Among other mandates, this Unit will: (i) facilitate mobilization, access, and monitoring of public financing flows for climate change mitigation and adaptation programs; and (ii) coordinate the integration of climate change aspects during the budget planning process and the evaluation and monitoring of the annual budget to better align spending and public investment with climate change goals while assessing the impact of the resources mobilized to inform future actions (climate change budget tagging). In addition, the new Unit will support the MEF's efforts to leverage financial resources from the private and international financial sectors.

160. **Climate change is intensifying and increasing the number of extreme weather events; the poor are among the least able populations to overcome or adapt to them, which would increase inequality**.[72,73] According to the Global Facility for Disaster Reduction and Recovery (GFDRR), assets at risk

[72] Global Center on Adaptation (2021). A Green and Resilient Recovery for Latin America. Available at: https://gca.org/reports/a-green-and-resilient-recovery-for-latin-america/

[73] Hallegatte, S., Fay, M. and Barbier E. B. (2018). Poverty and climate change: introduction. Environment and Development

due to natural disasters in Ecuador represent 1.94 percent of GDP, and risk to well-being is 2.93 percent of GDP.[74] If duly implemented, measures to finance climate change mitigation and adaptation policies will increase investment in low-carbon, environmentally friendly technologies, and resilient infrastructure in the medium- to long run. If these policies are effective, benefits come from saving lives and reducing losses from climate-related disasters, job creation, and increased incomes. However, an integrated approach that simultaneously considers social protection and poverty reduction policies is needed to materialize the positive welfare impacts of climate change policy.

Prior Action 2: *To reduce trade barriers, the Borrower has: (i) reduced the tariffs of 796 tariff lines, as evidenced by the following resolutions of the Foreign Trade Committee (Comité de Comercio Exterior) (COMEX): Resolution No. 007-2021 adopted on May 20, 2021 and effective May 31, 2021; and Resolution No. 009-2021 adopted July 9, 2021 and fully effective as of October 1, 2021; and (ii) in accordance with the recommendation of Informe Técnico No. MPCEIP-CTCE-008-2921 approved by the COMEX on July 22, 2021, eliminated one or more pre-import control documentation requirements with respect to 1,466 tariff subheadings, as evidenced by COMEX Resolution 010-2021 adopted on July 22, 2021, as published in the Official Register (Suplemento) No. 527 on August 31, 2021.*

161. **Facilitating trade by reducing import tariffs on intermediate and capital goods and lowering non-tariff barriers is expected to have marginal positive indirect effects on welfare**. Resolutions 007 and 009 are efforts to increase competitiveness by reducing import costs. Import tariffs for 795 lines were reduced, mostly to zero rates, for machinery, mechanical appliances, and parts. Additionally, Resolution 010 aims to facilitate customs processes by reducing the list of products subject to Prior Control Documents for importation and by eliminating redundancies in non-tariff measures. These actions by the Government emphasize trade liberalization of intermediate inputs and capital goods to better insert enterprises into global value chains (GVCs) and increase the economy's competitiveness, including the export sector.

162. **The effects of international trade facilitation policies on households' welfare are expected to be mostly indirect**, operating **through** channels such as general economic growth, higher labor incomes, and lower consumer prices. On the positive side, trade and trade facilitation can drive poverty reduction by boosting growth through the labor markets (McCulloch et al., 2001)[75] or expanding export sectors (World Bank and WTO, 2015). Economic growth results because trade allows each country to use its resources more efficiently, by specializing in production of goods and services that it can produce more cheaply, it gives access to more advanced technological inputs, and it enhances the incentives to innovate (World Bank and WTO, 2015; Mitra, 2016).

163. **However, there is mixed evidence on the impacts of trade liberalization on growth and**

Economics, Volume 23, Special Issue 3: Poverty and Climate Change. June 2018, pp. 217 – 233.
DOI: https://doi.org/10.1017/S1355770X18000141

[74] World Bank & GFDRR (2017). Unbreakable Resilience Indicator Tool. Available at: https://unbreakable.gfdrr.org/countrytool

[75] McCulloch, N., A. Winters, and X. Cirera. (2001). "Trade Liberalization and Poverty: A Handbook." London: Centre for Economic Policy Research.

poverty reduction, while impacts on inequality seem to be somber.[76,77] Moreover, "benefits from trade are not equally distributed, and losers typically are not compensated" (UNCTAD, 2013: 7). The links between trade and poverty are usually complex and case-specific, with similar trade policies having widely varying impacts on poverty in different countries.[78] There is evidence that increased imports will reduce the market share of domestic firms, potentially affecting employment levels. Evidence also suggests that trade contributed to increasing inequality between low- and high-skilled workers and that "(…) skilled labor is more likely to benefit from the complementarity of imported intermediate and capital goods" (Mitra, 2016: 2)[79].

164. **The net welfare effect of trade would depend on which groups are the main beneficiaries of the additional economic growth and how trade affects these heterogeneous groups of the population.** The liberalization reforms can be particularly beneficial for firms that import inputs, as it has the potential to substantially reduce uncertainty and trade costs, increase efficiency, and boost firm competitiveness. Yet, for positive outcomes on poverty and inequality to materialize, complementary policies need to be placed to support those negatively impacted (Engel et al., 2021)[80].

Prior Action 3: *To protect vulnerable populations, the Borrower has: (i) modified Executive Decree No. 712 of April 11, 2019, which established the Social Registry and its related administrative units, by enhancing the management of the Social Registry by targeting and including households and individuals (in addition to families) as well as the most vulnerable groups including those without administrative data, the future establishment of a model for permanent updating of the Social Registry, and mandating public executive agencies to provide their registers of data requested by the Social Registry Unit (e.g., on identity, tax, social security, socioeconomic status) to help keep the Social Registry updated and generate inputs for social protection policies and programs, and raising the profile of the Social Registry Unit by attaching it to the Presidency, as evidenced by Executive Decree No. 228 issued on October 20, 2021, as published in the Official Register (Suplemento) No. 575 on November 11, 2021; and (ii) (A) approved the implementation of a prioritized package of goods and services for pregnant women and children under 24 months of age to combat child and maternal malnutrition and (B) mandated an annual statistical survey of chronic child malnutrition rates, as evidenced by Executive Decree No. 1211 issued on December 15, 2020, as published in the Official Register (Suplemento) No. 356 on December 23, 2020.*

165. **Part 1 of Prior Action 3 is expected to positively impact poverty and inequality in the short and long run by improving targeting and expanding the coverage of social programs among the poorest deciles.** The December 2020 round of the National Labor Force Survey (i.e., ENEMDU) shows that households with female household heads are more frequent at the bottom of the income distribution.

[76] UNCTAD (2013). "The impact of trade on employment and poverty reduction". Note by the UNCTAD secretariat. TD/B/C.I/29.
[77] Dullien, S. (2017). "Shifting Views on Trade Liberalisation: Beyond Indiscriminate Applause". DOI: 10.1007/s10272-018-0733-8
[78] Coudouel, A., and Paternostro, S. (2006: xii-xiv). "Introduction" in Analyzing the Distributional Impacts of Reforms. A practitioner's guide to pension, health, labor markets, public sector downsizing, taxation, descentralization, and macroeconomic modelling. Eds. Aline Coudouel and Stefano Paternostro. Vol. 2. The World Bank, Washington, D.C.
[79] Mitra, D. (2016). "Trade Liberalization and poverty reduction". IZA World of Labor 2016: 272. doi: 10.15185/izawol.272
[80] Engel, J.; Kokas, D.; Lopez-Acevedo, G. and Maliszewska, M. (2021). "The Distributional Impacts of Trade: Empirical Innovations, Analytical Tools, and Policy Responses". Trade and Development. Washington, DC. World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/35552 License: CC BY 3.0 IGO.

While the first quintiles have one-third of female households' heads, the highest quintile has 27 percent. In addition, among households in the first two quintiles with a woman as the head of the household, only 32.1 percent are beneficiaries of any conditional transfers (i.e., Bono de Desarrollo Humano or Joaquín Gallegos Lara). If these first two quintiles are considered the potential beneficiary population, there would be a gap to be closed (i.e., exclusion error) of approximately 350 thousand households with female household heads. On the other hand, around 150 thousand households with women heads are among the highest quintiles and are beneficiaries of these conditional transfers, corresponding to an inclusion error. As a result, expanding the coverage of the Social Registry will improve the targeting of social programs by reducing inclusion and exclusion errors.

166. **Correcting both types of errors (i.e., inclusion and exclusion) in social programs will positively impact poverty and inequality**. According to the results of simulations using Ecuador's CEQ tool, expanding coverage with perfect targeting of social programs could reduce extreme poverty by 2 to 3 percentage points and moderate poverty by 3 to 4 percentage points among households with female household heads.[81] Moreover, inequality would fall from 0.3 to 0.6 percent of the Gini coefficient. It is important to note that the social protection system focuses on females 75 percent of beneficiaries of all programs are women. Therefore, expanding the coverage of the Social Registry that guarantees the inclusion of all poor and vulnerable female household heads would positively impact welfare in the short and long run.

167. **Part 2 of Prior Action 3 is expected to have positive impacts on poverty reduction in the long run through improved nutritional status of children**, from their conception to the first two years of life, guaranteeing the necessary conditions for physical and mental development. Adequate nutrition will improve children's health, intellectual capacity, psychosocial abilities, and their productivity and earnings in adult life (Gertler et al., 2015; Thangavelu, 2017; World Bank, 2019). In the medium to short run, moderate positive welfare impacts are expected given the time frame necessary for policies to be implemented, beneficiaries to be reached, and benefits materialized.[82]

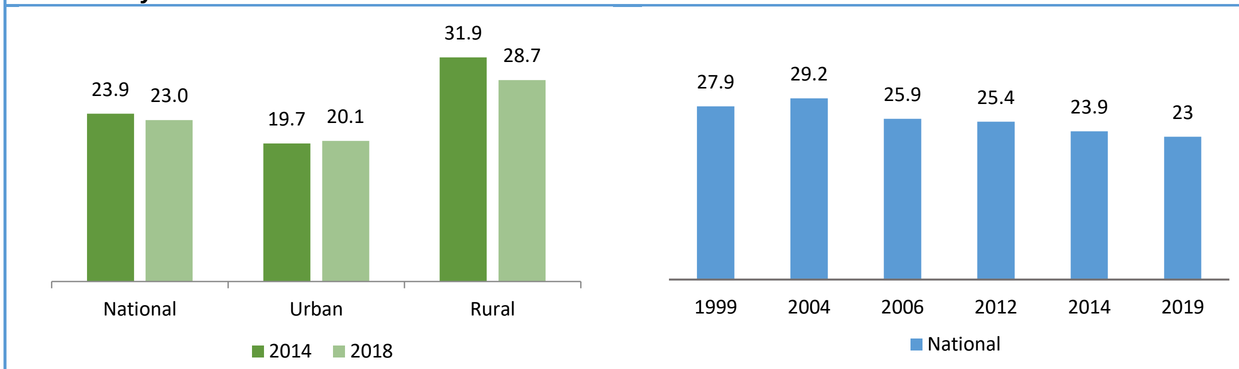
168. **In Ecuador, the prevalence of chronic child malnutrition has remained around a quarter of children under five years of age for over a decade**, leaving Ecuador as the second country with the highest rate in the region.[83] The prevalence for children under two years old is even higher (27 percent in 2018). As shown in Figure 1, chronic child malnutrition is especially high in the rural areas, and among indigenous populations (38.8 percent of indigenous children under 2 and 40.7 percent of those under 5 have this condition).[84] There is also a high correlation between undernutrition and poverty: over 30 percent of households in extreme poverty have undernourished children under 5, and children under 2 in household at the bottom of the income distribution are three times more likely to be undernourished than those at

[81] Carrillo, R., Fernandez, J, y Olivieri, S. (2021) "Distributional impact of fiscal policies in Ecuador", mimeo
[82] Gertler, Paul, James Heckman, Rodrigo Pinto, Arianna Zanolini, Christel Vermeersch, Susan Walker, Susan M. Chang, Sally Grantham-McGregor. "Labor market returns to an early childhood stimulation intervention in Jamaica." Science 344.6187 (2014): 998-1001.
[83] Secretaría Técnica Ecuador Crece Sin Desnutrición Infantil (2021). "Plan estratégico intersectorial para la prevención y reducción de la desnutrición crónica infantil."
[84] INEC, ENSANUT 2018.

the top.[85] Child malnutrition not only impacts negatively at the individual and household level, but also increases costs to society in general. In Ecuador, aggregated costs associated to health, education and productivity impacts of child chronic undernutrition are estimated to be 2.58 percent of GDP[86]. The country's limited success in combating malnutrition is explained mainly by three reasons: (i) lack of information on nutrition at the national and subnational levels, with enough disaggregation, (ii) suboptimal allocation of resources for proven and cost-effective interventions, and (iii) coordination issues that are impeding the access to complete health/nutrition packages for families.

FIGURE 3: PREVALENCE OF STUNTING, HEIGHT FOR AGE (% OF CHILDREN UNDER 5)

Panel A: By area **Panel B: National evolution**



Sources: (A) INEC, ECV 2014 and ENSANUT 2018. (B) World Development Indicators. https://data.worldbank.org/indicator/SH.STA.STNT.ZS?locations=EC

169. **The National Strategy to prevent and reduce chronic malnutrition in children under 24 months old addresses the limitations faced in previous years,** in that it considers the multidimensional nature of this problem, the need for interinstitutional coordination and availability of sufficient and timely resources, and an information system for planning, monitoring and evaluation of the programs. In summary, the prioritized package to fight child and maternal malnutrition consist of healthcare, hygiene, and nutrition services, including preventive benefits starting at pregnancy, the timely administration of immunizations, counseling to promote the adoption of healthcare, hygiene, feeding and parenting practices and access to safe water services among mothers. These services will be provided by MIES, MSP and subnational governments, respectively. A monitoring mechanism is established using inter-operable information systems in all institutions that will later be unified for case-tracking and monitoring, generation of early warnings and evaluation of interventions. In terms of resources, the Executive Decree establishes the implementation of a results-based budget scheme that will be fully implemented in 2022; it also states that the approved budget allocations for the services considered in the package, cannot be reduced.

[85] Secretaría Técnica Ecuador Crece Sin Desnutrición Infantil (2021). "Plan estratégico intersectorial para la prevención y reducción de la desnutrición crónica infantil."
[86] Fernandez, A., Martinez, R., Carrasco, I. & A. Palma (2017). "Impacto social y económico de la malnutrición. Modelo de análisis y estudio piloto en Chile, el Ecuador y México." CEPAL, PMA. Documentos de Proyectos. Disponible en: https://www.cepal.org/sites/default/files/publication/files/41247/LCTS2017-32_es.pdf

170. **There is ample evidence that investments in early childhood (from ages 0 to 5) are crucial to improve health, economic and social outputs at the individual and society levels.**[87] In the case of chronic undernutrition there is even a more limited window of time for prevention (and effective intervention): the first 1000 days from conception. After that, it seems difficult to revert short-term (increased risk of morbidity and mortality) and long-term consequences (decreased cognitive development, lower economic productivity and restrained social function).[88] Therefore, all actions that effectively prevent and reduce child malnutrition, will have positive impacts on poverty and welfare.

171. **Nutrition intervention programs are more likely to be effective when a favorable context is achieved through a combination of components and factors.** While there is little in generalizing positive findings, Hossain et al. (2017) find that programs were more successful (showed an average annual rate of reduction of stunting prevalence in children under 5 at least equal to the median of 3 percent) "…where there is an evidence of strong political commitment, multi-sectoral collaboration between government, nongovernment, national and international organization, active community engagement, and where the program is delivered through community-based platforms with high coverage and compliance".[89] The Ecuadorian strategy seems to have an integrated approach in design. As long as all components of the strategy are actually implemented, adjusted and improved where needed, positive outcomes in terms of inequality and poverty reduction can be expected in the medium to long run.

PILLAR 2: STRENGTHEN LOW-CARBON DEVELOPMENT

Prior Action 4: *To facilitate private investment in energy generation (including from non-conventional renewable sources) and electromobility, the Borrower has enacted the Organic Law Reforming the Law of the Public Electric Energy Service (Ley Orgánica Reformatoria a la Ley Orgánica del Servicio Público de Energía Eléctrica) which removes certain obstacles to private financing of non-conventional renewable electric generation and electric vehicle charging projects (e.g., clarifies operation license and concession termination events, lowers barriers to transfers of minority interests, provides for the authorization and regulation of commercial electric vehicle charging, and allows security interests in immovable project assets and transferability of license rights in favor of financiers), as published in the Official Register (Suplemento) No. 452 on May 14, 2021.*

172. **Promoting private sector investments in renewable energy is not expected to affect welfare in the short run. Yet, positive effects are expected in the medium and long run by increasing private sector investment in renewable energy projects, reducing generation costs, providing environmental benefits, and creating more jobs.**[90] According to the IFC's Climate Investment Opportunities report,

[87] Heckman, J. (2012). "Invest in early childhood development: Reduce deficits, strengthen the economy". Available at: https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/

[88] Independent Evaluation Group (2010). "What Can We Learn from Nutrition Impact Evaluations? Lessons from a Review of Interventions to Reduce Child Malnutrition in Developing Countries." Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/2524 License: CC BY 3.0 IGO."

[89] Hossain M, Choudhury N, Adib Binte Abdullah K, et al. (2017) "Evidence-based approaches to childhood stunting in low- and middle-income countries: a systematic review." Archives of Disease in Childhood 2017; 102: 903-909. DOI: *https://doi.org/10.1136/archdischild-2016-311050*

[90] Investment in clean energy will also help reduce local air pollution and improve health. It can also facilitate cost-effective access

investments in new, green, and clean technology projects opportunities in developing countries are estimated to be around $23 trillion until 2030.[91] Key investment opportunities in developing countries include the construction of new green buildings in China, Indonesia, the Philippines, and Vietnam; transport infrastructure in Argentina, Brazil, Colombia, and Mexico; climate-resilient infrastructure (e.g., facilities, ports, and rail transport infrastructure, and energy efficiency) in Bangladesh and India; and climate-smart buildings, transportation, industrial energy efficiency, electric transmission and distribution, and waste solutions in Egypt, Jordan, and Morocco's.[92] Also, investment in renewable energy technologies creates more jobs than fossil fuel technologies. Chen (2017) estimates that spending on renewable energy will produce nearly 70 percent more jobs per dollar of expenditure than spending on fossil fuels.[93] Similarly, solar PV could create more than twice the number of jobs per electricity generation unit than coal or natural gas (UKERC, 2014).[94] In addition, the number of people employed, directly and indirectly, in the renewable energy sector (excluding large hydropower) rose from 5.7 million in 2012 to 8.3 million in 2016. That number could expand to 25 million by 2030 with proper policy support.[95] In Latin America, investment in adaptation infrastructures such as weatherproof roads and climate-resilient housing can have immediate positive effects on employment from construction-related jobs even as they build longer-term resilience for households. The World Bank estimates that close to 200 jobs would be created in Bolivia, 130 jobs in Nicaragua, and 120 in Honduras for every million invested in the construction sector.[96]

173. **In the long run, the energy transition from fossil fuels to renewables will also generate new jobs and losses in employment.** In the transition to a net-zero carbon economy, about 7.5 million jobs are expected to be lost in fossil fuel electricity, fossil fuel extraction, and animal-based food production in Latin America. However, these lost jobs are more than compensated by new employment opportunities,

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to energy in rural and remote areas, improve energy security and decrease excessive reliance on fossil-fuel imports, and stimulate technology transfer and innovation across the clean energy value chain (equipment manufacture and distribution, project development, construction and installation, operations and maintenance). See: OECD. 2015. Policy Guidance for Investment in Clean Energy Infrastructure Expanding Access to Clean Energy for Green Growth and Development. OECD Publishing, Paris.

[91] It is worth mentioning that the OECD identified five areas that should address to take full advantage of new, green, and clean technology projects investment opportunities in developing economies: i) Regulated, transparent power arrangements. Broadly, policies must establish transparency and predictability, which provides confidence for investors in the ability to recover investments in power generation, ii) Specific clean energy/climate incentives. Having an integrated, multi-year energy strategy with short-term targets for retiring fossil fuel plants, if applicable, and building renewable energy helps lay the foundation for conducive policies, iii) General business-friendly measures. There exist several general (that is, not necessarily specific to energy) policies that can facilitate renewable energy investment (e.g, not withholding taxes on profits, and no VAT on clean power sales), iv) Innovative financing mechanisms. Financing mechanisms of different types can be useful in mitigating risk, offering additional return potential, or creating more investment opportunities; and v) Early risk assumption. Several successful projects have included an early sponsor that was willing to assume various risks. See: *https://www.weforum.org/agenda/2021/06/boost-renewable-energy-investment-in-developing-economies/*

[92] IFC. 2016. Climate Investment Opportunities in Emerging Markets An IFC Analysis. Washington, D.C.

[93] Chen, Y. (2017), Renewable Energy Investment and Employment in China, PERI Working Paper Series Number 439, Political Economy Research Institute (PERI), University of Massachusetts, Amherst, MA.

[94] See: UKERC (2014), Low-Carbon Jobs: The Evidence for Net Job Creation from Policy Support for Energy Efficiency and Renewable Energy.

[95] United Nations. 2018. Interlinkages Between Energy and Jobs. Strengthening Interlinkages Between SDG 7 and other SDGs. Policy Brief #13.

[96] See: https://blogs.worldbank.org/latinamerica/green-recovery-latin-america-and-caribbean-possible-and-necessary

as 22.5 million jobs are created in agriculture and plant-based food production, renewable electricity, forestry, construction, and manufacturing.[97] Therefore, efforts to promote investment and transition to new, green, and clean technology must be accompanied by policies that facilitate the reallocation of workers, promote decent work in rural areas, offer new business models, and support displaced workers and their communities.[98] For instance, in Santa Fe, Argentina, the local Government has established a green occupation program, *"Empleos Verdes— Cuidar el planeta da trabajo"* to help workers develop skills for green jobs in collaboration with the national Government. Under this program, workers are trained, re-qualified, and certified in green job competencies and analyse and develop occupational standards to improve working conditions. Since 2016, more than 1,500 participants have been trained in green occupations.[99] Guyana provides another example of the importance of anticipating skills gaps and new works and effectively coordinating among relevant stakeholders in the energy sector to meet the demands of the transition to a low-carbon economy. The Guyana Energy Agency has been preparing a ten-year Human Resource Development Plan.[100] It collaborates with the University of Guyana and Technical and Vocational Education and Training institutions to update electrical engineering and renewable energy courses. It also requires certification updates for standardizing skills and professional competencies and practices for renewable energies.

Prior Action 5: *To reduce energy costs, increase productivity and create jobs, the Borrower, through the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, has issued the regulatory framework for the qualification, connection, installation and operation of small (less than 1 MW) renewable distributed generation systems for self-supply, as evidenced by Resolution No. ARCERNNR-013/2021 (containing Regulation No. ARCERNNR-001/2021) (April 5, 2021).*

174. **Developing a comprehensive framework of distributed generation for small self-generation and mid-size systems could positively affect the medium and long run by reducing energy costs, increasing productivity, and creating jobs.** For instance, self-energy generations could allow firms and households to rely on their own power sources, such as solar panels, to sell electricity to the grid or buy from it depending on the hour of the day. In Ecuador, firms in the shrimp industry started to invest in integrating solar photovoltaic systems to meet their energy demands. Shrimp farms are generally located in remote places, near the coast and even on islands, without access to the national electrical grid. Thus, diesel internal combustion engines are responsible for meeting shrimp companies' energy demands. Implementing photovoltaic systems has already promising results reducing operating costs and improving efficiency in shrimp production and exports.[101] In rural, remote, or isolated areas, off-grid solutions based on renewable energy combined with energy-efficient technologies could be the most rapid means of

[97] Saget, C., Vogt-Schilb, A., & Luu, T. (2020). Jobs in a net-zero emissions future in Latin America and the Caribbean. Washington DC and Geneva: Inter-American Development Bank and International Labour Organization.
[98] Women are still underrepresented in employment in renewable energies. Data for Germany, for instance, suggests that women are underrepresented in the sector (23.6 per cent against 45 per cent in the whole economy). This share equals the percentage of women in the energy and water supply sector as a whole which implies that the new sector replicates existing gender patterns. Therefore, policies to ensure gender equality should also be implemented. See: ILO. 2011. Investment in Renewable Energy Generates Jobs. Supply of Skilled Workforce Needs to catch Up. Research Brief.
[99] See *http://www.ramcc.net/es/posts/view/339/la-provincia-de-santa-fe-apuesta-a-la-generacion-de-empleos-verdes*
[100] ILO. 2017. Skills for Green Jobs Study – Guyana (Report). Office for the Caribbean - Port of Spain, Port of Spain.
[101] See: Pesantez, J. P., Ríos Villacorta, A., & Redrován, J. G. (2021). Integración de Sistemas Solares Fotovoltaicos en el Sector Camaronero Intensivo y Extensivo del Ecuador: Caso de Estudio en la Provincia de El Oro. Revista Politécnica, 47(2), 7-16.

providing cost-effective energy services.[102] Also, local content requirements encourage local companies to participate in the renewable energy supply chain, making the energy transition more inclusive and contributing to the economic development in their communities. In Uruguay, an auctioning call was opened in 2009 to small wind farms of 30-50MW with a required local content of at least 20 percent. It also required that a minimum of 80 percent of workers be hired from the local community.[103]

Prior Action 6: *To promote consumer-side energy efficiency and reduction of greenhouse gas emissions, the Borrower has issued the General Regulations of the Organic Law on Energy Efficiency (Reglamento General de la Ley Orgánica De Eficiencia Energética), establishing the roles and responsibilities of the National Committee on Energy Efficiency (CNEE); the selection criteria, functions and governance for the CNEE's Advisory Council consisting of representatives from interested energy consumers, academia, professional unions, productive sectors, and civil society; the classification of energy consumers by sector and energy use (large, medium and small); obligations of large energy consumers to report periodically on their energy use, energy efficiency measures implemented and the results thereof, and to implement in their operations and (starting 2025) obtain certification under ISO 50001 (Energy Management) standards; requirements for entities to register as Energy Auditors, Energy Managers (under ISO 50001), or Energy Service Companies in the national Catalog of Energy Services Providers; mechanisms for the promotion of energy efficiency projects and the methodology for prioritizing and evaluating them; and policy mechanisms for meeting the targets in the national energy efficiency plan (such as "energy efficient" labeling of products and buildings, and issuing "energy savings" certificates to projects that demonstrate energy savings or carbon emissions avoided, entitling them to benefits such as lower tariffs), as evidenced by Executive Decree No. 229 issued on October 20, 2021, as published in the Official Register (Suplemento) No. 575 on November 11, 2021.*

175. **Promoting consumer-side energy efficiency and reducing GHG emissions is expected to affect welfare and other dimensions of living conditions positively across the distribution**. Evidence shows what energy efficiency measures lead to savings consistently across the income distribution. Nonetheless, households in more deprived areas observe fewer savings (both absolute and relative terms) than those in more affluent areas (McCoy & Kotsch, 2021).[104] In addition, the financial rate of return of such measures presents a significant heterogeneity between the poorest and the wealthiest deciles. The households with high energy costs living in poverty usually face costs that are mainly outside their control, given the capital investment required to reduce them. It could also lead to a much larger number of incidents of ill-health (Hills, 2012).[105] Moreover, according to Watson and Maitre (2015), the overlap between fuel poverty and deprivation is not perfect.[106]

176. Creating a National Fund for Energy Efficiency Investments (FNIEE) and a methodology for

[102] World Bank.. Toward a Sustainable Energy Future for All: Directions for the World Bank Group's Energy Sector.
[103] IRENA, 2019a. Renewable Energy and Jobs – Annual Review 2019. Abu Dhabi.
[104] McCoy, D., & Kotsch, R. A. (2021). Quantifying the distributional impact of energy efficiency measures. The Energy Journal, 42(6).
[105] Hills, J. (2012). Getting the measure of fuel poverty: Final report of the fuel poverty review.
[106] Watson, D. and Maitre, B. (2015). Is fuel poverty in Ireland a distinct type of deprivation? The Economic and Social Review, 46(2, Summer):267–29

evaluating projects could represent a significant first step in promoting energy consumption reductions in the different sectors, including electromobility. Evidence shows that energy efficiency measures lead to savings in energy bills from households. However, real cost-effectiveness depends on various specific household characteristics: energy savings depend primarily on specific technical and behavioral aspects of individual households (Tigchelaar, 2011).[107] As a result, implementing a methodology for evaluating projects could improve the cost-effectiveness of fund-driven programs.

Prior Action 7: *To promote a more efficient, greener and safer road transport sector, the Borrower has enacted the Organic Law Reforming the Organic Law on Land Transportation, Transit and Road Safety (Ley Orgánica Reformatoria de la Ley Orgánica de Transporte Terrestre, Tránsito y Seguridad Vial) that establishes incentives for the use of sustainable, environmentally-friendly means of transportation (including walking, bicycle use, and zero emissions vehicles), "green" labeling of license plates of electric/zero-emission vehicles to give effect to the applicable incentives, and enhanced measures for road safety, as published in the Official Register (Suplemento) No. 512 on August 10, 2021.*

177. **Promoting a more efficient, greener, and safer road transport sector by establishing the obligation for green labeling and including provisions for incentivizing zero-emissions vehicles is expected to have neutral effects on the welfare of the poor and vulnerable populations**. The transportation sector is the second-largest energy-consuming sector after the industrial sector and accounts for 30 percent of the world's total delivered energy. Also, according to Atabani et al. (2011), in 2008, the transportation sector accounted for about 22 percent of total world CO_2 emissions.[108] Within this sector, road vehicles dominate oil consumption and represent 81 percent of total transportation energy demand. Evidence suggests that green labeling and technologies offer vast potential for energy saving that can be achieved in this sector. Labeling could play an essential role in consumers' vehicle purchasing. Labeling accompanied by standards of an appropriate type and level of stringency may yield synergistic results, which, in turn, could lead to financial savings in the medium and long term. In addition, there is a crucial role of governments and non-governmental organizations since international, multistakeholder organizations have a critical part to play in setting protocols and standards for boosting and incentivizing the use of zero-emissions vehicles (Cohen & Vandenbergh, 2012).[109] On the other hand, there is an increasing amount of literature regarding the so-called direct and indirect rebound effects (RE). The direct rebound effect describes the increased consumption of a product or service that, due to an efficiency improvement, has become cheaper. The indirect rebound effect refers to increased spending on other goods and services through the additional income that has become available due to efficiency improvements (Marty, 2013).[110] These are aspects that must be considered from a climate change perspective and a distributional aspect. Literature shows that savings derived from the use of greener products tend to favor the rich the most. As a result, incentivizing zero-emission vehicles and rebound effects could lead to social losses if not adequately addressed.

[107] Tigchelaar, C. (2011). Do energy efficiency investments lead to lower household expenditure? Detailed analyses of the Dutch energy efficiency potential in real households. EU Energy Poverty Observatory.
[108] Atabani, A. E., Badruddin, I. A., Mekhilef, S., & Silitonga, A. S. (2011). A review on global fuel economy standards, labels and technologies in the transportation sector. Renewable and Sustainable Energy Reviews, 15(9), 4586-4610.
[109] Cohen, M. A., & Vandenbergh, M. P. (2012). The potential role of carbon labeling in a green economy. Energy Economics, 34, S53-S63
[110] Marty, S. (2013). Inequality and Green Innovations. Master Thesis. Department of Economics. University of Zurich.

Prior Action 8: *To strengthen the ability of different sectors to collect and report information on greenhouse gas emissions, and of the Borrower to prepare national greenhouse gas inventories and monitor its nationally determined contributions in the context of the Enhanced Transparency Framework of the Paris Agreement, the Borrower, through the Ministry of Environment, Water and Ecological Transition (MAATE) and with participation and input from relevant sector stakeholders, has issued and made public on its website four new technical guides containing updated procedures and methodologies for the collection and management of data required for the preparation of national greenhouse gas inventories, for the following sectors: (i) agriculture; (ii) waste; (iii) industrial processes and product use (mineral products category); and (iv) energy (fuel combustion in manufacturing and construction subcategory), as confirmed by Circular No. MAAE-MAAE-2021-0228-C dated October 20, 2021 from the Minister of Environment, Water and Ecological Transition to the Minister of Agriculture and Livestock, the Minister of Energy and Non-Renewable Natural Resources, the Minister of Production, Foreign Trade, Investment and Fisheries, and the Undersecretary of Environmental Quality of MAATE.*

178. **Prior Action 9 will improve the use of data and information in policy and decision-making related to climate change. This is not expected to have any direct social or poverty impacts.** This prior action aims to improve the transparency in climate data collection and management by reviewing GHG accounting methodologies for the different sectors, ensuring they are clear and robust. This systematization of climate information and data across sectors is key to developing a national registry on emissions to expand carbon markets and access international climate financing. This prior action will enhance transparency and improve the country's access to national and international financial resources. However, no impacts in terms of poverty and inequality reduction would result from this PA alone.

Prior Action 9: *To foster greenhouse gas emission reductions in all productive sectors of the economy, the Borrower has created the Ecuador Carbon Zero Program (Programa Ecuador Carbono Cero) (PECC), which establishes the processes and requirements for private and public institutions to quantify, reduce and offset/compensate their carbon emissions, and obtain one of three different "green" certifications for their climate change mitigation and adaptation actions (i.e., carbon footprint quantification; carbon reduction; or carbon neutrality) and its associated benefits, as evidenced by Ministerial Agreement No. MAAE-2021-18 issued by the Ministry of Environment and Water on May 6, 2021.*

179. Prior Action 9 is not expected to have significant impacts on equity and poverty. The ministerial Agreement creates the PECC as a voluntary program for national and international legal entities, public or private, that compensate GHG emissions in the Ecuadorian territory. Submitting entities must comply with program requirements and procedures established in the Agreement. They can apply to three levels of incentives: (i) quantification of carbon footprint, (ii) reduction of carbon footprint and (iii) carbon neutrality. Incentives are tied to the preexisting Punto Verde brand, and range from public recognition, use of a distinctive logo, to incentives related to public purchases, tax breaks according to Law and international promotion through the national foreign trade authorities. On the other hand, compensation initiatives can be public, private, community-based or from the popular and solidarity economy, duly certified and registered in the program.

180. **Evidence and modelling show both synergies and trade-offs between climate change**

mitigation policies and sustainable development, especially on inequality and poverty. "Many of Ecuador's systems are highly vulnerable and already have shown great sensitivity to climate variability and long-term change. Ecuador's ecosystems provide a range of environmental services that are critical to rural livelihoods and urban welfare. As these systems come under pressure from altered climate patterns as well as other direct and indirect factors (i.e., deforestation, agricultural and livestock practices), it is likely they will deteriorate due, and the quality of environmental goods and services will also decrease"[111]. Considering this and that poor households are also more at risk of suffering the consequences of climate change in terms of food insecurity, higher food prices, reduced income (over 30 percent of the employed population in Ecuador work in agriculture, forestry, and livestock activities), climate change mitigation measures could have positive impacts in the long run (Roy et al. 2018). However, trade-offs between mitigation actions to limit global warming and reduction of poverty and inequality have been identified in the literature (IPCC, 2014; Roy et al., 2018; Markkanen & Anger-Kraavi, 2019)[112],[113],[114]. This is especially true in countries with high fossil-fuel dependency for revenue or employment generation, and in contexts of high poverty and social and economic inequalities. Which is why it is required that potential negative impacts on poverty and inequality are identified and considered in all stages of policy making and clear action is taken to minimize them (Markkanen & Anger-Kraavi, 2019). Ecuador's PACC falls within the less traditional Results-Based Carbon Financing mechanisms that incentivize emission reductions while considering other benefits such as poverty reduction and community benefits[115].

181. **Given the voluntary nature of the PECC and the fact that other technical and administrative regulations are still pending to implement the program, no important impacts on poverty and shared prosperity are expected in the short run**. In the medium to long run, impacts depend on the proper implementation of the program itself, especially the compensation mechanisms. Impacts also depend on the interaction between this program and other environmental policies applied in the country, and whether these take a pro-poor approach and efforts are made to counter potential negative effects.

[111] World Bank – Climate Change Knowledge Portal (2021). "Ecuador country summary". Available at: https://climateknowledgeportal.worldbank.org/country/ecuador

[112] IPCC (2014). "Climate Change 2014: Synthesis Report". Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC. Geneva, Switzerland. 151 pp.

[113] Roy, J., P. Tschakert, H. Waisman, S. Abdul Halim, P. Antwi-Agyei, P. Dasgupta, B. Hayward, M. Kanninen, D. Liverman, C. Okereke, P.F. Pinho, K. Riahi, and A.G. Suarez Rodriguez (2018). "Sustainable Development, Poverty Eradication and Reducing Inequalities." In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Available at: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_Chapter5_Low_Res.pdf

[114] Markkanen, S. and A. Anger-Kraavi. 2019. Social impacts of climate change mitigation policies and their implications for inequality. Climate Policy, 19:7, pp. 827-844. DOI: 10.1080/14693062.2019.1596873

[115] World Bank Carbon Pricing Dashboard. 2021. What is carbon pricing? Available at: *https://carbonpricingdashboard.worldbank.org/what-carbon-pricing*

ANNEX 5: OVERVIEW of IFIs SUPPORT for the GOVERNMENT's FISCAL CONSOLIDATION AND GREEN, RESILIENT AND INCLUSIVE DEVELOPMENT AGENDA

Reform area	IFIs involved	Type of support
Reform area covered by the DPF		
Tax reform	WB	Technical Assistance on incidence analysis
Tax policy	WB, IADB, IMF, UNDP	Financial and technical assistance
Debt management and transparency	Treasury, IMF, WB	Technical assistance
Social Registry and expansion of social programs	WB IMF	Financing and technical assistance Financing
Child Malnutrition	CAF, WB	Technical Assistance and Financial
Migrantion	WB US, IOM UNHCR UNDP UNICEF,EU	Technical assistance Technical assistance
Disaster Risk Management	WB	Technical assistance
Fiscal Risk Unit	WB IADB	Financing Technical assistance
Access to Digital Technologies	WB	Technical assistance and financial
Law of the Public Electric Energy Service	WB	Technical assistance
National Energy Efficient System	WB	Technical assistance
Transport Sector Reforms	WB	Technical assistance
Programa Ecuador Carbono Cero	WB	Technical assistance
Complementary areas		
Investment Climate Reforms	WB	Technical assistance
Tax administration	WB IDB, CAF	Technical Assistance on Tax Transparency Technical Assistance on Large Taxpayer Unit
State-owned enterprise management	IADB, WB	Technical assistance and Financial
Public financial management	WB, IADB	Technical assistance
Public Procurement	WB IMF	Technical assistance Financial
Pension system reform	WB	Technical assistance on pension reform
Wage Bill	IMF	Technical assistance
Public and Private Partnerships	IFC, WB	Technical assistance

ANNEX 6. DPF PRIOR ACTIONS AND ANALYTICAL UNDERPINNINGS

Prior Actions	Analytical Underpinnings
Operation Pillar 1: ***Tackle selected structural challenges to foster growth, inclusion, job creation, and climate resilience***	
PA#1. To facilitate the mobilization, access and monitoring of public financing flows for climate change mitigation and adaptation programs, the Borrower has established the " Institutional Committee for Financing and Thematic Monitoring *(Comité Institutional de Financiamiento y Seguimiento Temático*) with the mandate of supporting the development, consolidation, coordination, and implementation of national strategies for accessing financing, and implementing economic and financial policies, for climate and sustainable development, as evidenced by Ministerial Agreement No.0097 issued by the Minister of Economy and Finance (October 15, 2021).	There is ample evidence that Ministries of Finance have a relevant role to play in the climate change agenda through fiscal and financial policies to integrate climate change in their economy. Ecuador is part and has co-led the Coalition of Finance Ministers for Climate Action, which includes 60 member countries, demonstrating its commitment to using economic policy to combat climate change. The Coalition has a study on green recovery strategy and recommended fiscal policies for boosting economic growth while pursuing national climate objectives. the work with the Coalition, Ecuador is sharing national options and learning from global experiences on how to confront physical impacts of climate change, as well as how to undertake a transition toward a resilient low-carbon economy, while addressing challenges for macro-financial management. Other analytical documentation include: • The New Climate Economy, The Global Commission on the Economy and Climate (2018), and its flagship • https://newclimateeconomy.report/2018/wp-content/uploads/sites/6/2018/09/NCE_2018_FULL-REPORT.pdf • Climate Change Budget Tagging: A Review of International Experience. Equitable Growth, Finance and Institutions Insight. "World Bank. 2021. World Bank, Washington, DC. © World Bank. *https://openknowledge.worldbank.org/handle/10986/35174* License: CC BY 3.0 IGO." • Mexico Strengthening Economic Sustainability Development Policy Financing (*http://operationsportal.worldbank.org/secure/P174150/home)* • *"Feyen, Erik; Utz, Robert; Zuccardi Huertas, Igor; Bogdan, Olena; Moon, Jisung. 2020. Macro-Financial Aspects of Climate Change. Policy Research Working Paper;No. 9109. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/33193 License: CC BY 3.0 IGO."*
Prior Action #2. To reduce trade barriers, the Borrower has: (i) reduced the tariffs of 796 tariff lines, as evidenced by the following resolutions of the Foreign Trade Committee (*Comité de Comercio Exterior*) (COMEX): Resolution No. 007-2021 adopted on May 20, 2021 and effective May 31, 2021; and Resolution No. 009-2021 adopted July 9, 2021 and fully effective as of October 1, 2021; and (ii) in accordance with the recommendation of Informe Técnico No. MPCEIP-CTCE-008-2921 approved by the COMEX on July 22, 2021, eliminated one or more pre-import control documentation requirements with respect to 1,466 tariff subheadings, as evidenced by COMEX Resolution 010-2021 adopted on July 22, 2021, as published in the Official Register *(Suplemento*) No. 527 on August 31, 2021.	There is substantial evidence that trade reform, including tariff reductions, promotes economic growth and productivity increases. The balance of the evidence suggests a positive relationship between trade reform and growth (Frankel and Romer, 1999; Irwin, 2019). There is strong empirical evidence across countries that reducing trade costs, such as tariffs, boosts productivity growth (e.g., Pavnick, 2002, for manufacturing in Chile; and Bernard, Jensen, and Schott, 2006, for the United States). A recent paper by Camino Mogro, Pinzón, and Carrillo Maldonado (2020) finds evidence of the causal relationship between import decision and firm productivity and on the "learning-by-importing" hypothesis in Ecuador during the period 2007–2018.

PA#3. To protect vulnerable populations, the Borrower has: (i) modified Executive Decree No. 712 of April 11, 2019, which established the Social Registry and its related administrative units, by enhancing the management of the Social Registry by targeting and including households and individuals (in addition to families) as well as the most vulnerable groups including those without administrative data, the future establishment of a model for permanent updating of the Social Registry, and mandating public executive agencies to provide their registers of data requested by the Social Registry Unit (e.g., on identity, tax, social security, socioeconomic status) to help keep the Social Registry updated and generate inputs for social protection policies and programs, and raising the profile of the Social Registry Unit by attaching it to the Presidency, as evidenced by Executive Decree No. 228 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021; and (ii) (A) approved the implementation of a prioritized package of goods and services for pregnant women and children under 24 months of age to combat child and maternal malnutrition and (B) mandated an annual statistical survey of chronic child malnutrition rates, as evidenced by Executive Decree No. 1211 issued on December 15, 2020, as published in the Official Register (*Suplemento*) No. 356 on December 23, 2020.	Leite, P., George, T., Sun, C., Jones, T., & Lindert, K. (2017). Social Registries for Social Assistance and Beyond. Evaluación Rápida al Registro Social del Ecuador (2019). World Bank, Unpublished manuscript. Reporte de evaluación técnica del PNUD a la operación del Registro Social. (Mar 2021). PNUD y URS. Unpublished manuscript One Pager Estado actual y camino futuro del Registro Social (Jul2021), World Bank, Unpublished manuscript.
Operation Pillar 2: *Strengthen low-carbon development to support the ecological transition*	
PA#4. To facilitate private investment in energy generation (including from non-conventional renewable sources) and electromobility, the Borrower has enacted the Organic Law Reforming the Law of the Public Electric Energy Service (*Ley Orgánica Reformatoria a la Ley Orgánica del Servicio Público de Energía Eléctrica*) which removes certain obstacles to private financing of non-conventional renewable electric generation and electric vehicle charging projects (e.g., clarifies operation license and concession termination events, lowers barriers to transfers of minority interests, provides for the authorization and regulation of commercial electric vehicle charging, and allows security interests in immovable project assets and transferability of license rights in favor of financiers), as published in the Official Register (*Suplemento*) No. 452 on May 14, 2021.	Governments can attract investments, increase investor confidence, strengthen national energy strategies, and fulfil climate pledges under the Paris Agreement by placing the development of renewables at the center of economic recovery plans. Renewable energy and energy efficiency has proven resilient and flexible despite the COVID-19 crisis, and its development provides an opportunity to align economic recovery with climate goals. According to the *2020 Joint Report on Multilateral Development Banks on Climate Finance* and the *Enabling Private Investment in Climate Adaptation and Resilience Report* , to boost private investments in clean generation and energy efficiency it is necessary to strengthen the power sector's regulatory framework and pave the way to competition in the sector. It has also been identified that catalyzing private investments in renewable energy requires removing barriers and decreasing transaction costs for renewable energy projects. • GFDRR. 2020. *Enabling Private Investment in Climate Adaptation and Resilience*. Washington, DC, World Bank. • World Bank. 2019. *Unlocking Private Sector Investment for Low-Carbon Transition in South Africa; Assessing Investment Climate for Climate Investments*. Washington, D.C. • ESMAP. 2020. Global Photovoltaic Power Potential by Country. Washington, DC: World Bank. • "Diálogos de Política", Ecuador Policy Notes, World Bank, 2021

	• Cálculo del Déficit en el Mercado Eléctrico de Ecuador por Efecto de la Pandemia del COVID-19.
PA#5. To reduce energy costs, increase productivity and create jobs, the Borrower, through the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, has issued the regulatory framework for the qualification, connection, installation and operation of small (less than 1 MW) renewable distributed generation systems for self-supply, as evidenced by Resolution No. ARCERNNR-013/2021 (containing Regulation No. ARCERNNR-001/2021) (April 5, 2021).	There is ample evidence that distributed generation can help promote the participation of cleaner energy that can help develop a more resilient distribution grid. Many countries in the region have started issuing framework regulation establishing the conditions, requirements, and payment mechanisms, together with the implementation of specific programs (e.g., behind the meter rooftop solar or others). Distributed generation is associated with emergence of prosumers (producers and consumers) whose per-kWh costs of self-generated renewable electricity is less or equal than electricity obtained from the grid. With grid parity, such consumers can benefit from generating their own electricity rather than buying it from the grid. In addition, self-consumption tends often to be exempted from grid costs and other system or capacity charges. Some studies (for instance, Rethinking Power Sector Reform in the Developing World) have identified that net metering is a useful mechanism for incentivizing distributed generation among citizens. Analytical documentation includes: • Foster, Vivien, and Anshul Rana. 2020. Rethinking Power Sector Reform in the Developing World. Sustainable Infrastructure Series. Washington, DC: World Bank. doi:10.1596/978 -1-4648-1442-6 • Distributed Power Generation for Lebanon: Market Assessment and Policy Pathways, • /India – Connected Rooftop Solar Program. *https://iea.blob.core.windows.net/assets/efa2da49-4576-49c1-840d-0bde4dd736c3/6-Abhinav_Goyal_Worldbank_Rooftop_Solar_Program_20201012.pdf*
PA#6. To promote consumer-side energy efficiency and reduction of greenhouse gas emissions, the Borrower has issued the General Regulations of the Organic Law on Energy Efficiency (*Reglamento General de la Ley Orgánica De Eficiencia Energética*), establishing the roles and responsibilities of the National Committee on Energy Efficiency (CNEE); the selection criteria, functions and governance for the CNEE's Advisory Council consisting of representatives from interested energy consumers, academia, professional unions, productive sectors, and civil society; the classification of energy consumers by sector and energy use (large, medium and small); obligations of large energy consumers to report periodically on their energy use, energy efficiency measures implemented and the results thereof, and to implement in their operations and (starting 2025) obtain certification under ISO 50001 (Energy Management) standards; requirements for entities to register as Energy Auditors, Energy Managers (under ISO 50001), or Energy Service Companies in the national Catalog of Energy Services Providers; mechanisms for the promotion of energy efficiency projects and the methodology for prioritizing and	There is ample evidence that shows that it is essential to develop national policies and programs to advance energy efficiency measures. Particularly, the *2021 China: 40-Year Experience in Energy Efficiency Development* and the *Technical Report 2017 Assessing and measuring the performance of energy efficiency projects* recommends establishing a national energy efficiency plan and determining performance evaluation indicators to keep track of the projects, their compliance targets and their benefits to reduce GHG. Analytical evidence includes: • World Bank. 2017. Assessing and Measuring the Performance of Energy Efficiency Projects. ESMAP Technical Report 011/17. Washington, D.C.: World Bank Group. *http://documents.worldbank.org/curated/en/531691498680679016/Assessing-and-measuring-the-performance-of-energy-efficiency-projects* • De Gouvello,Christophe; Song,Yanqin; Taylor,Robert. 2021. *China: 40-Year Experience in Energy Efficiency Development - Policies, Achievements, and Lessons Learned (English).* Washington, D.C.: World Bank Group. *http://documents.worldbank.org/curated/en/975831625856343245/China-40-Year-Experience-in-Energy-Efficiency-Development-Policies-Achievements-and-Lessons-Learned*

evaluating them; and policy mechanisms for meeting the targets in the national energy efficiency plan (such as "energy efficient" labeling of products and buildings, and issuing "energy savings" certificates to projects that demonstrate energy savings or carbon emissions avoided, entitling them to benefits such as lower tariffs), as evidenced by Executive Decree No. 229 issued on October 20, 2021, as published in the Official Register (*Suplemento*) No. 575 on November 11, 2021.	
PA#7. To promote a more efficient, greener and safer road transport sector, the Borrower has enacted the Organic Law Reforming the Organic Law on Land Transportation, Transit and Road Safety *(Ley Orgánica Reformatoria de la Ley Orgánica de Transporte Terrestre, Tránsito y Seguridad Vial*) that establishes incentives for the use of sustainable, environmentally-friendly means of transportation (including walking, bicycle use, and zero emissions vehicles), "green" labeling of license plates of electric/zero-emission vehicles to give effect to the applicable incentives, and enhanced measures for road safety, as published in the Official Register (Suplemento) No. 512 on August 10, 2021.	There is substantial evidence that reducing greenhouse gas emissions positively impacts the strengthening of a resilient and sustainable State (UN, *Climate Action*, 2021). Ecuador pledged to reduce 9 percent of GHG emissions (over a dynamic baseline) in energy, industrial processes, waste management and agriculture. With a 48.5 percent of total GHG emissions, transport represent by far the largest share of all energy sectors emissions. The World Bank has done an assessment of vehicle inspection system in Ecuador that includes recommendations and indicates the need for the implementation of improvements and minimum technical requirements of technical inspections of vehicles (including emissions), improving road safety standards and the minimum requirements for the importation of vehicles, with the main objective of reducing transport-related GHG emissions. Other analytical documentation include: • Assessment of Vehicle Inspection System for Ecuador for the National Transit Agency (Gasull, L., Carvajal, P., World Bank, 2021) • Ecuador Policy Notes (WB, 2021) • Ecuador Transport Sector Note (WB, 2021, pending publication) • Support for urban public transport in response to COVID-19 (Cercana for the World Bank, 2020) • Second national communication on climate change (Ministry of Environment, Republic of Ecuador, 2011) • Knowledge of vulnerabilities and possible adaptation measures to climate change in the metropolitan district of Quito (Environment Secretariat, Metropolitan District of Quito, 2015) • Social cost of carbon in project appraisal (Guidance Note WBG staff, 2014)
PA#8: To strengthen the ability of different sectors to collect and report information on greenhouse gas emissions, and of the Borrower to prepare national greenhouse gas inventories and monitor its nationally determined contributions in the context of the Enhanced Transparency Framework of the Paris Agreement, the Borrower, through the Ministry of Environment, Water and Ecological Transition (MAATE) and with participation and input from relevant sector stakeholders, has issued and made public on its website four new technical guides containing updated procedures and methodologies for the collection and management of data required for the preparation of national greenhouse gas inventories, for the following sectors: (i) agriculture; (ii) waste; (iii) industrial	National Climate Change commitments by countries sets out a number of key goals. Reaching these goals will enable Ecuador to meet its commitments under the United Nations Framework Convention on Climate Change (UNFCCC). They key elements that will ensure countries can effectively track and steer greenhouse has (GHG) emissions and removals include the Establishment of a national system for GHG measurement, reporting and verification (MRV). Meeting UNFCCC reporting commitments on steps taken and envisaged to implement the UNFCCC (focusing on understanding and driving down GHG concentration trends). • "Partnership for Market Readiness. 2016. Experience in Developing Legislation to Support South Africa's Mandatory GHG Emissions Reporting Program and National Inventory Data Flow. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/29120 License: CC BY 3.0 IGO." • "Partnership for Market Readiness. 2021. From the Ground Up: A Decade of Lessons on Carbon Pricing. World Bank, Washington, DC. © World Bank.

processes and product use (mineral products category); and (iv) energy (fuel combustion in manufacturing and construction subcategory), as confirmed by Circular No. MAAE-MAAE-2021-0228-C dated October 20, 2021 from the Minister of Environment, Water and Ecological Transition to the Minister of Agriculture and Livestock, the Minister of Energy and Non-Renewable Natural Resources, the Minister of Production, Foreign Trade, Investment and Fisheries, and the Undersecretary of Environmental Quality of MAATE.	https://openknowledge.worldbank.org/handle/10986/36021 License: CC BY 3.0 IGO.”
PA#9. To foster greenhouse gas emission reductions in all productive sectors of the economy, the Borrower has created the Ecuador Carbon Zero Program (*Programa Ecuador Carbono Cero*) (PECC), which establishes the processes and requirements for private and public institutions to quantify, reduce and offset/compensate their carbon emissions, and obtain one of three different “green” certifications for their climate change mitigation and adaptation actions (i.e., carbon footprint quantification; carbon reduction; or carbon neutrality) and its associated benefits, as evidenced by Ministerial Agreement No. MAAE-2021-18 issued by the Ministry of Environment and Water on May 6, 2021.	*Using Carbon Revenues -PMR Technical note 16-2019.* Carbon revenues have grown in recent years. As of April 2019, there were 57 carbon prices either in place or scheduled for implementation. These initiatives cover around 11 gigatons of carbon dioxide equivalent (GtCO2 e), representing around 20 percent of global emissions per year, an increase from 13 percent of global emissions in 2016. As a result, the estimated revenues generated from carbon pricing have increased from US$ 22 billion in 2016 to US$ 44 billion in 2018 (World Bank 2019a).1 Carbon revenues are expected to increase further in 2019 and the years following, and this growth has the potential to unlock fiscal opportunities, particularly in developing countries. These opportunities stem from both the possible expansion to new jurisdictions and increases in price. Fiscal Policies for a Low-Carbon Economy Semmler, Willi; Braga, Joao Paulo; Lichtenberger, Andreas; Toure, Marieme; Hayde, Erin. 2021. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/35795