#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

### COLOMBIA

#### SUSTAINABLE AND RESILIENT GROWTH PROGRAM

(CO-L1264)

#### LOAN PROPOSAL

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#### **ABBREVIATIONS**

CGR Office of the Comptroller General

CREG Energy and Gas Regulatory Commission

DANE National Administrative Statistics Department

DNP National Planning Department ECG Evaluation Cooperation Group

ECLAC Economic Commission for Latin America and the Caribbean

FAO Food and Agriculture Organization

GDP Gross domestic product

IDB Inter-American Development Bank

KIF Korea Infrastructure Development Cofinancing Facility

MADR Ministry of Agriculture and Rural Development

MADS Ministry of Environment and Sustainable Development

MHCP Ministry of Finance

MME Ministry of Mines and Energy MT Ministry of Transportation

MVCT Ministry of Housing and Urban and Regional Planning

NAMA Nationally appropriate mitigation action NCRE Nonconventional renewable energy NDC Nationally determined contribution

ONV Green Business Office (Ministry of Environment and Sustainable

Development)

PEFA Public Expenditure and Financial Accountability

PIGCCS Plan Integral de Gestión de Cambio Climático Sectorial [Sector-specific

Comprehensive Plan for Climate Change Management]

PIGCCT Plan Integral de Gestión de Cambio Climático Territorial [Regional

Comprehensive Plan for Climate Change Management]

PNCC Política Nacional de Cambio Climático [National Policy on Climate

Change]

PND Plan Nacional de Desarrollo [National Development Plan]

SDGs Sustainable Development Goals

SIN Sistema Interconectado Nacional [National Interconnected System]
UMPE Unidad de Planeación Minero Energética [Mining and Energy Planning

Unit]

UNFCCC United Nations Framework Convention on Climate Change

#### **PROJECT SUMMARY**

# COLOMBIA SUSTAINABLE AND RESILIENT GROWTH PROGRAM (CO-L1264)

Financial Terms and Conditions							
Borrower			Flexible Financing	g Facility <sup>(a)</sup>	KIF		
Republic of Colombia			Amortization period:	20 years	25 years		
Executing agency			Disbursement period:	1 year			
Ministry of Finance (MHCP)			Grace period:	7 years <sup>(b)</sup>	7 years		
Source <sup>(c)</sup>	A	%	Interest rate:	LIBOR-based <sup>(d)</sup>	2.5%		
Source	Amount		Front-end fee:	N/A	0.1%		
Ordinary Capital (IDB)	US\$700,000,000	87.5	Credit fee:	(e)	N/A		
			Inspection and supervision fee:	(e)	N/A		
Joint financing – Korea Infrastructure Fund (KIF) <sup>(f)</sup>	US\$100,000,000	12.5	Weighted average life:	12.60 years	N/A		
Total:	US\$800,000,000	100.0	Approval currency:	U.S. dol	ar		

#### Project at a Glance

**Project objective/description:** The general objective is to contribute to sustainable, resilient growth. Colombia's economic growth amid the COVID-19 health emergency will be supported through three specific objectives: (i) to strengthen the Colombian government's capacity to plan, manage, and finance climate action; (ii) to foster economic opportunities based on the sustainable use of natural resources and the development of circular economy models; and (iii) to promote the energy transition.

This is the first in a programmatic series of two contractually independent, technically related policy-based loan operations, in accordance with "Policy-based Loans: Guidelines for Preparation and Implementation" (document CS-3633-2).

Special contractual conditions precedent to the first and only disbursement of the financing: The first and only disbursement is contingent upon fulfillment of the policy reform conditions set forth in the Policy Matrix (Annex II) and other conditions in the loan contract (see paragraph 3.2).

#### Exceptions to Bank policies: None.

Strategic Alignment							
Challenges: <sup>(g)</sup> SI ☒   PI ☒   EI ☒							
Crosscutting themes:(h)	GE □ and DI □	CC ⊠ and ES ⊠	IC ⊠				

- (a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. The Bank will take market conditions as well as operational and risk management considerations into account when reviewing such requests.
- (b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.
- (c) The Bank will provide US\$700 million in financing from the Ordinary Capital, while the Korea Infrastructure Development Cofinancing Facility for Latin America and the Caribbean (KIF) will provide US\$100 million in cofinancing (see footnote (e)). Complementing the financing will be two parallel cofinancing operations (€200 million from Agence Française de Développement and €150 million from KfW Development Bank; see paragraph 1.46).
- (d) In keeping with document FN-729 (Strategy and Operational Readiness for the Execution of the LIBOR Transition for the IDB Balance Sheet) and document CF-257-1 (Base Rate Replacement for Sovereign Guaranteed LIBOR-based Loans), this loan will be subject to the SOFR-based interest rate, upon notification to the borrower by the Bank, or at the borrower's request, pursuant to the provisions of the loan contract
- (e) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with applicable policies.
- These funds will be administered by the Bank under the Korea Infrastructure Development Cofinancing Facility (KIF), in accordance with an agreement signed between the Government of the Republic of Korea and the Bank on 28 March 2015 and most recently amended on 26 August 2021 to increase the facility amount.
- (9) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).
- (h) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

#### I. DESCRIPTION AND RESULTS MONITORING

## A. Background, problem addressed, and rationale

- 1.1 The Government of Colombia has requested the Bank's support to assist in its economic recovery following the COVID-19 crisis and to promote sustainable and resilient growth in Colombia through a programmatic policy-based loan. The United Nations defines <u>sustainable growth</u> as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs." This calls for combining three essential components: (i) economic growth; (ii) social inclusion; and (iii) environmental protection.
- The impact of the COVID-19 pandemic on economic growth in Colombia. The economy shrank 6.8% in 2020 due to the COVID-19 pandemic. With the fiscal rule suspended, the fiscal deficit rose to 7.8% of gross domestic product (GDP) and the debt increased to 64.8% of GDP. Fiscal concerns prompted both Standard & Poor's and Fitch Ratings to lower their foreign-currency sovereign debt ratings from "BBB-" to "BB+" with stable outlook, which is below investment grade. However, Colombia still has access to international financing; its unrestricted access to the Flexible Credit Line of the International Monetary Fund was upheld. For 2021, the government is projecting a growth rate at or above 6.0%,¹ a deficit equivalent to 8.6% of GDP, and debt equivalent to 65.1% of GDP, amid expectations of increased expenditure for the emergency response and economic reopening.
- Impacts of COVID-19 on social inclusion. Colombia's gaps between vulnerable groups—women, young people, and rural workers—and the rest of society will widen significantly as the economic crisis caused by the COVID-19 pandemic leads to increased poverty among these populations (ECLAC, 2021; DANE, 2020). Monetary poverty increased from 35.7% in 2019 to 42.5% in 2021, while extreme poverty rose from 9.6% to 15.1% (DANE, 2021). Unemployment peaked in May 2020 (21.4%), and gender and age gaps deepened. In 2020, the jobless rate was 12.7% among men, 20.4% among women, and 24.2% among young people. The business community has also been hurt. According to the Superintendency of Corporations, business liquidation and insolvency and/or reorganization applications rose by 42% from 2019 to 2020, and more than 15% of businesses have reduced their workforce or cut work hours as of February 2021 (Social Pulse Survey, 2021).
- 1.4 Following a broad-based national consensus-building process, Congress approved the new tax reform bill introduced by the government. Known as the Social Investment Act, this legislation replaces the fiscal reform bill that had been presented in April 2021, which was withdrawn in the wake of numerous protests and social unrest in the country. The newly enacted legislation aims to: (i) protect the most vulnerable people; (ii) stabilize public finances without harming the middle class; and (iii) reopen the economy. Tax revenues are projected at 1.4% of GDP, amid an emphasis on austerity in public expenditure, the fight against tax evasion, and changes in the corporate tax system. In addition, it provides greater technical capacity and independence to the Fiscal

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<sup>&</sup>lt;sup>1</sup> Ministry of Finance Financial Plan 2021.

Rule Committee. These measures should bring the central government deficit down to an average of 2.7% of GDP in 2026-2032 and its debt down from 67.0% in 2022 to 61.1% of GDP in 2032. The President of the Republic has approved the legislation to become law.

- 1.5 Environmental protection amid the post-pandemic economic recovery. Since 2016, Colombia's adjusted net savings index has declined to below that of other countries in the region, as a result of low-sustainability economic growth (World Bank, 2018; optional link 3). The Organisation for Economic Co-operation and Development (OECD) and other experts have noted that certain public polices—such as those aimed at supporting the transition toward clean energy, strengthening sustainable agrifood systems, and promoting ecosystem restoration—can contribute to the economic reopening, sustainable growth, and the response to climate change, which in turn would improve Colombia's adjusted net savings. Colombia has the opportunity to leverage the comparative advantages afforded by its biodiversity and extensive natural resources that are renewable, recoverable, and grown (optional link 3) and to use these resources sustainably, so as to promote a number of these measures and return to a sustainable economic growth path, diversity the economy, and reduce the country's historic dependence on hydrocarbon exports (oil revenues accounted for 3.8% of GDP in 2019), amid an imminent decline in international demand.
- 1.6 Sustainable growth in Colombia is an innovative development model. Colombia has committed to environmental management and social inclusion as sustainable development strategies for its policy frameworks, including: (i) its <a href="National Policy on Climate Change (PNCC)">National Policy on Climate Change (PNCC)</a> (2017) and <a href="Climate Change Act">Climate Change Act</a> (Law 1931 of 2018); (ii) its <a href="Sustainable Development Goals">Sustainable Development Goals</a> (SDG) implementation <a href="Strategy">Strategy</a>; (iii) its <a href="Green Growth Policy">Green Growth Policy</a> (2018); and (iv) its <a href="National Development Plan 2018-2022">National Development Plan 2018-2022</a> (PND).
- 1.7 Colombia included climate action in its national public sector agenda and established an institutional framework to address climate change, through the PNCC and the Climate Change Act. On the heels of the December 2015 signing of the Paris Agreement, the PNCC in 2017 laid out a roadmap to include climate change management in public and private sector decision-making. This policy is built around five strategic areas (rural development, urban development, mining and energy, strategic infrastructure, and ecosystem management and conservation. Actions for each strategic area are identified with the aim of fostering technological development and enhancing production processes that are low in greenhouse gas emissions and/or can be adapted to the effects of climate change. The Climate Change Act also creates an institutional framework for decision-making and includes guidelines for comprehensive planning for and management of climate change. For example, it establishes institutional principles and areas of authority at the national and subnational levels, as well as participatory bodies (National Council on Climate Change); it creates Regional and Sector-specific Comprehensive Plans for Climate Change Management (PIGCCTs and PIGCCS, respectively); and it mandates the creation of the national climate change information system.
- 1.8 Colombia made strides in identifying its commitments for the sustainable development agenda through the SDG implementation strategy.

CONPES 3918/18 has informed subsequent strategic frameworks at the national and subnational levels, such as the Green Growth Policy (2018), the Regional Development Plans (2020-2024), and the PND 2018-2022, and it has become a long-term government policy. It identifies priority areas for meeting the SDGs by 2030 and establishes 156 indicators, specific targets, and responsible institutions. It includes targets for universal coverage of electricity, greater numbers of electric vehicles registered in Colombia, an increase in natural forest cover, the protection of natural areas, and increased rates of recycling and use of solid waste.

- In 2018, the Green Growth Policy became the main policy framework guiding actions related to sustainable growth. The objectives of this policy are to help increase productivity and economic competitiveness in Colombia through the sustainable use of natural capital. It identifies the need to: (i) create conditions that will foster new economic opportunities based on Colombia's wealth of natural capital; (ii) strengthen mechanisms to optimize the use of natural capital and energy in production and consumption; (iii) strengthen the capacity of science, technology, and innovation to promote green growth; and (iv) enhance interagency coordination, information management, and financing to implement the measures outlined in the policy.
- 1.10 The PND 2018-2022 follows the path outlined by the Green Growth Policy through the "Pact for Sustainability: Produce by Conserving, Conserve by Producing." The Colombian government is seeking a balance between productive development and environmental conservation to fuel new economic opportunities and safeguard natural resources for future generations. Its main targets are to cut greenhouse gas emissions by 36 million carbon dioxide equivalents, reduce deforestation by 30%, double the land area with systems for sustainable production and conservation to 1.4 million hectares, transition to sustainable transportation, and implement the National Strategy on the Circular Economy to increase solid waste recycling and water reuse.
- 1.11 Challenges in implementing sustainable growth. The framework policies (PNCC, Green Growth Policy, SDG implementation strategy, and PND 2018-2022) identify structural challenges related to sustainable, resilient growth and set forth priorities, plans, and actions to guide sector policies. These plans face challenges in implementation, and some have incurred delays due to institutional and regulatory obstacles, which have tended to be exacerbated by COVID-19. To confront the crisis, the Colombian government issued its economic reopening policy in February 2021, with an investment estimated at US\$37.5 billion (14% for clean growth), to support measures such as nature-based solutions, sustainable livestock farming, green businesses, the circular economy, and use of nonconventional renewable energies (NCREs) as policy priorities (see Definitions, optional link 3).
- 1.12 This policy-based loan will help fulfill the long-term objectives of the strategic policy frameworks and will address a number of the identified challenges.
  - 1. Challenges in planning, management, and financing of climate action
- 1.13 Colombia has reaffirmed its commitment to climate action through significant strides toward establishing a policy framework for the fight against climate change (optional link 2) and as an active party to the Paris Agreement. However,

persistent challenges in climate planning, management, and financing will need to be addressed to reduce the likelihood of sustaining annual economic losses from climate change equivalent to 0.49% of GDP per year through the end of this century, according to estimates by the <u>Colombian government</u>. The main challenged are described below:

## a. Lack of strategic planning with a long-term vision

1.14 Five years into implementation of the Paris Agreement, it is obvious that the worldwide commitments to reduce greenhouse gas emissions have been insufficient. The Paris Agreement requires signatory countries to update their emission reduction targets (NDCs) and supplement their NDCs with long-term decarbonization strategies that will help governments articulate an approach for achieving carbon neutrality and climate resilience, and which will identify critical sectors and considerations for the thorough transformation of production and consumption models by 2050. According to some analyses for Latin America and the Caribbean, updating NDCs with more ambitious targets could save the region some US\$90 billion in stranded assets and US\$100 million in investment costs in the electricity sector alone (IDB, 2019). No such estimates for Colombia are available, which has contributed to a lack of strategic planning in this regard. Colombia, therefore, needs to update its NDC to reflect more ambitious climate change adaptation and mitigation measures and build its long-term strategy (with a gender focus and women's participation; see optional link 9) and develop implementation plans that specify responsible parties, timelines, and sector targets.

# b. Limited sector-based and regional management of climate change

1.15 Under the Climate Change Act, the <a href="PIGCCSs">PIGCCTs</a> are among the main tools for climate change management. These plans identify and prioritize the mitigation and adaptation measures and actions for each sector and regional entity, so as to catalyze effective climate action consistent with the NDC. As for the PIGCCSs, only those for the energy and housing sectors have been developed and have begun to be implemented; those for finance, transportation, industry, agriculture, and the environment are still forthcoming. Meanwhile, only 5 of the 32 PIGCCTs have been officially adopted, and they are of varying quality, due to a lack of standard guidelines for preparation.

#### c. Low levels of interagency coordination

1.16 Although the Colombian government does have some coordination bodies, such as the Cross-sector Commission on Climate Change, they need to be strengthened and complemented by entities to facilitate coordination between government entities and with participation of the private sector, social organizations, academia, international organizations, and Congress. To this end, the Climate Change Act calls for creation of the National Council on Climate Change.

#### d. Limited mobilization of private sector resources

1.17 Colombia's financing gap for climate change adaptation and mitigation is estimated at US\$860 million per year (Alvarez-Espinosa et al., 2017). This gap

- will widen as NDC targets are increased, thus posing further challenges in the mobilization of economic resources.
- 1.18 Colombia has a carbon market strategy as one of its mechanisms for mobilizing resources (<u>optional link 3</u>), but market expansion is constrained by legal lacunae and obstacles in the procedures and methodologies for projects that give rise to carbon-related loans.
- 1.19 Tools such as thematic bonds have also proven to be excellent ways of mobilizing financing for sustainable development and have high growth potential in Latin America and the Caribbean (Climate Bonds Initiative; IDB, 2021). Colombia is considering issuing its first sovereign green bond (optional link 3) but lacks a bond issue framework with guidelines for the use of funds, project evaluation and selection, and verification mechanisms.
- 1.20 Lastly, royalties from operations in the extractive and energy sectors have not been used to mitigate the environmental impacts in areas where such operations take place. A system of specific allocations, allowing municipios to provide incentives for investment in environmental protection and recovery, will contribute to socioeconomic and environmental recovery at the regional level.

# e. Inadequate tools for boosting efficiency in public expenditure on climate change

1.21 The Colombian government needs to develop a methodology for monitoring and calculating the cost of adaptation policy actions in order to estimate the fiscal and financial implications of its international commitments. The scenario of a decarbonized economy calls for an assessment of investments with negative environmental impacts (brown investments) in order to help develop guidelines for expenditure optimization and guide public investments to reduce the risk of investing in <a href="stranded assets">stranded assets</a> (optional link 3). Such assets eventually constitute losses of public resources. The new challenges and opportunities need to be reflected in an update that reviews progress on, and lessons learned from, the first National Strategy on Climate Finance.

# 2. Challenges related to nature-based solutions, climate-smart agriculture, and the circular economy

1.22 While nature-based solutions, climate-smart agriculture, and the circular economy have a sound policy framework (optional link 2) and constitute an opportunity for Colombia to find a sustainable growth path (PND, 2018), they continue to face the challenges described below.

# a. Regulatory constraints on the use of forest resources and biodiversity

- 1.23 Despite low levels of sustainable forestry (less than 1.8% of the commercial potential of all forestland), deforestation is occurring at a net rate greater than 150,000 hectares per year in 2017-2019 (about 0.2% per year). Forest economy studies identify institutional barriers to sustainable forest management and usage in accordance with Colombia's identified potential.
- 1.24 The main obstacles are: (i) lack of a policy framework with guidelines for coordinating between objectives for deforestation control and sustainable

forestry; (ii) lack of a legal framework for the sustainable use of timber and nontimber forest products; (iii) inadequate technical assistance for efficient forest management with a community-based approach built on documenting Colombia's experience in this area; and (iv) lack of updated policies for protected areas to foster the sustainable use of natural resources through conservation measures and approaches. Measures for sustainable forest management should focus on including a gender focus (optional link 9) and taking into account the ethnic communities that are home to 52.4% of Colombia's natural woodlands and the residents of areas hardest hit by the conflict, due to their socioeconomic ties to forestry and their potential role in reducing deforestation.

#### b. Low productivity for climate-smart agriculture

- 1.25 Colombia's land productivity (measured in United States dollars per square kilometer) trails the OECD average by a factor of 5.3, primarily due to sector policies that favor price subsidies to the detriment of the provision of public goods, extension services, and the adoption of environmentally and economically sustainable technologies. Raising total factor productivity may help reduce greenhouse gas emissions from agriculture, forestry, and other uses of land, which account for 43% of Colombia's greenhouse gas emissions. The livestock sector—accounting for 13 percentage points of this total—cut its emissions by 50% per unit of output between 2001 and 2015, due to a 40% increase in total factor productivity (Freiría, Nin-Pratt, and Muñoz, 2020).
- The Colombian government, with support from the private sector and 1.26 international cooperation, has made some efforts to enhance the sector's productivity and cut its greenhouse gas emissions through climate-smart agriculture practices (see optional link 3), but such programs are insufficient (only 0.1%, or 40,000 hectares, of Colombia's land area used for livestock farming are covered by sustainable production programs) and little of the knowledge and job and income-earning opportunities reach women (see optional link 9). This calls for greater market incentives through public policies to promote the restructuring of livestock farming in accordance with sustainability principles; encourage low-carbon, climate-resilient agriculture programs with a low impact on vulnerable ecosystems, to ensure sustainability in production; strengthen technology transfer and innovation programs with coordination at the subnational level, in councils on agriculture, climate, and sustainable livestock farming; and develop regulatory frameworks that strengthen community-based agriculture with greater prospects of market access. This will assist in moving forward along a path of sustainable agribusiness; implementing climate change adaptation and mitigation measures in the sector; and expanding opportunities for, and strengthening the capacities of, people in rural areas.

#### c. Green businesses' limited market access and low survival rate

1.27 Green businesses, particularly those linked to the <a href="bioeconomy">bioeconomy</a> and nature tourism, have significant <a href="development potential">development potential</a> in Latin America and the Caribbean. Colombia's bioeconomy accounted for 3.43% of its GDP in 2018 and is projected to grow 10.7% by 2030 (GGGI-Bointropic, 2020). Tourism accounts directly for 1.86% of Colombia's GDP, trailing countries in the region such as Ecuador (2.4%) and Peru (3.8%) (World Travel and Tourism Council, 2019), although foreign tourism grew faster in Colombia than anywhere else in the

- region (BBVA Research, 2018). Before the COVID-19 pandemic, nature tourism grew 65% over the five-year period ending in 2018, with one third of these tourists drawn primarily by <u>nature tourism</u>.
- 1.28 In 2020, Colombia had 2,581 green businesses that accounted for over 30,000 jobs (40% of them held by women, signaling the role of women as entrepreneurs and their potential employability in operations using nature-based solutions); 82% of them entail goods and services from natural resources, while 18% are categorized as industrial ecoproducts (MADS-ONV, 2020). As a newly emerging area of the economy, however, green businesses are still only a small portion of all enterprises: only 0.8% of all businesses started in 2019 were green. They have great potential but face huge challenges on the path to sustainability and expansion. To strengthen them, the 2014 National Plan for Green Businesses needs to be updated, including regulatory, technical, and financial measures to help reduce barriers to market access and problems related to economic sustainability; a trademark exclusive to goods and services meeting specific sustainability standards needs to be registered; and business startups to promote investment in research, development, and innovation for bioeconomy initiatives need to be fostered, along with the roadmap for the recent National Bioeconomy Strategy (2020). Also needed is a tourism regulatory framework that considers the availability of natural resources, compatible land uses, coverage of public services, and investment in infrastructure to help ecosystems and communities absorb such activity in a sustainable manner.

# d. Recent integration of the circular economy model into the flow of materials and water

- 1.29 The circular economy is an approach that alters production and consumption paradigms and contributes to sustainable growth by promoting the efficient use of—and a longer useful life for—materials, water, and energy. Implementing circular economy businesses could save an estimated US\$595 billion to US\$705 billion per year overall. The environmental benefits are the result of less use of materials and resources, which will increase countries' capacity to recover their natural capital. On the social front, the circular economy also carries high potential for entrepreneurship and job creation (MADS, 2019).
- 1.30 Colombia is pioneering the circular economy in Latin America and the Caribbean, having issued the National Strategy on the Circular Economy in 2019, but this strategy has only begun to be implemented. Successful progress will require a regulatory framework for integrated solid waste management in order to organize and encourage these efforts (beyond the mere proper disposal of waste; see optional link 3) through stronger coordinated planning between the national and subnational levels and an institutional structure to coordinate, implement, and monitor policies for integrated solid waste management. Recordkeeping and monitoring mechanisms also need to be strengthened to gain greater control over fulfillment of targets in accordance with extended producer responsibility as it pertains to the flow of containers and packaging, and the circular economy approach needs to be expanded to include areas such as water management.

#### 3. Challenges for the energy transition

1.31 Transitioning the transportation and electricity sectors to renewable energies is essential to promoting sustainable growth, as it will help fulfill the target for reduced greenhouse gas emissions, the SDG target of universal access to energy, and gender equity outcomes. Colombia's energy sector accounts for 7% of greenhouse gas emissions, compared to 11% for the transportation sector, along with 80% of particulate matter emissions (third national communication on climate change, CONPES document 3943 on air quality, and Cisneros & Lara, 2020). Colombia's electricity sector has a largely clean generation matrix due to the significant contribution of hydraulic energy (68% of total energy), but because hydraulic power is vulnerable to hydroclimate events caused by climate change, power sources need to be diversified by leveraging NCREs.

# a. Inadequate regulations with technical guidelines and incentives for adoption of new technologies and development of infrastructure for electric transportation

1.32 Law 1964 of 2019 and the National Strategy on Electric Transportation (2019) constitute the main policy frameworks promoting the use of electric vehicles (see optional link 2). Despite strides in issuing regulations for this law and implementing the roadmap outlined by this strategy, Colombia needs to issue standards for electric vehicles with a view toward importing or assembling such vehicles in the country; issue guidelines for the building of charging infrastructure, which is essential to vehicular mobility; and define which vehicle technologies are classified as "low emissions" for the purpose of vehicle price reductions. In terms of incentives, discounts for technical/mechanical inspections and preferential parking accommodations still need to be specified.

# b. Lack of guidelines for promoting equal economic opportunities in the energy sector

1.33 Studies indicate that promoting NCREs has tremendous potential for job creation. Jobs in Colombia's mining and energy sector, however, are disproportionately held by men (70% by men; 30% by women) (Ministry of Mines and Energy, 2020). To capitalize on the opportunities created by new initiatives for NCRE and in the electricity sector overall, guidelines for incorporating a gender focus in the sector need to be developed.

# c. The need for an updated policy framework to reflect transformations in the electricity sector

1.34 Despite technological shifts in the electricity sector brought about by the rise of NCREs, Colombia lacks an updated policy framework (energy transformation mission, 2020). Since the passage of Law 143 of 1994, Colombia has not updated its regulatory framework for setting priorities and outlining the roadmap for fostering transformations to address challenges such as decarbonization of the economy, reduce gaps in access to electricity, and, recently, contribute to the economic reopening. In 2019, with the Bank's support, the Colombian government carried out an "energy transformation mission" to put forward a strategy for modernizing the sector. Colombia now needs to act on the findings of this mission by designing a roadmap to adopt the recommendations and consolidate an energy transition policy.

#### d. Limited inroads of NCREs in the Colombian market

1.35 The Colombian government has focused on eliminating barriers to the entry of NCREs into the market by auctioning long-term contracts and including a provision in the PND to require vendors to draw 8% to 10% of their electricity from renewable sources. These strategies have been implemented in various countries (IDB, 2020) and are designed to facilitate access to financing, as the cost of capital has been identified as one of the main barriers to entry for such initiatives (Seetharaman et al., 2019). Colombia held its first two energy auctions in 2019 and has the opportunity to expand its installed generation capacity through a third auction open to all market agents (wholesalers as well as both individuals and entities). New NCRE initiatives will make the energy matrix more resilient, foster competitive pricing, and help reduce greenhouse gas emissions.

# e. Limitations in rules for management of available transmission infrastructure

1.36 To manage the available power transmission infrastructure, upgrades are needed for the increase in projects awaiting connection to the National Interconnected System (SIN). According to the Mining and Energy Planning Unit (2021), an average of 52 new generation projects per year were registered between 2010 and 2015, and this figure rose by 425% between 2016 and 2020. However, the approval process for connection to the grid continues to be on a first-come, first-served basis (Resolution CREG 106 of 2006); any generation project seeking connection must wait for pending applications to be resolved before its application can be reviewed and approved, and the entry of new projects can be blocked by delays in the entry of existing projects (Energy and Gas Regulatory Commission (CREG) and Household Utilities Administration, 2020). This results in a system with blockages, bottlenecks, and inefficiencies. The increase in projects calls for amending these regulations and allowing the use of shared assets to maximize the use of available infrastructure and more efficiently leverage the time-based and seasonal complementarity of NCREs.

#### f. Opportunities for the use of hydrogen

1.37 The Colombian government has the opportunity to explore the potential of hydrogen as an alternative energy source. According to the <a href="International Energy Agency">International Energy Agency (2019)</a>, hydrogen has potential uses in the electricity and transportation sectors through processes that would reduce greenhouse gas emissions, and a growing number of countries are adopting targets, commitments, and incentives to support deployment of this new technology. Colombia's progress in this energy segment requires conducting specific analyses on production capacity and potential demand (domestic and export-oriented), followed by development of a policy framework to outline a roadmap for the use of hydrogen.

# g. Weaknesses in the delivery of energy services by private operators to areas not connected to the grid

1.38 Currently, 3.11% of Colombians lack access to electricity service in areas not connected to the SIN (<u>Energy Hub, 2021</u>). This causes severe health impacts on these residents, particularly women, due to the use of firewood for cooking and the resulting difficulties in housework, which is primarily performed by women (<u>Andean Development Corporation</u>, 2020). One of the main challenges in

expanding coverage is providing incentives for private distributors, as 100% coverage requires some US\$2 billion in investment, far exceeding the government's budget (energy transformation mission, 2020). Power in areas not connected to the SIN is provided by small enterprises with low operational capacity, largely in the informal sector. These areas, as a result, receive service that falls short of the required minimum quality, their electricity infrastructure suffers from a lack of operation and maintenance work, and they experience metering and billing problems, *inter alia* (Energy Hub, 2021). Colombia needs to make strides in offering incentives to organizationally and financially sound private sector providers that are interested in entering these markets and have the capacity to perform ongoing administrative, operational, and maintenance work. To this end, existing regulations should include a rate schedule that adequately covers the total costs of private service and facilitates the expansion of virtual grids (mini-grids and individual photovoltaic solutions).

# h. Limited deployment of distributed generation and self-generation of clean energy

- 1.39 The Colombian government should focus on promoting distributed energy resources (see optional link 3) to promote the development of local infrastructure for renewable generation, the deployment of storage systems, and rise of the concept of the "prosumer" (electricity exchanges between users who generate their own electricity, depending on need and price). A precondition for the deployment of distributed energy resources is the widespread use of advanced metering infrastructure to promote energy efficiency, responsiveness to demand, and time-based rate-setting models and to incorporate electrical systems such as distributed generation and electric vehicles. Although this technology is available and has been deployed in other countries, Colombia's current regulations fail to offer enough incentives to make it widely available. A roadmap is needed, therefore, to deliver this technology to 75% of SIN users by 2030 (see CREG-175 of 2020). Technical procedures for connecting generators and self-generators need to be adjusted as well, and clearer rules on connection are needed to encourage distributed generation (CREG, 2020).
- 1.40 **Rationale.** This program helps promote sustainable, resilient growth in Colombia. Through regulatory and policy measures, it promotes areas prioritized by the government in its relevant policy frameworks (PNCC, Green Growth Policy, SDG implementation strategy, PND, economic reactivation policy) to foster the development of new sectors and economic activities based on the sustainable use of natural capital and to strengthen existing ones in order to achieve environmentally friendly growth with <a href="https://doi.org/10.1001/journal.org/">https://doi.org/10.1001/journal.org/</a> and a decisive transition toward decarbonization in Colombia.
- 1.41 **Proposed intervention.** The Government of Colombia requested support from the Bank and from strategic partners such as Agence Française de Développement, KfW Development Bank (Germany), the Export-Import Bank of Korea, and the Governments of Sweden and the United Kingdom to assist in Colombia's sustainable, resilient growth in the post-COVID-19 era. The program was designed in conjunction with parallel operations and entails two programmatic phases with joint policy and results matrices.

- 1.42 Effectiveness of sector policy reforms. The measures taken for climate management are change planning and aligned with international recommendations and the Bank's publications that have noted that current targets for reduced greenhouse gas emissions are inadequate for meeting the targets of the Paris Agreement. Along these lines, it would be advantageous to develop long-term planning strategies to go with updates to the NDC. In terms of nature-based solutions, gains are expected to be achieved in productivity, rural income, deforestation reduction, and mitigation of greenhouse gas emissions by promoting conservation efforts such as payment for environmental services and sustainable livestock farming with agroforestry and silvopastoral systems (Costedoat, 2015; González, 2017; Maes and Jacobs, 2015; Seddon et al., 2020 and 2021; IDB, 2020; Nin-Pratt and Valdés Conroy, 2020; Freiría, Nin-Pratt, and Muñoz, 2020. For the energy transition, studies indicate that the greatest impact on NCRE growth is achieved through a combination of fiscal incentives and measures to ensure grid access (McCarthy and Henderson, 2014). For closing gaps in access to energy service, the electrification model based on microgrids is competitive in isolated areas where extending the grid would be even more costly (energy transformation mission, focus area 4, 2020) (optional link 4).
- 1.43 **Synergies.** The Bank has extensive knowledge of the sectors involved in the program, thanks to its ongoing support for the policies of the Colombian government and others in Latin America and the Caribbean through various programs (see optional link 5). Specifically, this operation has synergies with the following operations in execution: Financing for the Design and Implementation of the Nationally Determined Contributions and Strengthening of the Management and Monitoring of Climate Action, for US\$1.5 million (ATN/MC-17416-RG and ATN/OC-18128-CR); Sustainable Colombia Program, for US\$100 million Strengthening of Forestry Governance, for US\$1.5 million (4424/OC-CO): (CO-G1012); Social and Economic Entrepreneurship in Sustainable Production Projects, for US\$2.4 million (GRT/CM-18495-CO); country dialogues and programming of proposals for the Infrastructure Program, for US\$1 million (RG-T3337); and Inclusive Circular Economy in the Pacific Alliance, for US\$0.5 million (ATN/OC-18546-RG).
- Additionality. The Bank has been a key partner in financing operations that have contributed to the success of the reforms subscribed in this operation in this programmatic series. It has provided support in the form of nearly 20 operations (see optional link 5), notably the following: (i) Analysis for the Design of Long-term Decarbonization Strategies, for US\$1 million (ATN/FR-18228-RG), in support of the development of the country's E2050 (2.1.2.1); (ii) Regional Green Bonds Program for Latin America and the Caribbean, for US\$1.9 million (ATN/OC-17317), as a contribution to preparation of the Framework for the Issuance of Sovereign Green Bonds (2.2.3.1); (iii) support for issuing the policy for control of deforestation and progress towards implementation of the policy (3.1.1.1 to 3.1.1.4) by strengthening capacity with technical cooperation operations ATN/CM-18487-CO, ATN/CM-18259-CO, and ATN/CM-18261-CO, for US\$2.7 million; (iv) Coordination and Implementation of the Joint Declaration of Intention, for US\$1.1 million (ATN/CM-17268-CO), which provided evidence for the preparation of guidelines on sustainable livestock farming (3.2.1.1); and (v) strengthening of the institutional capacities of Colombia to integrate

nonconventional energy resouces, for US\$1 million (ATN/PI-17372-CO), in support of the Energy Transformation Mission (4.2.1.2). In addition, for the second operation in the programmatic series, the Bank will contribute US\$1.6 million to advance 16 (27%) of the measures identified (see <a href="https://example.com/operation/energy/">optional link 6</a>).

- 1.45 Lessons learned. The Bank's support for policy reform programs in Latin America and the Caribbean has yielded lessons that figured into the design of this program: (i) policy outcomes are more likely to be achieved if there is effective alignment with the government's priorities [Program to Deepen Fiscal Reform in Colombia (3284/OC-CO) and Program to Deepen Fiscal Reform in Colombia II (4552/OC-CO)]; the program's components are aligned with Colombia's strategic policy frameworks; (ii) the time needed for measures to mature should be taken into account [Support for the Transition of the Energy Matrix in Ecuador II (5044/OC-EC)]; the program is designed in two phases with sequential commitments, and it will not be evaluated until two years after completion; (iii) responsibilities should be coordinated and allocated between the entities involved in designing and implementing the reforms, particularly for multisector programs [Program to Support a Fair, Clean, and Sustainable Energy Transition (5278/OC-CH)]; to this end, the National Planning Department has been designated as the program's technical coordinator, and the entities responsible for each policy commitment have been identified; (iv) successful implementation of reforms hinges largely on strengthening the institutional capacities of the relevant entities [Productive Economy and Creative Economy Support Program (5053/OC-CO)]; and (v) reforms should be supported by technical cooperation resources [Productive Economy and Creative Economy Support Program (5053/OC-CO) and Reform Program to Support Economic Recovery and Competitiveness (5203/OC-PE)].
- Coordination with other donors. This operation will be financed with 1.46 US\$700 million from the Bank's Ordinary Capital, including US\$100 million under the agreement between the Bank and the Government of Sweden through the Swedish International Development Cooperation Agency. This agreement creates an innovative risk-transfer mechanism to support development in Latin America and the Caribbean, which allows the Bank to increase its lending capacity by up to US\$300 million for new projects in Bolivia, Colombia, and Guatemala.<sup>2</sup> In addition, US\$100 million in cofinancing will come from funds administered by the Bank under the Korea Infrastructure Development Cofinancing Facility (KIF). Financing for this operation will be complemented by two parallel cofinancing operations:3 (i) a loan from Agence Française de Développement for €200 million under the modality of parallel cofinancing without services, to be signed between that institution and the Colombian government and which is covered by the Partnership Framework Agreement signed with the Bank; and (ii) a loan from KfW Development Bank for €150 million, to be signed between that institution and the Colombian government and which is covered by the memorandum of understanding entered into with the Bank in 2018. The

<sup>2</sup> For more details on this guarantee, see document GN-2989.

When the Bank and the cofinancing entity establish separate financial mechanisms for the same program, each party disburses and reimburses funds independently. For more details, see document GN-2911.

parallel cofinancing operations are the product of a complementary initiative to coordinate and mobilize resources, which has made it possible to expand the scope of the program and support the Colombian government as it develops the additional policy measures needed for it to achieve its sustainable and resilient growth objectives.

- 1.47 Successful coordination between financing entities has been supported by a common understanding of the operation's importance for Colombia, as well as the articulation of instruments and standardization of procedures. In particular, the Bank has played a leadership role in coordinating to mobilize strategic partners, helping to achieve double the agreed amount of financing compared to a bilateral operation (34% of the resources will be provided by other financing entities) and using its experience to support the technical component and policy dialogues with the government.
- 1.48 Strategic alignment. The program is consistent with the Second Update to the Institutional Strategy (document AB-3190-2), as it is aligned with the general objective of achieving sustainable growth in Colombia over the short, medium, and long terms, as well as with the following development challenges: (i) social inclusion and equality, by devoting more resources to sustainable development and helping small-scale producers gain access to new economic opportunities; (ii) productivity and innovation, by helping foster innovation through an improved regulatory framework to facilitate the development of products and services that will reduce environmental impact; and (iii) economic integration, by encouraging production in the agriculture sector and new businesses providing nature-based solutions with potential for entering regional and global markets. The program is also aligned with the following crosscutting themes: (i) climate change and environmental sustainability, by supporting climate-resilient development with low greenhouse gas emissions, having scored 93.75% in accordance with the multilateral development banks' joint methodologies for tracking climate finance; and (ii) institutional capacity and rule of law, by promoting policies to strengthen the government's efforts for sustainable growth and for the transparency and effectiveness of public expenditure on projects for investment in the environment and sustainable development. The program is also aligned with the Gender Action Plan 2020-2021 (GN-2531-19), as it includes multiple measures promoting women's leadership and participation in policymaking and women's access to economic and professional development opportunities (optional link 9). The program also contributes to the Corporate Results Framework 2020-2023 (GN-2727-12), is included in the Update of the Annex III of the 2021 Operational Program Report (GN-3034-2), and is consistent with the IDB Country Strategy with Colombia 2019-2022 (GN-2972), by supporting sustainable growth with an emphasis on: (i) economic productivity; (ii) public management effectiveness; and (iii) social mobility and consolidation of the middle class (see optional link 7).
- 1.49 Consistency with the Public Utilities Policy. The program is consistent with the objectives of the Public Utilities Policy (document GN-2716-6). It complies with the policy's principles related to economic evaluation and financial sustainability and contributes to the technical, operational, and financial sustainability of the energy sector by encouraging competition in the domestic and regional markets and enhancing rate-setting systems and processes. Moreover, to comply with the specific conditions of the Public Utilities Policy

(Section IV of document GN-2716-6), a cost-benefit and cost-efficiency analysis of the reforms proposed by the program has been carried out for this policy-based operation, as has an analysis of the operation's financial sustainability, as described in optional link 10.

### B. Objectives, components, and cost

- 1.50 **Objective of the programmatic policy-based loan.** The general objective is to contribute to sustainable, resilient growth with the aim of supporting Colombia's economic growth amid the COVID-19 health emergency. The specific objectives are: (i) to strengthen the Colombian government's capacity to plan, manage, and finance climate action; (ii) to foster economic opportunities based on the sustainable use of natural resources and the development of circular economy models; and (iii) to promote the energy transition.
- 1.51 **Components.** The Policy Matrix (Annex II) establishes the sequence of commitments for the project, which are structured through the following components. Due to the number of specific conditions in the matrix, the conditions deemed most important have been noted in the component descriptions.
- 1.52 **Component I. Macroeconomic stability.** The objective of this component is to maintain an appropriate macroeconomic policy framework that is consistent with the program objectives as set forth in the Policy Matrix (Annex II).
- 1.53 Component II. Planning, management, and financing of climate action. The objective of the proposed reforms is to strengthen the Colombian government's capacity to plan, manage, and finance climate action with the aim of fulfilling the country's targets related to climate change. This includes the following and other measures: (i) publication of the update to Colombia's NDC; (ii) publication of a long-term decarbonization strategy for public consultation (E2050); (iii) publication of PIGCCSs for public consultation; (iv) development of guidelines for preparation of the PIGCCTs; (v) adoption of technical and financial instruments to increase resource mobilization by issuing and publishing the royalty reform law that allocates public resources to finance investment projects for the environment and sustainable development; (vi) issuance and publication of regulations to invigorate the carbon market; (vii) publication of the framework for issuing sovereign green bonds; and (viii) publication of the methodological guidelines for tracking brown investments (or investments with negative environmental impacts) with the aim of strengthening climate finance. Through the proposed instruments, this component will help strengthen the regulatory framework for climate action, expand capacity for regional and sector-specific management of climate change, and approach greater efficiency in the use of public and private resources for climate change mitigation and adaptation, with the aim of reducing Colombia's greenhouse gas emissions by 51%.
- 1.54 The second operation of the programmatic series will continue the aforementioned policy actions by: (i) preparing regulations for the 2020 NDC; (ii) preparing the roadmap for the implementation thereof; (iii) presenting the E2050 to the UNFCCC; (iv) expanding sectors that prepare their PIGCCSs and developing technical guidelines for updating them to reflect the new NDC; (v) developing, issuing, and publishing instruments for implementing the increase in the direct allocation for environmental projects provided under the new royalties law;

- (vi) preparing additional regulations for the carbon market; (vii) issuing the sovereign green bond; and (viii) preparing a climate finance strategy to guide the mobilization of resources.
- 1.55 Component III. Economic opportunities based on the sustainable use of natural capital and the development of circular economy models. The objective of this component is to increase the sustainable use of natural capital and develop circular economy models as a source of sustainable economic growth. This component has four focus areas: sustainable forest management and usage, climate-smart agriculture, green businesses, and the circular economy. In the sustainable forest management component, support will be provided for the following and other measures: (i) issuance and publication of the National Policy on Deforestation and Sustainable Forest Management, as well as issuance and publication of regulations and technical documents in advance of implementation; (ii) development of an action and monitoring plan to implement the new policy on the National System of Protected Areas; and (iii) registration in the management systems of the Ministry of the Environment and Sustainable Development of the guidelines on other effective conservation measures. For the climate-smart agriculture area, support will be provided for the following and other measures: (i) issuance of guidelines for developing the sustainable livestock farming action plan; (ii) preparation of a technical document on nationally appropriate mitigation actions (NAMAs) for sustainable livestock farming; (iii) publication for public consultation of the draft resolution for guidelines on agriculture with low environmental impact on moorlands; and (iv) issuance and publication of Law 2046 of 2020 to allow for greater participation by local small farmers and campesino, family-based, and community-based agriculture in public marketplaces where foodstuffs are sold. Support will also be provided to issue regulatory measures to strengthen green businesses, such as: (i) issuance and publication of the Sustainable Tourism Act; (ii) preparation and filing of technical guidelines on the registered trademark to enhance access to green business markets; and (iii) publication of guidelines to issue a call for support for programs and projects related to research, development, and innovation in the bioeconomy. Lastly, to promote the circular economy, support will be provided for the following and other measures: (i) coordination of the proposed law on integrated solid waste management between the MADS and the Ministry of Housing, City, and Territory; (ii) issuance and publication of regulations to facilitate and encourage the reuse of flows of containers, packaging, and plastics; and (iii) issuance and publication of the National Policy on the Circular Economy on clean water and wastewater management services. This component will help meet the sector target of reducing greenhouse gas emissions in agriculture, forestry, and other land uses (11.15 metric tons of carbon dioxide equivalent through 2030) to progress toward the target of net-zero forestation by 2030 and increase the number of green jobs by at least 4%.
- 1.56 The second operation in the programmatic series will bring sustainability to these efforts in the four areas by supporting: (i) the continued issuance of regulations, guidelines, and development of programs for policymaking on control of deforestation; (ii) publication of the new policy on the National System of Protected Areas: (iii) adoption of other effective conservation measures:

- (iv) issuance of the action plan for sustainable livestock farming; (v) issuance of policies on climate variability; (vi) regulation of technical boards on sustainable livestock farming and agro-climate; (vii) approval of the NAMA for livestock farming; (viii) issuance of regulations to implement the Sustainable Tourism Act; (ix) issuance of the trademark for green businesses; (x) update to the National Plan on Green Businesses; (xi) preparation of the action plan for the National Bioeconomy Strategy; (xii) presentation of the proposed law on integrated solid waste management; (xiii) preparation of the action plan of the biomass waste roundtable; (xiv) issuance of regulations on construction and demolition waste; and (xv) preparation of the National Plan for Municipal Wastewater Management 2021-2050.
- 1.57 Component IV. Energy transition. The objective of this component is to support the energy transition in Colombia. In this area, support will be provided for: (i) promotion of alternative energies in transportation, with: (i) the publication of the draft resolution for public consultation on low- and zero-emissions vehicle technologies; (ii) issuance and publication of the resolution to encourage the establishment and use of mixed stations with charging spots; and (iii) of a decree on preferential parking for electric vehicles. Support will also be provided to diversify the energy matrix with NCREs, through: (i) congressional approval and publication of the Energy Transformation Act; the issuance and publication of Resolution 075 of 2021 with procedures for allocating transportation capacity in the SIN; (ii) issuance and publication of the resolution with guidelines for the third NCRE auction to facilitate the procurement process for each type of energy generator; (iii) publication for public consultation of the roadmap on the use of hydrogen; and (iv) development of guidelines for inclusion of a gender focus on the electricity sector to promote equal economic opportunity in the energy transition. Lastly, the component will promote clean sources for electricity generation at the local level, both in the SIN and in areas not connected to the SIN, through: (i) publication of draft Resolution 137 of 2020, which establishes the general rate formula for compensating energy service providers with individual photovoltaic solar solutions in areas not connected to the SIN, for public consultation; (ii) issuance of regulations to help network operators serve users in their areas of influence; and (iii) publication of draft resolutions for public consultation establishing the conditions for implementation of advanced metering infrastructure in the SIN and to encourage self-generation and distributed generation. These measures will help to double the number of electric vehicles on Colombian roads, increase access to energy in rural areas to achieve the country target of 100% electricity coverage, and diversify the energy matrix by expanding installed NCRE capacity to increase the share of NCREs in Colombia's energy matrix from 0.2% (2018) to 16% in 2023.
- 1.58 The second operation of the programmatic series will support measures such as: (i) issuance of regulations on low- and zero-emissions vehicle technologies, for the discounted technical/mechanical inspection and with requirements for charging infrastructure for electric vehicles; (ii) preparation of guidelines to standardize electric vehicles; (iii) publication of a roadmap to implement the recommendations from the energy transformation mission; (iv) development of an energy transition policy; (v) publication of outcomes of the third NCRE auction; (vi) publication of the hydrogen roadmap; and (vii) issuance of

administrative documents to help increase the NCRE load capacity in the SIN and in areas not connected to the SIN.

#### C. Key results indicators

1.59 The operation's Results Matrix includes impact and outcome indicators and the associated baselines, targets, and means of verification. The program's main expected impacts are sustainable growth accompanied by an increase in green jobs. Table 1 below shows the main results indicators.

Table 1. Results indicators

Commitment to reduce greenhouse gas emissions in Colombia

Proceeds from royalties allocated directly to the environmental budget

Planted forest area for commercial purposes

Areas with sustainable cattle-raising systems

Verified green businesses

Recycling rate

Electric vehicles registered in Colombia

NCREs as a percentage of Colombia's energy matrix

- 1.60 **Evaluation methodology.** Program results will be measured by a before-and-after analysis. This methodology follows the Bank's guidelines for preparing project completion reports on the basis of the impact and outcome indicators in the Results Matrix, as described in the foregoing section. This analysis will be performed at the outset of the project and two years after completion. An ex ante economic and environmental analysis, which identified the program's potential costs and benefits, was conducted as part of program preparation (see required link 3).
- 1.61 **Economic evaluation.** Based on the recommendations of the Bank's Office of Evaluation and Oversight (OVE) in its 2011 review of the evaluability of Bank projects,<sup>4</sup> and on the review of evaluation practices and standards for policy-based loans by the Evaluation Cooperation Group<sup>5</sup> (ECG),<sup>6</sup> as described in paragraph 1.3 of document GN-2489-5 (Review of the Development Effectiveness Matrix for Sovereign and Non-sovereign Guaranteed Operations), which state that an analysis of efficiency in the use of financial resources need not be included,<sup>7</sup> it was determined that an economic analysis would not be performed for this type of loan, and the Bank's Board of Executive Directors was notified to this effect. Therefore,

Document RE-397-1: "Currently, the economic analysis section is computed as the maximum between the cost-benefit analysis and the cost-effectiveness analysis. However, these analyses cannot be applied to policy-based loans."

<sup>5</sup> The ECG consists of the independent evaluation offices of multilateral development banks.

<sup>&</sup>lt;sup>6</sup> "Good Practice Standards for the Evaluation of Public Sector Operations." Evaluation Cooperation Group, Working Group on Public Sector Evaluation, 2012 revised edition. February 2012.

According to the ECG, policy-based loans should be evaluated on the basis of relevance, effectiveness, and sustainability. Efficiency was not included as a criterion because the scaling of policy-based loans is tied to a country's financing gap, regardless of project benefits.

no economic analysis is included in this loan operation, nor does such an analysis figure into the evaluability score of the program's Development Effectiveness Matrix. However, the ex ante economic analysis confirms that the program is economically viable, with a net present value of US\$4,227,600,000 and an internal rate of return of 20.9% (see optional link 1).

Beneficiaries. Society at large will benefit from a reduction in net greenhouse gas emissions that will help mitigate climate change, reduce air pollution caused by internal combustion vehicles, and develop a diversified, cleaner, and more resilient energy matrix. The universe of agricultural producers (numbering about 2,000,000, about 30% of them women) will potentially benefit from the knowledge transfer for improved productivity with the inclusion of principles of climate-smart agriculture and good practices for climate change resilience (National Agriculture Survey, 2020). Some 1,200 new entrepreneurs may benefit from verification as green businesses and from the opportunity to use the associated trademark, and this could potentially create 14,000 new jobs, about 40% of which could be held by women, 13% by people affected by violence, and 6% by indigenous people (MADS-ONV, 2021). At least seven sector institutions will benefit from strengthened policy frameworks and from the technical support received by their teams for program-supported policies.

#### II. FINANCING STRUCTURE AND MAIN RISKS

#### A. Financing instruments

- 2.1 This is the first in a programmatic series of two contractually independent, technically related policy-based loan operations, in accordance with the guidelines set forth in the financing framework (document GN-2200-13) and in "Policy-based Loans: Guidelines for Preparation and Implementation" (document CS-3633-2). The programmatic modality is justified in view of: (i) the complex, progressive nature of the reforms; (ii) the varying timelines for implementing the reforms; (iii) the need for coordination between participating institutions; (iv) the need to support policy dialogue in Colombia; and (v) the need to monitor implementation of the reforms and gather feedback on outcomes. This programmatic policy-based loan operation will help design and strengthen policy guidelines and the institutional and regulatory changes needed to fulfill the operation's objective. It also addresses the challenges in promoting sustainable, resilient growth in Colombia with measures in the environment, agriculture, finance, energy, transportation, and water, and it will help achieve meaningful reforms over the 2021-2023 period. The Government of Colombia has expressed interest in pursuing a second phase of this programmatic series; this will be discussed in detail over the coming months.
- Dimensioning of the operation. In accordance with paragraph 3.27(b) of "Policy-based Loans: Guidelines for Preparation and Implementation" (document CS-3633-2, new version). the program was sized in view of Colombia's needs for fiscal resources. This operation will be financed with US\$700 million from the Bank's regular Ordinary Capital, to be disbursed in a sole disbursement in 2021. The cofinancing from other financing entities will expand the operation to US\$1.214 billion. The Colombian government's financing needs, according to the 2021 financial plan prepared by the Ministry of Finance,

total US\$35.698 billion in 2021, or 12.1% of the country's GDP (US\$295 billion<sup>8</sup>). The programmatic policy-based loan operation equates to 1.7% of Colombia's financing needs and 5.9% of its external financing.

#### B. Environmental and social risks

2.3 In accordance with directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), this program does not require an impact classification. The program supports the identification of policies, regulations, management instruments, and institution-strengthening actions, and therefore no direct, significant negative social or environmental impacts are anticipated. An indirect risk was identified in the indirect impacts of the introduction of invasive species, deforestation, and the loss of natural habitats as a result of promoting green businesses and the forest economy with the aim of using natural capital for economic benefit (medium-high). As a mitigation measure, the need to observe social and environmental safeguards was discussed at meetings with Colombian government entities (see optional link 8).

### C. Fiduciary risks

2.4 According to the Public Expenditure and Financial Accountability (PEFA)9 assessment. Colombia's public financial management system is a mature system with satisfactory performance in most areas and is reasonably aligned with good international practices. In late 2018, the update to the evaluation of Colombia's country subsystem for accounting and reporting (Integrated Financial Information System, or "SIIF Nación II")—Pillar III of the Bank guidelines for determining the level of development and usage of public financial management systems—found that the subsystem is at a high level of development. This subsystem allows for financial reporting as required by the Bank, but it is tied to the project execution system insofar as the executing agency must be included in the national budget and be part of the central government without posing a risk in this subsystem. In a March 2019 update to the evaluation of the external control subsystem— Pillar V of the Bank guidelines for determining the level of development and usage of public financial management systems—the Office of the Comptroller General (CGR) was found to have a broad legal mandate that allows it to remain independent, with no outside interference in its work as an oversight entity, and its technical and operational structure was found to be appropriate. The CGR audits government entities on a selective, ex post basis, and it verifies regulatory compliance, proper use of resources, observance of processes and procedures, and fulfillment of targets and objectives, inter alia. As for the use of country systems, 100% of the loan portfolio uses the budget, treasury, and accounting subsystems, which reduces fiduciary risks related to payment management, cash flow management, reconciliations, and accounting records. Colombia has experience managing external loan resources, and no financial management risks are anticipated.

International Monetary Fund, World Economic Outlook 2021.

<sup>&</sup>quot;Public Expenditure and Financial Accountability" is an international tool that serves as a benchmark assessment of management of public finances; Colombia's most recent PEFA assessment was completed in October 2016.

#### D. Other key issues and risks

2.5 The operation has a low level of risk, as it is supported by a reform process that is necessary to sustainable, resilient growth in Colombia. The following additional risks were identified: (i) a risk of delays in program execution due to a lack of agreement between entities, due to its crosscutting nature (medium-low); and (ii) a risk of a decrease in the amount of financing provided by other financing entities (34%) (medium-low). To mitigate these risks: (i) from the outset, the DNP will have assumed the role of technical coordinator, with responsibility for coordinating and monitoring the work of relevant ministries, and the Bank is available to help strengthen its capacities; and (ii) efforts will be coordinated regularly with financing partners to report on progress and difficulties.

#### III. IMPLEMENTATION AND MANAGEMENT PLAN

#### A. Summary of implementation arrangements

- 3.1 The borrower will be the Republic of Colombia. The executing agency will be the Ministry of Finance (MHCP), which will carry out the program in coordination with the National Planning Department (DNP), which will serve as technical coordinator, and other entities involved in execution. In coordination with the DNP, the executing agency: (i) will promote actions related to the policy objectives; (ii) will provide evidence that the policy conditions have been fulfilled; and (iii) will compile and submit to the Bank any information that will enable the borrower and the Bank to monitor and evaluate program results. The financing entities share an implementation arrangement that calls for standardizing procedures and tools, preparing and conducting joint missions, and conducting regular (weekly) monitoring through a committee tasked with coordinating the financing entities jointly with the DNP (see paragraphs 1.47 and 1.48).
- 3.2 Special contractual conditions precedent to the first and only disbursement of the financing. The first and only disbursement is contingent upon fulfillment of the policy reform conditions set forth in the Policy Matrix, the Policy Letter, and other conditions in the loan contract (see required link 1).

## B. Summary of arrangements for results monitoring

- 3.3 The Policy Matrix (Annex II), the Means of Verification Matrix (required link 2), and the Results Matrix (Annex III) set the parameters for program monitoring and evaluation. The DNP, along with participating government entities, will fulfill the policy conditions. The borrower and the Bank have agreed to monitor the program in a coordinated manner with other financing entities, through annual monitoring meetings and reports to be presented by the credit subdivision of the DNP, to verify progress on indicators in the Results Matrix.
- 3.4 The objective of the project evaluation is to verify—after the deadlines specified in the program's Monitoring and Evaluation Plan (<a href="required link 3">required link 3</a>) have passed—whether the expected outcomes and impacts were attained. A project completion report will be prepared by the project team at the end of the second operation, in accordance with applicable Bank guidelines, within two years after the date of the disbursement for the last operation.

## **IV. POLICY LETTER**

4.1 The policy letter (see <u>required link 1</u>) issued by the borrower describes the macroeconomic and sector policies pursued by the Government of Colombia, which are consistent with the policy measures supported by this project. The letter confirms the government's commitment to implement the agreed conditions as described in the Policy Matrix.

Development Effectiveness Matrix								
Summary	CO-L1264							
I. Corporate and Country Priorities								
Section 1. IDB Group Strategic Priorities and CRF Indicators								
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -Economic Integration -Climate Change -Institutional Capacity and the Rule of Law							
CRF Level 2 Indicators: IDB Group Contributions to Development Results	th technical assistance (#) access to energy services (#) access to agricultural services and investments (#) economic empowerment initiatives (#) ual tons CO2 equivalent) dy managed applying ecosystem-based approaches (ha) on capacity from renewable sources (MW)							
2. Country Development Objectives								
Country Strategy Results Matrix	GN-2972	(i) Productivity of the economy; (ii) effectiveness of public management; (iii) social mobility and consolidation of the middle class						
Country Program Results Matrix	GN-3034-1	The intervention is included in the 2021 Operational Program.						
Relevance of this project to country development challenges (If not aligned to country strategy or country program)								
II. Development Outcomes - Evaluability		Evaluable						
3. Evidence-based Assessment & Solution		7.0						
3.1 Program Diagnosis		1.9 1.6						
3.2 Proposed Interventions or Solutions 3.3 Results Matrix Quality		3.5						
4. Ex ante Economic Analysis	3.5 N/A							
5. Monitoring and Evaluation	9.5							
5.1 Monitoring Mechanisms	4.0							
5.2 Evaluation Plan		5.5						
III. Risks & Mitigation Monitoring Matrix								
Overall risks rate = magnitude of risks*likelihood		Low						
Environmental & social risk classification		B.13						
IV. IDB's Role - Additionality								
The project relies on the use of country systems								
Fiduciary (VPC/FMP Criteria)								
Non-Fiduciary								
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:								
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Technical Cooperations CO-T1610, CO-T1611 and CO-T1633						

This operation is the first in a programmatic series in support of policy reforms, consisting of two contractually independent and technically linked loans, which seeks to contribute to sustainable and resilient growth in Colombia. The specific objectives are: (i) to strengthen the GoC's capacity to plan, manage, and finance climate action; (ii) promote economic opportunities based on the sustainable use of natural capital and the development of circular economy models; and (iii) promote the energy transition.

The diagnosis presented is adequate and the proposed policy measures generally respond to the deficiencies and opportunities identified. The results matrix exhibits vertical logic with result indicators that allow evaluating the achievement of the specific objectives at the closing of the operation.

The Monitoring and Evaluation Plan meets the expectations for this type of loan.

## **POLICY MATRIX**

Components/Policy objectives	P	Policy conditions for programmatic operation I	operation I Status of conditions for programmatic operation I*		Triggers for programmatic operation II				
Component 1: Macroeconomic stability									
1.1 Macroeconomic stability	1.1.1	Maintenance of an appropriate macroeconomic policy framework that is consistent with program objectives, as set forth in this policy matrix.	Fulfilled	1.1.1	Maintenance of an appropriate macroeconomic policy framework that is consistent with program objectives, as set forth in this policy matrix.				
Component 2. Planning, manager	nent, and	financing of climate action							
	2.1.1.1	· · · · · · · · · · · · · · · · · · ·	Fulfilled	2.1.1.1	Issuance of regulations for 2020 NDC.				
		contribution (NDC) to reflect more ambitious measures for climate change adaptation and	(Q4 2020)	2.1.1.2	Preparation of roadmap for implementing 2020 NDC.				
		mitigation.		2.1.1.3	Issuance of regulations for the National Council on Climate Change.				
	2.1.2.1	Publication of Colombia's long-term strategy for implementing the Paris Agreement (E2050), for public	Fulfilled (Q2 2021)	2.1.2.1	Presentation of the long-term climate strategy (E2050) before the UNFCCC.				
Strengthening of capacity to plan and manage climate		consultation.		2.1.2.2	Issuance of guidelines to incorporate recommendations from the E2050 strategy in the next PND.				
action (in mitigation and resilience)	2.1.3.1	Publication of the draft resolution to adopt the	Fulfilled	2.1.3.1	Preparation of PIGCCS for agriculture.				
resilience)		Sector-specific Comprehensive Plan for Climate	(Q3 2021)	2.1.3.2	Preparation of PIGCCS for environment.				
		Change Management (PIGCCS) for agriculture, for public consultation.		2.1.3.3	Preparation of PIGCCS for finance.				
	2.1.3.2	•	Fulfilled	2.1.3.4	Preparation of PIGCCS for transportation.				
	2.1.3.2	PIGCCS for the industrial sector, for public consultation.	(Q2 2021)	2.1.3.5	Issuance of PIGCCS for industry.				
	2.1.4.1	Preparation of the technical guidelines for preparing Regional Comprehensive Plans for Climate Change Management (PIGCCT).	Fulfilled (Q2 2021)	2.1.4.1	Preparation of technical guidelines for updating PIGCCSs in view of the 2020 NDC.				

Components/Policy objectives	Pol	licy conditions for programmatic operation I	Status of conditions for programmatic operation I*	Т	riggers for programmatic operation II
	į.	Issuance and publication of the law reforming the General Royalties System (SGR), which allocates public resources to finance investment projects for the	Fulfilled (Q3 2020)	2.2.1.1	Issuance of guidelines for viability of investment projects for the environment and for development of sources of royalties.
	2.2.1.2 I	environment and sustainable development.  Issuance and publication of the decree issuing regulations for the law reforming the SGR.	Fulfilled (Q4 2020)	2.2.1.2	Preparation of the National Strategy for Protection of Strategic Environmental Areas, identifying criteria for allocating royalties for local investment in the environment and sustainable development.
				2.2.1.3	Publication of rules and areas of authority for local investment in the environment and sustainable development.
2.2 Financing of climate action,     resilience, and green	r	Issuance and publication of the resolution on the system for monitoring, reporting, and verifying nationally appropriate mitigation actions (NAMAs) for the carbon market.	Fulfilled (Q3 2020)	2.2.2.1	Preparation of regulations to adjust tax-related aspects of the "no causation" procedure for monitoring (and other provisions) of the carbon market.
investment	á	Issuance and publication of the decree for accreditation of entities to verify reduced emissions and removals from the carbon market.	Fulfilled (Q1 2020)	2.2.2.2	Preparation of regulations specifying additionality requirements and standards for the carbon market.
		Publication of the framework for issuing the sovereign green bond.	Fulfilled (Q3 2021)	2.2.3.1	Issuance of sovereign green bond.
	t	Publication of the methodological guidelines for tracking brown investments in order to strengthen	Fulfilled (Q2 2021)	2.2.4.1	Preparation of the updated National Strategy on Climate Finance.
		climate finance.		2.2.4.2	Publication of methodological guidelines determining the cost of adaptation measures for Colombia's NDC.
				2.2.4.3	Preparation of methodological guidelines for preparing analyses of effectiveness of public expenditure in the environmental sector for climate change and biodiversity.

Components/Policy objectives	Components/Policy objectives Policy conditions for programmatic operation I				riggers for programmatic operation II				
Component 3: Economic opportunities based on the sustainable use of natural capital and development of circular economy models									
				In development of the National Policy for Deforestation Control and Sustainable Forest Management:					
	Defore	nce and publication of the National Policy for estation Control and Sustainable Forest gement.	Fulfilled (Q4 2020)	3.1.1.1	Issuance of regulations on the use of timber forest products, for public consultation.				
		elopment of the National Policy for Deforestation of and Sustainable Forest Management:							
	sustai	nce and publication of the decree for the nable management of wild flora and nontimber products.	Fulfilled (Q2 2021)	3.1.1.2	Issuance of regulations on forestry-related technical extension services in natural forest areas.				
	viabilit compe	nce and publication of the resolution for the ty of investments for environmental ensation, directed toward sustainable atives to natural forestland.	Fulfilled (Q2 2021)	3.1.1.3	Issuance of regulations to promote development of planted forests, with an emphasis on areas hardest hit by violence and poverty.				
3.1 Sustainable forest management and use		val and publication of the technical guidelines rarding contracts for usage in reserve areas.	Fulfilled (Q4 2020)	3.1.1.4	Preparation of technical and operational guidelines strengthening the community-based forestry program.				
				3.1.1.5	Creation of a program for sustainable use of nontimber resources and wild flora				
	regula to incl	nce and publication of the decree issuing tions for the forest incentive certificate, in order ude policies on forest plantings for commercial ses and promote new protective plantings.	Fulfilled (Q4 2020)	3.1.2.1	Issuance of regulations clarifying and standardizing procedures for forestry activity in regions.				
		ment on the plan of action and for monitoring of	Fulfilled	3.1.3.1	Publication of the SINAP policy.				
	the po (SINA	licy on the National System of Protected Areas P).	(Q2 2021)	3.1.3.2	Issuance of updated regulations on habitat banks to specify minimum duration, establish baseline, and standardize biodiversity loans.				
	the gu	tration in the MADS management systems of lidelines for the use of other effective rvation measures.	Fulfilled (Q2 2021)	3.1.4.1	Adoption of other effective conservation measures.				

Components/Policy objectives	Policy conditions for programmatic operation I	Status of conditions for programmatic operation I*	Triggers for programmatic operation II			
	3.2.1.1 Issuance of guidelines based on evaluation of implementation of the Comprehensive Program for Restructuring Production and Environmental Efformation for Livestock Farming for development of the Activation of the Sustainable Livestock Farming.	rts	<ul> <li>3.2.1.1. Issuance of the Action Plan for Sustainable Livestock Farming.</li> <li>3.2.1.2 Issuance of the National Policy on Climate-smart Agriculture.</li> </ul>			
	3.2.1.2 Preparation of the technical documents on NAMA		3.2.1.3 Issuance of the National Policy on Climate Variability.			
	sustainable livestock farming.	(Q3 2021)	3.2.1.4 Approval by NAMA committee of technical document on NAMAs for sustainable livestock farming.			
			3.2.1.5 Adoption of Comprehensive Program for Restructuring Production and Environmental Efforts for Livestock Farming.			
3.2 Promotion of climate-smart agriculture			3.2.1.6 Issuance of the administrative act formalizing the technical boards on sustainable livestock farming.			
	3.2.2.1 Publication of the draft resolution to adopt guidelir for agriculture with low environmental impact in moorlands, for public consultation.	nes Fulfilled (Q3 2021)	3.2.2.1 Issuance of the administrative act adopting guidelines for agriculture with low environmental impact in moorlands.			
			3.2.2.2 Issuance of regulations for implementing low-carbon, climate-resilient agriculture programs.			
			3.2.2.3 Issuance of regulations formalizing the agroclimate technical boards to help make producers more resilient to climate variability.			
	3.2.3.1 Issuance and publication of Law 2046 of 2020, whe allows for greater participation by local small farm and campesino, family-based, and community-bate agriculture in public markets that sell foodstuffs.	ers (Q3 2020)	3.2.3.1 Implementation of regulations for Law 2046 of 2020.			
3.3 Support for strengthening of green businesses	3.3.1.1 Issuance and publication of the Sustainable Touri Act, which includes measures for the sustainable of natural capital and for the promotion of nature tourism.		3.3.1.1 Issuance of regulations implementing the Sustainable Tourism Act.			

Components/Policy objectives	P	Policy conditions for programmatic operation I	Status of conditions for programmatic operation I*	Triggers for programmatic operation II			
	3.3.2.1	Preparation and filing of guidelines on use of the registered trademark for green businesses.	Fulfilled (Q4 2020)	3.3.2.1	Issuance of regulations on the registered trademark for green businesses.		
				3.3.2.2	Update to the National Plan on Green Businesses, including economic instruments to boost green businesses, among other provisions.		
	3.3.3.1	Publication of the guidelines for the call for support for research, development, and innovation programs and projects related to bioeconomy.	Fulfilled (Q2 2021)	3.3.3.1	Preparation of the Action Plan for the National Bioeconomy Strategy 2020.		
	3.4.1.1	Agreement on the draft legislation on integrated solid waste management between the MADS and the MVCT.	Fulfilled (Q3 2021)	3.4.1.1	Presentation of the draft legislation on integrated solid waste management.		
	3.4.2.1	Issuance and publication of the resolution amending Resolution 1407 of 2018 for environmental management of waste consisting of packaging and containers made of paper, cardboard, plastic, glass, and metal.	Fulfilled (Q4 2020)	3.4.2.1	Preparation of the Action Plan of the National Biomass Waste Board.		
3.4 Circular economy	3.4.2.2	Issuance and publication of the National Plan on Sustainable Management of Single-use Plastics.	Fulfilled (Q3 2021)	3.4.2.2	Issuance of regulation amending Resolution 0472 of 2017 on construction and demolition waste.		
	3.4.3.1	Issuance and publication of the National Policy on the Circular Economy for management of clean water services and wastewater management.	Fulfilled (Q3 2020)	3.4.3.1	Issuance of regulations amending Resolution 1207 of 2014 on reuse of treated wastewater.		
	3.4.3.2	Publication of the draft amendment to Resolution 1207 of 2014 with provisions on the use of treated wastewater, for public consultation.	Fulfilled (Q3 2021)	3.4.3.2	Preparation of the National Plan for Municipal Wastewater Management 2021-2050.		

Components/Policy objectives	P	olicy conditions for programmatic operation I	Status of conditions for programmatic operation I*	Triggers for programmatic operation II		
Component 4: Energy transition						
	4.1.1.1	Publication of the draft resolution for the Ministry of Transportation to regulate low- and zero-emissions	Fulfilled (Q2 2021)	4.1.1.1	Issuance of regulations on low- and zero-emissions vehicle technologies.	
	4.1.1.2	vehicle technologies, for public consultation.  Issuance and publication of the resolution providing incentives for the establishment and use of mixed	Fulfilled (Q4 2020)	4.1.1.2.	Preparation of technical guidelines on regulations for the standardization of electric vehicles.	
4.1 Promotion of alternative energies in transportation		stations with charging spots, to allow for regulated marketing of electric charging of hybrid and electric vehicles.	,	4.1.1.3	Issuance of regulations on discounts for the technical and mechanical inspection for electric vehicles.	
	4.1.1.3	Issuance and publication of the decree on preferential parking for electric vehicles.	Fulfilled (Q1 2021)	4.1.1.4	Issuance of regulations establishing minimum standardization and market conditions for electric vehicle charging infrastructure.	
	4.2.1.1	Approval and publication of the Energy Transformation Act by the Congress of the Republic.	Fulfilled (Q2 2021)	4.2.1.1	Publication of the roadmap for implementation of recommendations from the energy transformation mission.	
	4.2.1.2	Publication of the report on recommendations from the energy transformation mission.	Fulfilled (Q1 2020)	4.2.1.2	Preparation of the National Policy on the Energy Transition.	
	4.2.1.3	Preparation and publication of the guidelines for inclusion of gender focus on the energy sector.	Fulfilled (Q2 2020)		3, 4, 4, 4, 4	
4.2 Diversification of the energy matrix with nonconventional renewable energies (NCREs)	4.2.2.1	Issuance and publication of the final version of Resolution 075 of 2021, with procedures for allocating transmission capacity in the National Interconnected System (SIN) while facilitating and optimizing the use of connection points for NCRE projects.	Fulfilled (Q2 2021)	4.2.2.1	Issuance of regulations on the single-stop connection window to centralize, facilitate, and streamline the approval of connection projects.	
	4.2.3.1	Issuance and publication of the resolution with guidelines for the third NCRE auction.	Fulfilled (Q2 2021)	4.2.3.1	Publication of the outcomes of third NCRE auction.	
	4.2.4.1	Publication of the hydrogen roadmap, for public consultation.	Fulfilled (Q3 2021)	4.2.4.1	Publication of the hydrogen roadmap.	

Components/Policy objectives			Status of conditions for programmatic operation I*	Т	riggers for programmatic operation II
	4.3.1.1	Publication of the Draft Resolution 137 of 2020, which establishes the general rate-setting formula to determine compensation for energy service provision, with individual photovoltaic solar solutions in areas not connected to the SIN, for public consultation.	Fulfilled (Q3 2020)	4.3.1.1	Issuance of final regulations establishing the rate-setting formula for compensation for electricity service delivery through individual photovoltaic solar solutions in areas not connected to the SIN.
4.3 Widespread use of distributed	4.3.2.1	Issuance and publication of the decree ordering the identification of areas of influence for onboarding of users by grid operators.	Fulfilled (Q1 2021)	4.3.2.1	Issuance of regulations for identifying grid operators' areas of influence.
generation and self-generation with renewable energy sources	4.3.2.2	Issuance and publication of the resolution setting rates for service delivery in areas of influence of grid operators.	Fulfilled (Q1 2021)	4.3.2.2	Approval of guidelines for strengthening service providers in areas not connected to the SIN.
	4.3.3.1	Publication of the draft resolution establishing conditions for implementation of advanced metering infrastructure in the SIN, for public consultation.	Fulfilled (Q4 2020)	4.3.3.1	Issuance of regulations establishing conditions for implementation of advanced metering infrastructure in the SIN.
	4.3.4.1	Publication of the draft resolution to regulate small-scale self-generation and distributed generation in the SIN, while simplifying and creating incentives for distributed generation, for public consultation.	Fulfilled (Q1 2021)	4.3.4.1	Issuance of regulations to promote simplification and incentives for distributed generation.

<sup>\*</sup> This information is merely indicative as of the date of this document. In accordance with the guidelines set forth in document CS-3633-2 ("Policy-based Loans: Guidelines for Preparation and Implementation"), fulfillment of all conditions specified for disbursement, including maintenance of an appropriate macroeconomic policy framework, will be verified by the Bank at the time of the corresponding disbursement request by the borrower and duly reflected in the memorandum of eligibility for disbursement.

#### **RESULTS MATRIX**

## Project objective:

General objective: To contribute to sustainable, resilient growth in Colombia. Specific objectives: (i) to strengthen the Colombian government's capacity to plan, manage, and finance climate action; (ii) to foster economic opportunities based on the sustainable use of natural resources and the development of circular economy models; and (iii) to promote the energy transition.

#### **EXPECTED IMPACT**

Indicators	Unit of measure	Baseline	Baseline year	Final target	Final target year	Means of verification	Comments				
Impact 1. Increase in sustainable,	Impact 1. Increase in sustainable, resilient growth										
Indicator 1: Adjusted net savings, including harm caused by particulate emissions (% of gross national income)	Percentage of gross national income	2.9%	2019	3.0%	2023	World Bank data	Average sustainable growth measuring sustainable wealth accumulation in a country, expressed in net savings plus expenditure on education, minus depletion of energy sources, minerals, forest resources, and harm from particulate and carbon dioxide emissions. Published annually; two-year lag.				
							Target projected through integrated economic- environmental modeling (IEEM).				
Indicator 2: Green jobs	Number of jobs	85,722	2019(p)	89,683	2023	DANE: Environmental and economic report on environmental activities and related transactions	This refers to jobs aimed at reducing pressure on natural capital by protecting, conserving, and using it in all production processes for goods and services (environmental reports). Unlike environmental jobs, they include considerations related to workers' welfare ("decent work" dimension): fair wages, upholding of workers' rights, and social protection (DANE, 2020). Published annually (September); nine-month lag.  Target projected through IEEM.				
Indicator 3: Cumulative reduction of greenhouse gas emissions	Million tons of carbon dioxide equivalents (CO <sub>2</sub> eq)	37.09	2020	52.28	2023	MADS, through the <u>DNP</u> : Sinergia					

#### **EXPECTED OUTCOMES**

Indicators	Unit of measure	Baseline	Baseline year	Final target	Final target year	Means of verification	Comments	
Component I objective. To streng	Component I objective. To strengthen the Colombian government's capacity to plan, manage, and finance climate action							
Expected outcome 1.1: Increased	ambition for redu	icing greenho	use gas emi	ssions in Colomb	ia			
Indicator 1.1.1: Commitment to reduce Colombia's greenhouse gas emissions	Percentage reduction in greenhouse gas emissions with respect to emissions projected for 2030	20%	2020	51%	2023	<u>MADS</u>		
Expected outcome 1.2: Increased	financial resourc	es for enviror	mental sust	ainability projects	and prog	rams		
Indicator 1.2.1: Proceeds from royalties allocated directly to the environmental budget	Colombian pesos	0	2020	98,186,584,212	2023	MHCP, DNP, SGR		
Indicator 1.2.2: Reduced CO <sub>2</sub> emissions traded on the domestic voluntary carbon market (to avoid incurring taxes)	Metric tons of CO₂eq	10	2020	32	2023	MADS, <u>World Bank</u>	The baseline calculation measures the reduction in CO <sub>2</sub> emissions using the 2020 "no causation" mechanism, which was the basis for projections through 2030. The target is based on the baseline calculation plus the projected reduction in CO <sub>2</sub> emissions using "no causation" mechanisms for 2021-2023.	
Component II objective: To foster	economic opport	unities throu	gh the susta	inable use of natu	ral capital	and the development of cir	cular economy models	
Expected outcome 2.1: Increased sustainable use of forests								
Indicator 2.1.1: Area under sustainable conservation systems (restoration, agroforestry systems, sustainable forest management)	Hectares	896,711	2020	1,438,017	2023	MADS, through the <u>DNP</u>	Published semiannually; 90-day lag. PND target; contributes to NDC target.	
Indicator 2.1.2: Area of planted forest for commercial purposes	Hectares	527,169	2020	665,743	2023	MADR, through the DNP	Published semiannually; 60-day lag. PND target; contributes to NDC target.	

Indicators	Unit of measure	Baseline	Baseline year	Final target	Final target year	Means of verification	Comments		
Expected outcome 2.2.: Increased	Expected outcome 2.2.: Increased knowledge and use of climate-smart agriculture principles <sup>1</sup>								
Indicator 2.2.1: Areas with sustainable cattle-raising systems	Hectares	89,807	2020	174,300	2023	MADR, through the DNP PND and NDC targets	Areas on which pastureland was improved and/or renovated, or pasture management was carried out (including silvopastoral systems to improve beef and cow's milk production and reduce the seasonal impact of climate variability). <b>Technical file available.</b> Semiannual publication; 30-day lag. Targets are based on MADR projection of sector actions for fulfilling the NDC target by 2030.		
Indicator 2.2.2: Departments with agroclimate technical councils	Number of departments	11	2020	27	2023	MADR	An initiative led by the FAO in various countries in Latin America and the Caribbean at the local level to provide information—particularly to small-scale producers—on expected changes in the region's climate, how these changes may impact their crops, and what they can do to reduce the negative impacts.		
Expected outcome 2.3: Increase in	n green business	es							
Indicator 2.3.1: Verified green businesses	Number of businesses	1,270	2020	2,135	2023	DNP: <u>Sinergia</u>	Economic activities providing goods or services that generate positive environmental impacts and incorporate good environmental, social, and economic practices, using a lifecycle approach, thereby helping to conserve the environment as natural capital in support of territorial development (MADS). The outcomes refer to implementation of the green business program of the MADS. Semiannual publication; 30-day lag.		
Indicator 2.3.1: Women employed at verified green businesses	Percentage	35%	2019	41%	2023	MADS: Green Business Office			

An approach for developing agricultural strategies to secure sustainable food security under climate change. It aims to tackle three main objectives: sustainably increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing greenhouse gas emissions (FAO, 2021).

Indicators	Unit of measure	Baseline	Baseline year	Final target	Final target year	Means of verification	Comments
Expected outcome 2.4: Increased recovery of solid waste							
Indicator 2.4.1: Recycling rate	Percentage	11.10%	2018(p)	12.3%	2023	DNP: Sinergia DANE: Economic environmental report on environmental flows	Recycled or reused solid waste divided by the total supply of solid waste or waste products. Published annually (August); lag of 1 year and 8 months.
Component III objective. To suppo	ort the energy tran	sition					
Expected outcome 3.1 Increased r	number of electric	vehicles in C	olombia				
Indicator 3.1.1: Electric vehicles registered in Colombia	Number of vehicles	4,259	2020	8,451	2023	MT, Consolidated National Traffic Registry. <u>DNP</u>	2030 target: 600,000. The 2024 target is calculated by applying the historic growth coefficient for 2018-2021 (0.28%) to the target of 6,600 for 2022 (IDB, MT). Published annually; 30-day delay.
Indicator 3.1.2: Public fast- charging stations operating in Colombia	Number of stations	17	2020	23	2023	MT	Baseline was calculated using data from network operators as of September 2020. Targets are projected in accordance with Law 1964: five in special municipios (Cali, Medellín, Barranquilla, Cartagena, Bucaramanga) plus 20 in Bogotá (IDB, MT).
Expected outcome 3.2. Diversifica	tion of energy ma	trix with none	conventional	renewable energ	ies (NCRE	Ēs)	
Indicator 3.2.1: NCREs as a percentage of Colombia's energy matrix	Percentage	0.2%	2018	16%	2023	MME, UMPE	Expansion Plan 2020-2034 (solar, wind, and biomass)
Expected outcome 3.3. Widespread use of distributed generation and self-generation of energy							
Indicator 3.3.1: Installed capacity in NCREs in the National Interconnected System (SIN)	Megawatts	30	2018	4,300	2023	MME, UPME	Targets: Indicative Expansion Plan
Indicator 3.3.2: Installed capacity in NCREs in areas not connected to the SIN	Megawatts	21.29	2020	30.61	2023	MME, UPME-PIEC	Targets: National Electrification Plan

## SUSTAINABLE GROWTH AND RESILIENT PROGRAM

#### CO-L1264

## **CERTIFICATION**

The Grants and Co-Financing Management Unit (ORP/GCM) certifies that the referenced operation will be financed through:

Funding Source	Fund Code	Currency	Amount Up to
Korea Infrastructure Development Co-Financing Facility for Latin America and the Caribbean	KIF	USD	100,000,000

For operations financed by funds where the Inter-American Development Bank (IDB) does not control liquidity, the availability of resources is contingent upon the request and the receipt of the resources from the donors. Additionally, in case of operations financed by funds that require a post-approval agreement with the donor, the availability of resources is contingent upon the signature of the agreement between the Donor and the IDB. (i.e.: Project Specific Grants (PSG), Financial Intermediary Funds (FIF), and single donor trust funds).

Certified by:	Original Signed	Oct-13-21
	Maria Fernanda Garcia	Date
	Chief	
	Grants and Co-Financing Management Unit	
	ORP/GČM	

#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

#### PROPOSED RESOLUTION DE- /21

Colombia. Loan \_\_\_\_\_/OC-CO to the Republic of Colombia Sustainable Growth and Resilient Program

The Board of Executive Directors

#### RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Colombia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Sustainable Growth and Resilient Program. Such financing will be for the amount of up to US\$700,000,000 from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_ 2021)

LEG/SGO/CAN/EZSHARE-1274791288-24475 CO-L1264

#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

#### PROPOSED RESOLUTION DE- /21

Colombia. Loan \_\_\_\_/KI-CO to the Republic of Colombia Sustainable Growth and Resilient Program

The Board of Executive Directors

#### **RESOLVES:**

- 1. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, acting as Administrator of the Korea Infrastructure Development Co-financing Facility for Latin America and the Caribbean (hereinafter, the "Facility"), to enter into such contract or contracts as may be necessary with the Republic of Colombia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Sustainable Growth and Resilient Program. Such financing will be for an amount of up to US\$100,000,000 from the resources of the Facility, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.
- 2. That the authorization granted in paragraph 1 above will only be effective once the Republic of Korea has approved the financing for the Program in accordance with the agreement for the creation of the Facility, signed between the Ministry of Strategy and Finance of the Republic of Korea and the Bank on March 28, 2015, and its subsequent modifications.

(Adopted on	2021)
MUUDLEU UN	ZUZ 1 1

LEG/SGO/CAN/EZSHARE-1274791288-24596 CO-L1264