

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

COLOMBIA

FINANCING TO SUPPORT COLOMBIA'S ENERGY TRANSITION

(CO-L1258; CO-J0015)

**THIRD INDIVIDUAL OPERATION UNDER THE CONDITIONAL CREDIT LINE FOR
INVESTMENT PROJECTS (CCLIP)**

(CO-O0004)

LOAN PROPOSAL

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REQUIRED ELECTRONIC LINKS (REL)	
REL#1	Monitoring and Evaluation Plan
REL#2	Environmental and Social Management Report (ESMR)

OPTIONAL ELECTRONIC LINKS (OEL)	
OEL#1	Economic Analysis
OEL#2	Market Study for Non - Conventional Renewable Energy Sources, Distributed System, Advanced Metering Systems and Energy storage
OEL#3	Market Study for Electromobility
OEL#4	Analysis of Compliance with the Public Utilities Policy
OEL#5	Gender and Diversity Analysis
OEL#6	Credit Rules

ABBREVIATIONS	
AMI	Advanced Metering Infrastructure
Bancoldex	<i>Banco de Comercio Exterior de Colombia S.A.</i>
BRT	Bus Rapid Transit
CCLIP	Conditional Credit Line for Investment Projects
CONPES	<i>Consejo Nacional de Política Económica y Social</i>
CTF	Clean Technology Fund
CR	Credit Rules
CREG	Energy and Gas Regulatory Commission
DANE	National Administrative Department of Statistics
DEM	Development Effectiveness Matrix
DER	Distributed Energy Resources
EA	Executing Agency
ESMR	Environmental and Social Management Report
ESMS	Environmental and Social Management System
ESS	Environmental and Social Strategy
EV	Electric Vehicle
FENOGE	Found for Non-Conventional Energy and Efficient Energy Management
FEO	Firm Energy Obligations
FFCL	Flexible Credit Line
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GoC	Government of Colombia
ICAP	Institutional Capacity Assessment Platform
IEA	International Energy Agency
IDB	Inter-American Development Bank
ILO	International Labor Organization
IMF	International Monetary Found
KfW	<i>Kreditanstalt für Wiederaufbau</i>
LAC	Latin America and the Caribbean
Minenergía	Ministry of Energy and Mines
MSME	Micro, Small and Medium Enterprises
MW	Megawatt
MWh	Megawatt hour
NCRE	Non-Conventional Renewable Energy
NDC	Nationally Determined Contributions
NIS	National Interconnected System
NIZ	Non-Interconnected Zones
OECD	Organization for Economic Co-Operation and Development
PMR	Project Management Report
POD	Proposal for Operation Development
PPA	Power Purchase Agreement
PWD	Persons With Disabilities
SESA	Strategic Environmental and Social Assessment
SME	Small and Medium size Enterprises
TC	Technical Cooperation
TCFD	Task Force on Climate-related Financial Disclosures
VAT	Value-added Tax

PROJECT SUMMARY
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Financial Terms and Conditions					
Borrower and Executing Agency			Flexible Financing Facility ^(a)	IDB CTF Loan	IDB CTF (Grant CO-J0015)
Banco de Comercio Exterior de Colombia S.A. (Bancoldex)		Amortization Period:	25 Years OC Loan	20	N.A.
Guarantor		Disbursement Period:	4 Years		
Republic of Colombia		Grace Period:	5,5 Years ^(b)	8 Years	N.A.
Source	Amount	Interest rate:	IBR-Based ^(c)	0.98%	
IDB (Ordinary Capital (OC)):	COP175,000 million	Credit Fee:	(d)	N.A.	
Co-financing: CTF ^(e)	US\$3,500,000	Inspection and supervision fee:	(d)		
Co-financing: CTF (Grant CO-J0015)	US\$1,500,000	Weighted Average Life (WAL):	15.25 Years		
		Administrative Fee ^(e) :	N.A.	0.45%	
		Currency of Approval:	Colombian pesos (COP) for the IDB loan and U.S. dollars for the CTF financing		
Project at a Glance					
Project Objective/Description: The specific objectives are: (i) to support the decarbonization of the economy by reducing greenhouse gas (GHG) emissions; and (ii) to accelerate the country's inclusive energy transition by financing Non-Conventional Renewable Energy (NCRE) projects and associated transmission lines, energy storage, energy efficiency, distributed energy resources (DER), advanced metering infrastructure (AMI) and electric mobility in Colombia. The achievement of these objectives will contribute to the general objective of promoting the country's productivity and competitiveness through the financing of strategic green energy and electric mobility projects.					
Special Contractual Clauses prior to the first disbursement: The approval of the Operation's Credit Rules (CR) by Bancoldex with the Bank's prior non-objection, which must include, among other matters, information regarding the Strategic Environmental and Social Assessment (SESA), the criteria and procedures for the selection of projects; and a dedicated social and environmental specialist in Bancoldex throughout project implementation, a condition to facilitate the implementation of the SESA (¶3.5).					
Exceptions to Bank Policies: A partial waiver of the Bank's Policy on Guarantees Required from the Borrower (OP-303), so that the Republic of Colombia guarantees only the loan payment obligations, including interest and commissions will be processed. The request is consistent with the provisions set forth in Decree 2681 and Article 40 of Law 80 of the Republic of Colombia and has as precedents the same waiver in the first two operations under the CCLIP CO-O0004 (loans 4939/OC-CO and 5169/TC-CO) and the operations approved under CCLIP CO-X1007 (¶3.6).					
Strategic Alignment					
Challenges ^(f) :		SI <input type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>	
Cross-Cutting Issues ^(g) :	GE <input checked="" type="checkbox"/>	and	DI <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/>	and ES <input type="checkbox"/>
				IC <input type="checkbox"/>	

^(a) Under the Flexible Financing Facility (document FN-655-1), the borrower has the option to request modifications to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. In considering such requests, the Bank will consider operational and risk management considerations.

^(b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded.

^(c) Consistent 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 either based upon notice to the Borrower by the Bank, or upon the request by the Borrower, in accordance with the provisions of the Loan Contract.

^(d) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with the relevant policies.

^(e) GN-2571 Document. Proposal for the establishment of the Clean Technology Fund (CTF) in the Inter-American Development Bank^(f)

^(f) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(g) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, and Justification

1.1 Background of the Conditional Credit Line for Investment Projects (CCLIP).

This is the third Individual Operation under the CCLIP for Productive Business Financing with *Banco de Comercio Exterior de Colombia S.A. (Bancoldex)*, approved by the Executive Directors Committee in 2019, for US\$600,000,000 with a period of utilization of six years. The objective is to promote business productivity in Colombia through financing channeled by Bancoldex. The defined sectors of intervention of this Multisectoral Modality I (MM-I) CCLIP are: (i) productive modernization and upgrading; and (ii) climate change management¹. The CCLIP may incorporate cross-cutting aspects of technological innovation and digitalization, orange economy, and gender equality. The first operation under this CCLIP (4939/OC-CO) was approved by the Board in December 2019 for US\$90,000,000 with the general objective of contributing to the improvement of small companies' productivity through Bancoldex financing. The Interamerican Development Bank (IDB) made the first disbursement of US\$25,900,000 in August 2020, a second disbursement for US\$4,500,000 in June 2021, and a third disbursement for US\$10,400,000 in November 2021 achieving a 68% of the total disbursement. This project has had a satisfactory execution, according to the project management reports (PMRs). The second operation (5169/TC-CO) was approved by the Board in December 2020 for US\$16,000,000, following the same general objective as the first operation, reached effectiveness in May 2021 and is in the process to achieve its eligibility.

1.2 **Macroeconomic context.** In the last 20 years, Colombia has shown economic and social progress, becoming an upper middle-income economy and a member of the Organization for Economic Cooperation and Development (OECD). However, the COVID-19 outbreak had a strong economic and social impact. As a result, the economy experienced a 6.8% contraction in 2020, the worst Gross Domestic Product (GDP) decline in the country's history. Poverty increased from 35.7% in 2019 to 42.5% in 2020, while extreme poverty rose from 9.6% to 15.1%. Unemployment reached 14.3% in July 2021, particularly affecting women, and the young population. The suspension of the Fiscal Rule allowed for an increase of the fiscal deficit to 7.8% of GDP and of debt to 64.8% of GDP. Due to the withdrawal of the tax reform proposal in April 2021, which led to social unrest and shortages of fuel and basic goods, Standard & Poor's and Fitch Ratings downgraded Colombia's credit rating, removing its investment grade. Yet, the country maintains access to international financing, having the Flexible Credit Line (FCL) of the International Monetary Fund (IMF) ratified recently. In September 2021, under a national consensus process, Congress approved a new tax reform called the "Social Investment Law", which would aim to collect 1.4% of GDP from austerity in public spending, less tax evasion, and changes in corporate tax rates. This approval influenced Moody's decision to maintain Colombia's investment grade

¹ Understood as: technological transformations to substitute fuels for low carbon emission technologies; self-generation or cogeneration with renewable sources; transport sector clean technologies including hybrid and EV; and climate change resilience and adaptation measures to reduce vulnerability of industries.

with a stable perspective, highlighting the country's commitment to fiscal sustainability.

- 1.3 Although uncertainty remains high, signs of recovery are already materializing. The reopening of the economy and progress of the vaccination scheme have contributed to an economic recovery. In the second quarter of 2021, the economy grew 17.6% in comparison to the same period of 2020. Economic growth of more than 7.6% is expected in 2021 followed by 3.8% in 2022. Nonetheless, the recovery is affecting the inflation rate, which is expected to exceed the 3% target, already triggering the first increase of the monetary policy rate in five years, from 1.75% to 2%.
- 1.4 **Government's economic reactivation plan.** To support the economic recovery and reactivation of the country, the Government of Colombia (GoC) approved in February 2021 the "Policy for Economic Reactivation and Sustainable and Inclusive Growth" (CONPES 4023). It presents a comprehensive set of policies and investment programs aimed at, in the short-term, supporting the economic recovery to its pre-COVID-19 growth level while transitioning to a more sustainable and resilient growth in the long term. The implementation of the measures identified in the CONPES will involve an estimated COP135,000 billion (US\$36,000,000) in investments (equivalent to 12.5 of GDP) over a five-year period from 2021-2026, in partnership with the private sector. These investments are expected to create 2 million jobs², generate new sources of income for women; and support vulnerable households and enterprises in a sustainable and inclusive way. A critical element of this policy is the ambitious agenda for infrastructure development in the energy and transport sectors, which will contribute to accelerate the country's transition to a low-carbon growth path³, including the green energy transition and the decarbonization of the transport sector (with estimated investments of COP19,000 billion).
- 1.5 **Colombia's greenhouse gas emissions.** According to Colombia's latest GHG emissions inventory, the country emitted 236.97 million Tons of Carbon Dioxide equivalent (MtCO₂eq) in 2014. Disaggregated data by sectors suggests that the primary sources of GHG emissions are: (i) agriculture, forestry, and other land uses (55%); (ii) energy (35%); (iii) waste (6%); and (iv) industrial processes and product use (4%). The transportation sector represents the 36% of the final energy consumption⁴ and is one of the largest drivers of GHG emissions from combustion, being responsible for 12% of the country's emissions. It also generates 80% of particulate matter (PM₁₀) emissions and as a result, urban air pollution is a major challenge for Colombian cities with negative effects on human health and quality of life. Nearly 15,681⁵ people die in Colombia every year

² CONPES 4320/2021.

³ According to the World Economic Forum's (WEF) "Shaping an Equitable, Inclusive and Sustainable Recovery: Acting Now for a Better Future", to promote strong and sustainable economic growth beyond the pandemic recovery phase and accelerate the transition to a net-zero and climate resilient economy, seven investment areas are important as they can be rapidly implemented, can mobilize significant private finance, are labor-intensive in the short term, and can drive innovation. Among those seven areas, WEF identifies electricity generation, storage and networks; energy efficiency; electrification of the transport sector; and green hydrogen and carbon capture utilization and storage.

⁴ <https://www.iea.org/countries/colombia>.

⁵ [Press Release No 872 of 2021, Ministry of Health and Social Protection](#).

because of outdoor air pollution, due to stroke, heart disease, lung cancer and chronic respiratory diseases.

- 1.6 **National commitments for decarbonizing the economy.** Colombia's commitment to the Paris Agreement under the revised National Determined Contributions (NDC)⁶ aims to reduce GHG by 51% with respect to the business-as-usual scenario in 2030. Colombia's NDC is considered one of the most ambitious in Latin America and the Caribbean (LAC) and is closely aligned with the country's objective of achieving carbon neutrality by 2050. In this regard, the energy sector is at the forefront of implementing a comprehensive climate change management plan, by reducing an equivalent of 11.2 million tons of carbon dioxide (CO₂) by 2030. The transportation sector has also been prioritized within the NDC, aiming at optimizing logistics and transportation operations as well as the development of electric mobility, which can yield a reduction of 7.16 Mt CO₂ eq.
- 1.7 **The Colombian energy transition is considered a pivotal element for economic recovery and reactivation.** It will bring new investments and ensure the availability of abundant, secure, and affordable energy supplies for the development and growth of productive activities⁷, residential consumption, and the provision of public services. Moreover, it will contribute to the development of sustainable and clean mobility. It has four main objectives: (i) migrating towards a more competitive, efficient and resilient power mix through the massification of NCRE and the adoption of new technologies; (ii) eliminating energy gaps, by introducing new business models to accelerate the universalization of electricity; (iii) implementing energy efficiency policies at residential, commercial and industrial levels; and (iv) leading the fight against climate change, by prioritizing sustainable and clean mobility with the massive adoption of zero and low emission vehicles.
- 1.8 **Colombia's policy and regulatory framework for the energy transition is in place.** The GoC has enacted different laws and regulations aimed at diversifying its energy matrix and decarbonizing the energy sector such as Law 1715 of 2014 (Renewable Energy Law), that established concrete instruments to promote NCRE and energy efficiency measures, including tax incentives, and creation of the Fund for Non-Conventional Energy and Efficient Energy Management (FENOGE). Law 1955 of 2019 (Pact for Colombia, Pact for Equity), adopted the National Development Plan of 2018-2022 and includes enhanced tax incentives established by Law 1715, extending the uplift on income tax to 15 years, as well as creating an automatic Value-Added Tax (VAT) exemption for solar panels, controllers, and inverters. In addition, it was established that between 8% and 10% of the electricity purchases made by retailers in the wholesale energy market must come from long-term contracts with NCRE generation and established ambitious targets regarding NCRE in the country's generation matrix (from 22.4MW to 1,500MW by 2022). Law 1964 of 2019 (Sustainable Mobility Law) defined a series of incentives for the use

⁶ [Updated National Determined Contribution of Colombia \(NDC\).](#)

⁷ Long-term relationship between energy consumption and GDP has been widely studied. See Asafu-Adjaye, J., 2000, The relationship between energy consumption, energy prices and economic growth: Time series evidence from Asian developing countries; Barreto and Campo, 2012, *Relación a largo plazo entre consumo de energía y PIB en América Latina: Una evaluación empírica con datos panel* ; Soytas and Sari, 2003, Energy consumption and GDP: causality relationship in G-7 countries and emerging markets; Lee, Ch., 2006, The causality relationship between energy consumption and GDP in G-11 countries revisited.

of zero and low emission vehicles as well as specific targets for the incorporation of electric or zero emissions vehicles in all Bus Rapid Transit (BRT) systems of the country, and for the implementation of fast charging stations for EV in the main cities of the country. Moreover, Law 1972 of 2019 sets emission targets for all urban and regional public systems, including those of medium-size cities. Finally, the 2019 Policy for the modernization of road freight transport⁸ (CONPES 3963) establishes the specific objective of introducing new technologies to reduce environmental contamination of this subsector (See [OEL#2](#)). Finally, Law 2099 of 2021 (Energy Transition Law) establishes provisions on energy transition, revitalization of the energy market and economic recovery. It includes tax provisions applicable to NCRE projects and expands those to power storage, AML and power management for NCRE, as well as investments in goods, machinery and equipment used in the manufacturing, storage, packaging, distribution, re-electrification, research, and final use of green and blue hydrogen.

- 1.9 These laws are accompanied by other policy, regulatory, and administrative acts and initiatives that strengthen and accelerate the energy transition in Colombia. Of all these initiatives and measures, five are worth highlighting:
- 1.10 The first, which marked a turning point for the entry of large-scale variable NCRE projects in the country, was the long-term contracts auction for NCRE held in October 2019, which awarded 1,365MW of wind and solar projects. It also introduced long-term contracts - 15-year Power Purchase Agreements (PPAs) - which were virtually non-existent in Colombia's electricity sector. And more importantly, the auction achieved historic low prices, about 35% lower than the prices of energy contracts traded at the time of the auction. Moreover, eight NCRE projects were awarded during the auction of Firm Energy Obligations (FEO) held in March 2019, with an installed capacity exceeding 1,400MW. A new NCRE auction took place in October 2021 that awarded an additional 800MW of solar energy. Estimates indicate that more than US\$4 billion will be required to develop those projects.
- 1.11 The second major initiative was to convene an Energy Transformation Mission, with the participation of more than 30 national and international experts who provided specific recommendations for the modernization of the energy sector. Although the current system has operated successfully for over 25 years, technological changes, the emergence of new business opportunities and new users' needs required a comprehensive review. These recommendations are already being implemented in various areas, including a review of the structure and the competition rules of the electricity market, the introduction of new technologies such as hydrogen and geothermal, decentralization and digitalization incentives, and a review of the institutional framework.
- 1.12 The third major milestone was to launch and award the first Latin American large-scale battery energy storage procurement in 2021. This combines the needs of complementary services to the transmission and distribution networks, and supports the incorporation of NCRE in the generation matrix. The project includes

⁸ At municipal and district levels, local governments have shown growing interest in incorporating low and zero emission vehicles in their urban transport systems (including buses for the SETP, SITP, taxis, bicycles, and urban freight).

a battery system with the capacity to deliver 45 MWh to operate under contingency conditions of the National Transmission Network of the department of Atlántico. Energy storage is considered the future of clean electricity generation, since it can store variable wind and solar electricity. It also contributes to mitigate the effects of network scarcities and provides flexibility to the grid ensuring uninterrupted power to consumers, anytime they need it. Flexibility is critical to both reliability and resilience. It can also improve the efficiency of the grid – increasing the capacity factor of existing resources – and offset the need for building new pollution-emitting peak power plants.

- 1.13 Fourth, as part of its initiatives to transition to a digitalized and decentralized electricity sector, the Ministry of Mines and Energy (MINENERGIA) and the Energy and Gas Regulatory Commission (CREG) have issued policy guidelines and regulations that allow the incorporation of DER⁹ into the power grid that provide multiple benefits for households, industries and utilities¹⁰. DER in Colombia is just starting (installed capacity is less than 50MW) but could grow exponentially if the right incentives and financing are available (See [OEL#2](#)). DER based on NCRE has also been identified as a clean and cost-effective solution to bring electricity services to non- interconnected areas. The GoC is also promoting the digitalization of the sector through the rollout of AMI, by setting the goal that 75% of consumers have AMI installed by 2030, which will require an investment close to US\$1.9billion.
- 1.14 Lastly, the decarbonization of the transport sector is underway. For the decarbonization of energy systems, it is important to promote the use of zero-emission vehicles and the development of its infrastructure (charging points). The GoC is committed to reduce GHG emissions from the transportation sector, with ambitious regulations and incentives for boosting electric mobility. For example, the Indicative Action Plan of the Rational Use of Energy Program 2017-2022 defines a cumulative energy saving goal in the transportation sector of 5.49% of total national energy consumption by 2022. Similarly, the 2018-2022 National Development Plan defines a target of introducing 6,600 EV in the country by 2022, which complements the goals defined by the National Electric Mobility Strategy - according to which, for the year 2030, the incorporation of 600,000 EV is expected nationwide. In 2021, the country has shown some notable achievements with more than 3,800 EV sold according to the National Transport Register. Bogotá is incorporating the largest fleet of electric buses, with 1,485 e-buses entering in operation between 2020 and 2021, and Medellín and Cali have 65 and 35 e-buses already operating. Also, there are 17 fast charging stations operating in the country, and private enterprises such as Bavaria have acquired 200 electric trucks to their fleet.
- 1.15 **Mobilization of large financial resources is necessary to accelerate the energy transition and close the infrastructure gap in Colombia.** MINENERGIA estimates that the energy transition will require around US\$8 billion¹¹ in

⁹ DER are small, modular, energy generation and storage technologies that provide electric capacity or energy where need it. Typically producing less than 10 MW of power it can usually be sized to particular needs and installed on site. It may be either connected to the power grid or isolated in stand-alone applications.

¹⁰ DER can help manage energy bills and provide voltage support to enhance power reliability; enable a facility to operate independently of the power grid and can help reduce CO2 emissions when NCRE are used.

¹¹ [MemoriasCongresoMME-2020.pdf \(minenergja.gov.co\).](#)

investments. Projections also show that massive and strategic public systems of transportation could acquire more than 2,735 e-buses between 2021 and 2030, representing an investment of US\$833,000,000. Colombia has estimated an overall infrastructure investment need of US\$85 billion¹², substantially higher than the actual historic levels of infrastructure spending, that needs to be met through a diversification of financing sources. According to the International Energy Agency's (IEA) Report "Financing Clean Energy Transitions in Emerging and Developing Economies"¹³, mobilizing capital for energy transition and electromobility will require a dramatic increase in the role of the private sector, and an enhanced role for international and development finance institutions that will be critical to catalyze these investments. Given that increased public investment in infrastructure is not feasible in a post-Covid environment where the limited funds available need to be allocated to the healthcare and other priority sectors, strong partnerships between public and private sectors are needed to attract the diversified, resilient sources of capital needed for multi-year and multi-decade investments into energy systems.

- 1.16 **Bancoldex can play an important role in co-financing and managing risks.** Bancoldex, one of Colombia's National Development Banks (NDB), has progressively increased their role in filling major financing gaps and developing long-term financing. Colombia has a limited project finance market and thus, infrastructure financing needs have been traditionally met through corporate loans or by a small set of commercial banks. Local commercial banks and investors are not very familiar with clean energy and electromobility¹⁴ projects. Additionally, this type of investments present the following barriers: (i) high up-front capital cost of EV and charging infrastructure projects; (ii) short concession periods in some market segments; (iii) business risk perceptions that may limit micro and small firms access to credit; (iv) lack of access to preferential interest rates and subsidies to cover capital costs; (v) lack of well-structured e-mobility projects; (vi) complex regulatory system for the energy sector that limits the appetite of the commercial banks to finance NCRE and DER projects; and (vii) new technologies that have not been proved and/or are not financially viable without concessional financing, among others. Thus, risk mitigation and credit enhancement mechanisms will be necessary to manage the spectrum of financing risks and attract private sector financiers to these sectors. Bancoldex, as a multipurpose first- and second-tier banking institution¹⁵ could play a key role in financing and co-financing long term sustainable and bankable clean and inclusive energy transition projects and help mitigate its associated risks, such that a track record for private investments can be established in the clean energy sector in Colombia.

¹² [Colombia's National Development Plan \(NDP\) 2018-2022.](#)

¹³ [Financing transitions in fuels and emissions-intensive sectors.](#)

¹⁴ Commercial banks have expressed interest in financing awarded projects with other financiers co-financiers. They would seek syndicated loans or other co-financing alternatives.

¹⁵ Constituted exclusively for promotion of exports in 1967, Bancoldex began to focus on credit for Micro, Small and Medium Enterprises (MSMEs). At the beginning of 2000 it was consolidated as a multipurpose first- and second-tier banking institution to serve national companies of all sizes, through rediscount lines, direct financing, private equity funds, factoring, international interbank operations. On August 1st of 2020, Bancoldex merged with ARCO, a financing company specialized in leasing and commercial credit, with extensive experience in direct financing operations.

- 1.17 **Rationale.** This Operation seeks to accelerate the clean and inclusive¹⁶ energy transition within the country's overall economic reactivation agenda. It will: (i) contribute to familiarize the Colombian banking sector with these investment opportunities; (ii) support Bancoldex on the identification/structuring of financial instruments adapted to these types of projects; (iii) support mobilization of resources from financial institutions that will contribute to making long-term and private financing available to realize these infrastructure development goals; and (iv) include best practices in social and environmental management. Furthermore, these investments represent an effective mechanism to create jobs, contribute to the ambitious emission reduction targets adopted by the country, and support a long-term sustainable structural growth.
- 1.18 **Evidence.** The IDB has a broad knowledge of the energy sector in Colombia from its technical and financial support of more than 20 years. It has financed multiple generation, energy efficiency, rural electrification, and energy sector policy reform projects. Currently, two investment loans and five TC are being implemented (¶1.321.26). Through the TCs, the IDB has supported the energy transition in Colombia including the structuring of the October 2019 NCRE auction, the Energy Transition Mission and the Hydrogen Roadmap.
- 1.19 Like many countries in the LAC Region, Colombia has embraced the goal of becoming carbon neutral. This transition process can create jobs and improve economic growth post-COVID-19 (IADB 2020)¹⁷. The IEA, in partnership with the IMF, has proposed a global Sustainable Recovery Plan to help governments to boost economic growth, create jobs, and build more resilient and cleaner energy systems (IEA, 2020a). It focuses on expanding renewable electricity capacity and electricity grids, expanding EV production, expanding mass transit and improving energy efficiency in residential, commercial, and industrial sectors, among others. IEA estimates that implementing such a plan would create 9 million jobs a year over the next three years globally and increase global economic growth by 1.1% each year (IEA, 2020a). In developing countries, growth would increase by around 1.3% and global GDP would be 3.5% higher in 2023 than it would be otherwise (Jaumotte, et al 2020). The report "Jobs in a Net-Zero Emissions Future in LAC" (IADB and International Labor Organization (ILO) 2020) estimates that a carbon free transition could create as many as 22.5 million new jobs, more than half of which would be in the medium-skill category (13.5 million), one-third in the low skill category (8 million), and 1 million in the high-skill category. This would benefit many of the 66 million people who are being underutilized in the labor market, including 9 million unemployed youths.
- 1.20 On the other hand, Bancoldex has experience in executing operations with IDB funds since 2008 through four operations under the CCLIP "Financing Line Investment Projects, Productive Restructuring, Export Development" CO-X1007 (First 2080/OC-CO for US\$100,000,000, Second 2193/OC-CO for

¹⁶ Inclusive energy transition, incorporates the definition of inclusive development as part of the energy transition process, which considers that "every person, regardless of identity, is instrumental in the transformation of their own societies; and their inclusion throughout the development process leads to better outcomes." USAID 2018. Suggested Approaches for Integrating Inclusive Development Across the Program Cycle and in Mission Operations.

¹⁷ "Opportunities for Stronger and Sustainable Post-pandemic Growth", Eduardo Cavallo and Andrew Powell (IADB 2020).

US\$200,000,000, Third 2949/OC-CO for US\$200,000,000, and Forth 4439/OC-CO for US\$90,700,000), in addition to the “CTF Energy Efficiency Financing Program for the Services Sector” 2983/TC-CO for US\$10,000,000 and “Bogota's Integrated Public Transit System Transformation Program” 3003/TC-CO for US\$40,000,000 which are now closed, and the “Renewable Energy Financing Program for the Non Interconnected Zones” 3661/TC-CO for US\$9,265,000 which is in closing process. At the end of 2019, the IDB approved the CCLIP “Conditional Credit Line for Investment Projects (CCLIP) for Productive Business Financing” CO-O0004 for US\$600,000,000 with a first operation, 4939/OC-CO, for US\$60,000,000; and a second, 5169/TC-CO, for US\$8,000,000.

- 1.21 The opportunities for improvement identified during the execution of the operations mentioned above have been appropriately addressed through Technical Cooperation (TC) resources, such as building capacities in green financing with the ATN/TC -13728-CO, ATN/TC-14011-CO, ATN/TC-15151-CO, ATN/TC-15364-CO, ATN/OC-18799-CO and the ATN/OC-18002-CO.
- 1.22 **Gender and Diversity Gaps.** A key challenge for the infrastructure sector is low female participation in science, technology, engineering and mathematics (STEM) careers. In Colombia (2017), the percentage of women who completed tertiary studies in STEM areas was 34%¹⁸. A study conducted by the IDB, Insuco and CoreWomen found that, on average, the participation of women in the energy-mining sector in Colombia is around 27%, in the electricity sector specifically the participation was 33%, however, this percentage declines to 19.5% when focusing on the enterprises that create most jobs¹⁹. Likewise, female participation in the construction sector is very low (11%). Worldwide, women account for 32% of the labor force in the renewable energy sector²⁰ (see [OEL#5](#)).
- 1.23 Women face an important gap in relation to access to finance when compared to men. According to the Financial Inclusion Report 2020, despite substantial overall progress, there is still a 6% gap between women's and men. Considering both gender gaps in the infrastructure sector and financial sector, Bancoldex can support gender equality²¹ by ensuring that projects with direct financing promote an inclusive energy transition²². Currently, Bancoldex is elaborating its own Gender Action Plan to reflect its strong commitment in promoting gender equality. Women make up 56% of Bancoldex's staff; represent 45% of the leadership and 30% of the Board of Directors²³.
- 1.24 In terms of diversity, specifically of persons with disabilities (PWD), according to the GoC's National Administrative Department of Statistics (DANE) in 2018, 3,134,036 (7,2%) Colombians live with a disability²⁴ ²⁵. Most of these PWD belong to lower socio-economic strata: poor education, income of less than a minimum

¹⁸ CEPAL. (2020). Mujeres y Energía.

¹⁹ CoreWomen, IDB, Insuco. 2021. [Estudio Sectorial de Equidad de Género para el Sector Minero-Energético](#).

²⁰ IRENA. (2019) Renewable Energy: A Gender Perspective.

²¹ Women would have a key role in the energy transition. [The Role of Women in Sustainable Energy Development NREL](#).

²² A definition of inclusive development as part of the energy transition process.

²³ [Bancoldex, referente de la equidad de género en el sector empresarial colombiano](#). 2020.

²⁴ Ministry of health and Social Protection indicates: most reported impairments are movement and walking limitations (34.1%), nervous system alterations (25.7%) and visual impairment (13%).

²⁵ [DANE. 2020-Boletín-personas-con-discapacidad-marco-COVID-19](#).

monthly wage, unemployed, forming part of homes defined as poor, being male and living in rural areas²⁶.

- 1.25 The Constitution and different laws guarantee the rights of PWD and promote their social inclusion. However, PWD face different barriers exercising their rights. According to the Ministry of Health some of these barriers are for their mobility and daily activities in streets (46%), public transportation (34%), transport platforms (29%) and parks (26%). More than half of Colombians with disabilities are in productive age (15-64 years of age) (58.5%), where 31.4% are women and 27.1% men.
- 1.26 **Sector experience and lessons learned.** In Colombia, the IDB has worked with national development banks such as Findeter and Bancoldex, in channeling resources towards investments that improve infrastructure, competitiveness, and productivity in various sectors. Since 2008, IDB has provided financing to Bancoldex through four programs under the CCLIP (¶1.20).
- 1.27 In particular, the IDB has experience financing the acquisition of clean technology vehicles for Bogotá's public transportation system (3003/TC-CO), through a concessional credit line administered by Bancoldex and funded with resources from the Clean Technology Found (CTF). The lessons learned from this program have been incorporated during the design of this CLIPP by adding flexibility to the eligible cities, which reduces the risk of delays in fleet renewal process of a given city. In addition, the program will finance different types of clean technologies such as full EV and Euro VI²⁷. Moreover, the Operation allows granting loans to different actors involved in the e-mobility ecosystem for passengers and freight transport, such as manufacturing companies, operating companies, taxi owners, among others. Finally, the program considers the need and provision of TC to local authorities in risk and contingency management, and to operating companies in the use of new technologies. The IDB also has experience financing projects in digitization and intelligent operation in Brazil (2700/OC-BR) for US\$218,000,000, México (ATN/IM-13935-ME) for US\$145,000, Ecuador (3494/CH-EC, 3494/OC-EC) for US\$90,000,000 Dominican Republic (3182/OC-DR) for US\$78,000,000 and Surinam (3059/OC-SU) for US\$30,000,000 among others. It has also experience working with battery storage systems to improve electricity access in isolated areas by installing mini-grids and is working on storage pilot projects to be connected to the grid. The projects are in Haiti (4900/GR-HA) for US\$38,000,000 Nicaragua (1435/OP-NI, 2342/BL-NI, 2342/BL-NI-1, 2342/BL-NI-2, 2342/BL-NI-3, 2342/BL-NI-5-3) for US\$30,000,000 and Suriname (4931/OC-SU, 4931/OC-SU-1, 4931/OC-SU-2) for US\$30,000,000, among others.
- 1.28 The Bank's previous experience in the development of long-term financing solutions for sustainable energy projects via public development banks have proven viable and effective with several operations in the region, including Mexico

²⁶ [An approach to indirect costs of disability in Colombia.](#)

²⁷ Euro VI: set of latest standards introduced by the European Commission to reduce harmful pollutants from diesel vehicle, particularly nitrogen oxides (NOx), carbon monoxide (CO), hydrocarbons (HC) and particulate matter (PM). Introduced in September 2016 for light commercial vehicles.

and Brazil²⁸. These CCLIP operations had objectives related to the support of private sector investment in sustainable power generation, with strong focus on maximizing the leverage of public and donor resources where applicable. This previous experience with NDBs, has led the Bank to identify the need to improve the environmental and social management of sustainable energy projects, among both developers and lenders, not only to comply with Bank requirements but also to maximize their positive impact and minimize conflicts. In this sense, NDBs should be supported in assessing their subprojects, including the allocation of funds and efforts to ensure projects compliance with international environmental and social standards. That is why a detailed Strategic Environmental and Social Assessment (SESA) for the program was developed with Bancoldex which includes the strengthening of its socio-environmental monitoring capacity. Moreover, the IDB's experience with financial intermediaries in the energy sector can be useful to better define the sub-projects eligibility criteria. This includes applying its experience in the sector, with the country's environmental and social standards, and its proposed portfolio of projects towards a focused strategy that will set up better marketing and procedures.

- 1.29 **Complementarity with other IDB Group interventions.** The main objective of the CCLIP (CO-O0004) is to contribute to the improvement of business productivity through channeling of medium and long-term resources for investments in creative innovation, technological modernization and environmental sustainability; all this through services offered by Bancoldex. The first two operations support and promote the investment in energy projects, mainly through energy efficiency interventions. In the case of the first one (4939/OC-CO) between its specific objectives, has one related to scale up financing for investments by Small and Medium Enterprises (SME) in energy efficiency projects. The second operation (5169/TC-CO), was fully designed to keep supporting energy efficiency projects, and promoting the productivity of SME and at the same time, reducing the country's GHG emissions. This third Operation will continue contributing to the main objective of the CCLIP, by promoting investments in energy and electromobility which will benefit the productivity of the country by reducing electricity and fuel costs; and at the same time contribute to accelerate its energy transition. Additionally, it will build on the positive results achieved with the operation 3661/TC-CO, which financed renewable energy projects in areas that are not connected to the grid and helped to strengthen Bancoldex's position as a supplier of green financing in the country. These operations demonstrate Bancoldex's experience executing IDB's programs.
- 1.30 In addition, Bancoldex had four operations with IDB Invest since 2005. In 2020, It provided a US\$60,000,000 loan (CII/DE-13100-01) to support MSMEs affected by the COVID-19 situation. This loan, disbursed in September 2020, was supplemented with a US\$10,000,000 co-financing from FinDev Canada. On the other hand, in May 2020, IDB Invest supported, through Bancoldex, six energy distribution companies in Colombia for US\$670,000 so that these companies serving mainly remote areas of the country could meet their contractual commitments under the power purchase agreements signed during the renewable

²⁸ Mexico (Renewable Energy Financing Program with NAFIN, 2631/TC-ME) and Brazil (Renewable Energy Financing Program, 3866/OC-BR, of the Conditional Credit Line for the Financing of Productive and Sustainable Investments, BR-O0001).

energy auction launched by GoC in 2019 (Operations 13201-01, 13193-01, 13198-01, 13200-01, 13199-01).

- 1.31 **Coordination with other development agencies.** During the preparation of this Operation, the IDB has coordinated with various bilateral and multilateral financiers. It is expected that concessional financing for energy transition projects financed by Bancoldex will be available in 2022 through the Climate Investment Fund's Renewable Energy Integration Program as Colombia was selected as one of the five beneficiary countries; the Rockefeller Foundation Fund to be established at the IDB by the end of 2021; and the Green Climate Fund.
- 1.32 **Technical Cooperation.** The Operation is supported by three TCs: The first, "Support for Financing electricity generation projects with NCRE and electric mobility in Colombia" (ATN/OC-18799-CO) of US\$100,000, recently approved, supports the preparation process of this Operation by: (i) identifying and designing financing mechanisms required to develop projects that contribute to the sustainable economic growth in the energy and transportation sectors; and (ii) strengthening Bancoldex's capacity to evaluate energy transition projects; the second, "Support the Colombian Energy Sector to Mitigate the COVID-19 Impacts" (ATN/OC-18002-CO) of US\$400,000, which finances studies such as: (i) estimating investment demand in future NCRE projects, storage systems, distributed energy resources, advanced metering, and electromobility; (ii) preparing the Operation's Environmental and Social Management Framework (ESMF); (iii) assessing the financial needs and risks of electric mobility projects; and (iv) assessing Bancoldex capacity for direct financing projects; and the third, "Accelerate Gender Equality in the Energy Sector" (ATN/OC-18760-RG) for US\$100,000, will fund gender activities to promote gender equality in direct finance projects.
- 1.33 **Strategic Alignment.** The Operation is consistent with the Second Update of the Institutional Strategy (AB-3190-2) and is aligned with the development challenge of Productivity and Innovation, given that it will support innovation and digitalization by promoting advanced renewable energy technologies such as solar and wind power, electric mobility, energy storage systems and AMIs. Clean, cutting-edge technology, and sustainable energy contributes to a more sustainable development and productivity. Additionally, the use of innovation and technologies that increase efficiency in infrastructure have a positive effect in productivity²⁹. It is aligned with the cross-cutting themes of: (i) gender equality and diversity since it will support: (a) female labor force participation in the energy transition projects by ensuring that women occupy at least 35% of jobs related with projects financed under the Operation; (b) gender equality and the inclusion of PWD through training activities and sensibilization workshops for both Bancoldex and the project developers; (c) implementation of key activities from Bancoldex's Gender Action Plan and; (d) preparation of a strategy along with its action plan for the recruitment and permanence of PWD. The Operation is consistent with the IDB's Vision 2025 pillars of: (i) digitalization, as it aims to accelerate the adoption of new technologies and digitalization in the energy and transport sectors; (ii) gender, as gender mainstreaming in Bancoldex and in projects with direct financing is included as a

²⁹ [From structures to services: the path to better infrastructure in LAC/edited by Eduardo Cavallo, Andrew Powell, Tomás Serebrisky.](#)

key activity; and (iii) climate change and environmental sustainability, considering that 100% of the Operation's resources are invested in climate change mitigation activities according to the Joint methodology of the [Multilateral Development Banks \(MDB\)](#) for estimating climate finance: due to the investment in green energy projects, like renewable energy, energy efficiency and electromobility, among others. These resources will contribute to the IDB Group's target of increasing financing for climate change-related projects to 30% of all approvals by the end of 2021. The Operation will contribute to the Corporate Results Framework (CRF) 2020 - 2023 (GN-2727-12) through the indicator of avoided emissions (annual tons of CO₂ equivalent). Likewise, the Operation is consistent with the Sectoral Framework Document for Support for SMEs and Access and Supervision of Financial Services (GN-2768-7) under the pillar of improving the efficiency and scope of the intermediation of bank credit to the productive sector. Along the same lines, it is consistent with the Energy Sector Framework document (GN-2830-8) and with the Climate Change Sector Framework (GN-2835-8) about sustainability and renewable energies. The Operation is aligned with the Country Strategy with Colombia 2019-2022 (GN-2972), by contributing to the strategic objective of stimulating innovation and business development and with the cross-cutting issue of climate change. Finally, the Operation is included in the 2021 Update of the Operations Program Report (GN-3034-2).

- 1.34 **Consistency with Bank's Public Utilities Policy (PUP) (GN-2716-6).** The Operation is also consistent with the IDB Public Utilities Policy (GN-2716-6) because: (i) the tariff structure of the power sector guarantees that all the costs of the service are covered, while seeking to deliver the service at the least possible cost; (ii) there is regulatory framework and institutions to promote the reliability, quality and efficiency of the electricity service, including a mechanism to ensure that generation projects are selected based on least cost, in a transparent manner; (iii) the Operation promotes environmental sustainability in the power sector, by diversifying the energy matrix with NCRE; and (iv) as shown in the SESA, it is expected to have small environmental and social impacts and will have a dedicated strategy to manage environmental and social risks. Moreover, the Operation complies with the conditions of the PUP by ensuring that: (i) is financially viable, as it will be operated through a public financial institution that requires as an eligibility criteria that each project is financially sustainable; and (ii) has economic viability, as demonstrated in the economic analysis of the program.

B. Objective, Components, and Cost

- 1.35 **Objective.** The objectives of this third Operation are: (i) to support the decarbonization of the economy by reducing GHG; and (ii) to accelerate the country's inclusive energy transition by financing NCRE projects and associated transmission lines, energy storage, energy efficiency, DER, AMI and electric mobility in Colombia. The achievement of these objectives will contribute to the general objective of promoting the country's productivity and competitiveness through the financing of strategic green energy and electric mobility projects.
- 1.36 **Sole Component. Financing clean and inclusive energy transition projects (COP 175,000 million IDB, US\$5 million CTF³⁰).** The Operation will consist of

³⁰ US\$3,500,000 co-financing and US\$1,500,000 grant.

one component through which Bancoldex will use IDB funding along with CTF resources administered by the Bank to provide financial support to private and/or public developers of bankable clean and inclusive energy transition projects in Colombia through direct/indirect loans, contingent loans, and/or guarantees. It will provide finance to:

- a. NCRE projects (wind, solar, small hydropower projects (less than 20 MW³¹), biomass, and green hydrogen (H₂), and associated transmission³² lines.
- b. energy efficiency projects through direct and rediscounted financing. Eligible projects include investments in refrigeration, electric motors, LED lighting, industrial furnaces, boilers, and solar panels, among others.
- c. DER projects based on NCRE in the National Interconnected System (NIS) and Non-Interconnected Zones (NIZ).
- d. AMI projects including smart meters, communications networks, and data management systems that enables two-way communication between utilities and customers.
- e. Battery energy storage systems (including utility-scale and distributed storage such as mini-grids and individual FV systems).
- f. Acquisition of EV (including buses, vessels or trucks) for: (i) the integrated or massive public transportation systems, (ii) private transportation services for businesses or utilities, (iii) individual passenger transportation (taxis)³³, and (iv) freight transportation.
- g. Infrastructure associated to e-mobility, including EV stations, bus maintenance depots, and EV homologation and testing centers, among others.

1.37 To ensure inclusiveness, the project has defined specific actions under this component, to promote both gender equality (§1.40) and the inclusion of PWDs (§1.41), such as: (i) supporting gender mainstreaming in direct financing projects, (ii) support Bancoldex in closing the gender gaps identified within the institution and in the implementation of its Gender Action Plan; and (iii) training on gender equality with FI, as will be detailed in the Credit Rules (CR) (see [OEL#6](#)).

1.38 The Operation does not establish specific amounts to be allocated for each type of project or type of financing (direct or through financial intermediaries), but most of the resources will be used through direct financing based on Bancoldex's project portfolio³⁴. Bancoldex will provide financing to at least four projects. Direct financing projects will have a minimum financing of US\$1,000,000 and a maximum investment of US\$30,000,000.

³¹ The Colombian energy sector regulation considers mini-hydros of less than 20 MW as NCRE.

³² According to the Mines and Energy Planning Unit (UPME) definition of transmission lines associated to the NCRE projects.

³³ Hybrid vehicles can be also financed through this operation, but only in segments where the vehicle useful life is shorter like taxis.

³⁴ Current pipeline includes NCRE (wind and solar), energy storage batteries, DER in NIZ and electric buses.

- 1.39 **Eligible projects to be financed by Bancoldex.** The SESA includes eligibility criteria to exclude those projects with high socio-environmental risk included within a Category “A”. In addition to these eligibility criteria, all Bancoldex activities comply with an exclusion list included in its Environmental and Social Risk Management System (SARAS). Moreover, the eligibility criteria for projects, including the environmental, social and technical requirements for each individual subproject are described in the ESMR (see [REL#2](#)) and in the CR (see [OEL#6](#)). The CR may only be modified by mutual agreement between the IDB and Bancoldex. By channeling IDB resources, Bancoldex will increase its ability to provide a longer tenor consistent with the project's costs, risks and cash flow profile, as well as the expected returns to make these ventures successful.
- 1.40 **Gender and diversity specific activities.** The Operation will implement the following activities: (i) support gender mainstreaming³⁵ in direct financed projects by including a target of employing at least 35% of women. It will include a gender analysis to identify gender gaps within the project, gender activities targeted to address these gaps and at least 1 indicator to measure the activities' progress. The activities will focus on: promoting the participation of women in the infrastructure sector (including trainings programs; mentorship and apprenticeship programs for women in professional or technical areas; awareness workshops for the staff on micro-aggressions, gender bias in the work environment and in recruiting, , gender-based violence, new masculinities; leadership programs for women); prevention and mitigation of gender-based violence (developing and implementing behavior guidelines for employees; adapting the working infrastructure); selecting and hiring providers that promote gender equality, for example, by working with business owned by women; (ii) support Bancoldex in closing gender gaps identified within the institution and in the implementation of its Gender Action Plan through: (a) promotion of leadership, mentoring and networking opportunities for women³⁶; (b) training on implicit biases³⁷ for Bancoldex's human talent team; (c) workshop on new masculinities for Bancoldex's employees; and (d) workshop to prevent and mitigate the risk of sexual harassment in the workplace for Bancoldex's employees; and (iii) gender equality trainings with FIIs. The FIIs trainings will focus on: (a) promoting female labor force participation; (b) preventing and mitigating the risk of gender-based violence; and (c) implicit biases training. All gender activities have funds to be executed (See [REL#1](#)). Additionally, the CR will include explicit requirements for buses to follow the Colombian Institute of Technical Standards and Certification's requirements for universal accessible infrastructure. For example, regarding space for baby strollers and shopping carts to access the buses; ramps to facilitate the access of people with disabilities, elderly, and people with baby strollers; and the height of the handles should be appropriate for women and men (see [OEL#5](#)).

³⁵ "Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in any area and at all levels (...). The ultimate goal of mainstreaming is to achieve gender equality." ECOSOC. 1997.

³⁶ The KPMG Women's Leadership Study found that professional working women believe it is critical for companies to support a woman's development.

³⁷ McKinsey has found that companies implementing activities to improve fairness in hiring practices and performance reviews have made the greatest progress in women's representation, 92% of the companies leading progress on diversity and representation offer bias training for hiring evaluators. McKinsey & Company and Lean In. (2021). Women in the Workplace.

- 1.41 **Support people with disabilities.** The project will promote the inclusion of PWD in the sector by carrying out sensibilization workshops within Bancoldex, with the aim of raising awareness about the importance and different ways to support PWD, both as employees and clients. Moreover, to meet the institution's goal on hiring employees with disabilities, Bancoldex will define a strategy along its action plan for the recruitment, training, hiring and permanence of PWD. If projects financing electric buses are financed under the loan, ensure that electric buses selected to renew the public transport fleet consider and incorporate universal accessibility norms.
- 1.42 The sensibilization workshops in gender and PWD to Bancoldex staff and FIs, will be financed with resources from the CTF grant, CO-J0015 (up to US\$150,000,000), operational support TC for the loan ATN/OC-18799-CO, operational support TC ATN/OC-18760-RG, and Bancoldex's own resources.
- 1.43 **Sub-borrowers and Beneficiaries.** The sub-borrowers of this Operation will be public and private developers of NCRE and associated transmission lines, energy storage, energy efficiency, DER, AMI and electromobility. The beneficiaries will be end users of electricity infrastructure added to the system, such as industries, firms, commercial users or households, who will also benefit from a more secure and diversified provision of the service. In addition, the Colombian population will indirectly benefit from positive externalities associated with the environmental and economic impacts of the Operation, such as reduction in water consumption, job creation, increased local revenues, and reduced pollution, especially in poor geographic areas.

C. Key Results Indicators

- 1.44 **Expected Results.** The Operation aims to: (i) reduce GHG emissions; (ii) mobilize financing from third parties in energy transition projects; (iii) increase Bancoldex's total loan portfolio of energy transition projects; and (iv) undertake concrete activities to promote gender equality in direct financing projects. The Result Matrix (Annex II) summarizes the Operation's expected impacts, outcomes and outputs.
- 1.45 **Economic Analysis.** The economic analysis estimates the Operation's benefits through projected flows of estimated economic value of avoided CO₂ emissions thanks to the implementation of Operation's projects. Subtracting the costs associated with those investments and discounting future flows at a rate of 12%, the result is a net present value (NPV) of US\$869,480 and an internal rate of return (IRR) of 12.21%. A sensitivity analysis was also performed which shows that the Operation is robust in scenarios with extreme changes in key parameters, such as efficiency, investment costs, carbon pricing, etc. (see [OEL#1](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing Instruments

- 2.1 **Financing modality.** This third individual Operation proposed under CCLIP CO-O0004 will consist of a global credit loan to Bancoldex for COP175,000,000 charged to the ordinary capital of the IDB, an additional US\$3,500,000 CTF loan,

and a CTF grant of US\$1,500,000, administered by the IDB. Bancoldex will use the IDB and CTF resources to diversify and lengthen its funding sources, thus better responding to the financing needs of private and public investors in sustainable energy and electric mobility in Colombia. CTF funding, (US\$3,500,000 in concessional and US\$1,500,000 in grant financing) will focus on energy storage projects, lowering Bancoldex's financing cost that will contribute to the financial viability of the projects, making it more attractive for developers. The total amount of resources from the IDB and up to US\$5,000,000 of CTF will be channeled to end users by Bancoldex directly, or indirectly, through the intermediation of its accredited FIs. Technical Assistance resources of US\$150,000 from the CTF grant (CO-J0015) will be used by Bancoldex to support the gender and PWD activities.

- 2.2 **Disbursement plan.** According to the regulation PR-203 of Global Credit Programs, all the resources of the Operation should be committed within three years and disbursed with four years. Therefore, this Operation's resources are expected to be disbursed within 48 months from the effective date of the loan contract.

Table 1. Summary of Operation's costs

Sole Component	IDB (COP million)	CTF Co-financing (US\$ million)	CTF Grant (CO-J0015) (US\$ million)
Inclusive energy transition projects: <ul style="list-style-type: none"> • NCRE & associated transmission lines • Energy Efficiency • DER • AMI • Electromobility 	175.000.	-	
Energy storage projects		3.50	1.35
Gender and PWD activities	-	-	0.15
Total	175.000.	3.50	1.50

Table 2. Operation's preliminary disbursement estimate (US\$ million, COP million and %)

Source	Year 1	Year 2	Year 3	Year 4	Total
IDB	COP39,000	COP59,000	COP59,000	COP18,000	COP175,000
CTF	0.00	US\$3.00	US\$2.00	0.00	US\$5.00
Disbursement	20%	36%	34%	10%	100%

B. Environmental and Social Safeguard Risks

- 2.3 As it is a financial intermediation Operation, following the Bank's Environment and Safeguards Compliance Policy (OP-703), Directive B.13, it cannot be classified ex-ante.
- 2.4 Bancoldex has an SARAS that entered a second phase of continuous improvement, with the support of the IDB and KfW, to update it to the current risk profile of their loan portfolio. The revised SARAS was recently approved by Bancoldex.

- 2.5 Regarding Bancoldex's capacity for socio-environmental management, it has been considered adequate for the scope of the first two CCLIP operations. However, it will be necessary to strengthen its capacity in socio-environmental monitoring for future operations in which greater technical capacity will be necessary to follow up and solve problems of compliance or socio-environmental performance. Additionally, in the medium and long term, Bancoldex is interested in adopting the Financial Stability Board that created the Task Force on Climate-related Financial Disclosures (TCFD) to incorporate climate risk into its risk management process and improve reporting of climate-related financial information.
- 2.6 Within the framework of this Operation, a SESA and its corresponding Strategic Environmental and Social Management Plan (SESMP) have been developed including the management measures for potential impacts and risks, as well as possible cumulative and indirect impacts.
- 2.7 Bancoldex will apply the SESA when identifying projects to be financed with IDB resources. It incorporates certain restrictions and specific eligibility criteria to exclude those projects/sectors with high socio-environmental risk (category A³⁸), or activities that, among others: (i) result in resettlement, involuntary or displacement of subsistence activities of vulnerable groups; (ii) implies potentially significant adverse impacts that cannot be mitigated on indigenous peoples / ethnic communities, their lands, territories, intellectual and/or cultural property; (iii) may damage cultural sites or critical cultural sites; (iv) imply a significant negative impact on natural habitats; or (v) projects located in areas prone to high risk of natural disasters and other climate related risk.
- 2.8 The SESA will be published prior to Operations Policy Committee (OPC) and will be an integral part of the CR whose entry into force, in accordance with the terms previously agreed with the Bank, will be a special contractual condition prior to the first disbursement of the financing (See [REL#2](#))
- 2.9 In addition, the SARAS of Bancoldex is aligned with relevant international standards for the management of Labor and Working Conditions including the Performance Standards on Environmental and Social Sustainability of the IFC, the Guidelines on Environment, Health and Safety of the World Bank Group, the fundamental conventions of the International Labor Organization (ILO) and the Equator Principles. This Operation is being prepared under the Bank's current safeguards policies, where directive B.4 Other Risks allows for this detailed analysis and mitigations measures that are aligned with the Bank's E&S Policy Framework that will become effective on Oct 31, 2021, specifically with ESPS 2 on Labor and Working Conditions.
- 2.10 ESPS 2 sets out provisions to remedy any cases of forced labor. The risk of forced labor in the solar panel supply chain has been assessed in the operation's SESA as part of the contextual risk. The FI's ESMP will include respective provisions/procedures for analysis, management, and monitoring of the risk of forced labor in subprojects and their primary suppliers. Where instances of forced labor are identified immediate measures will be taken to safely remove the worker

³⁸ Category "A" classification: operations with high probability of causing significant negative environmental impacts and the consequent related social impacts. This concept also applies to the related project's facilities.

from the condition of forced labor, address the specific incident and the practice that led to the worker's situation. ESPS 2 acknowledges that the ability of the Borrower to fully address forced labor risks in its primary supply chain depends upon its level of control or influence over the project's primary suppliers. Where remedy is not possible, the Borrower will shift the project's primary suppliers over time to suppliers that can demonstrate that they are complying with ESPS 2. The measures contemplated to address the risk of forced labor in the supply chain of polysilicon Solar Panels in this operation are fully aligned with the document "IDB Group Measures to Address Risk of Forced Labor in the Supply Chain of Silicon-based Solar Modules. Revised Version" (GN-3062-1), with new requirements of IDB E&S Policy Framework (GN-2965-23) and with IDB Procurement Policies (GN-2340-15 and GN-2350-15).

- 2.11 To address this risk, E&S Due Diligence of subprojects will include screening and analysis of the risk of forced labor and develop procedures to identify, prevent and manage the risk of forced labor in the project workforce including the primary supplier workforce. Such analysis is risk-based and may, depending on the subproject and its operating context take the form of vetting primary suppliers of goods and services with a labor issues checklist or amount to a specific labor risk assessment of the expected project workforce. As part of IDB monitoring of this operation, the IDB will supervise subprojects that finance the purchase and installation of solar panels ex-post, validating their E&S risk analysis and due diligence as per Bancoldex' SESA and ESMS and IDB requirements set out for the operation.
- 2.12 As mentioned above, Bancoldex has experience in the implementation of operations with resources financed by the Bank and has shown capacity as EA. Based on this knowledge, the institution is deemed to have sufficient capacity to perform activities of financial management and administration of the resources under the proposed Operation. The updated institutional analysis confirmed that Bancoldex maintains a satisfactory level of development and a low risk for project implementation. The fiduciary risk is low (see Annex III).

C. Other Risks and Key Issues

- 2.13 **Economic and financial.** There is a medium risk that demand for loans is lower than expected due to the financial conditions offered by Bancoldex not being competitive. IDB's long-term financing allows Bancoldex to offer longer tenors, increasing its competitiveness. Also, the IDB is adding US\$5,000,000 in CTF concessional financing (US\$3,500,000 in concessional and US\$1,500,000 in grant financing) for the energy storage projects and is looking for additional concessional financing that will allow Bancoldex to lower their interest rates for the projects supported by this Operation. Moreover, additional concessional resources from the Climate Investment Fund's Renewable Energy Integration Program (REI) and the Rockefeller Foundation are expected to be approved next year to further improve the financial conditions offered by Bancoldex to developers of energy transition projects and to generate confidence to private investors in these type of projects that, even though are not new in many countries, represent the first large scale NCRE, DER, energy storage, AMI and electromobility projects to be developed in Colombia. It is expected that as the commercial banks and funds feel more confident in these type of investments, concessional financing will no longer be

necessary. Finally, Bancoldex has already identified a preliminary energy transition pipeline of projects close to US\$100,000,000 (of which approximately US\$50,000,000 could be co-financed with IDB Invest).

- 2.14 **Institutional.** There is a medium risk that Bancoldex's ability to provide the sophisticated financing schemes demanded by the project developers could affect the project pipeline. Since Bancoldex's line of direct financing was only added in 2020, IDB will provide technical support and capacity building to Bancoldex through the ATN/OC-18799-CO, on direct financing mechanisms and project evaluation for energy transition projects eligible under this Operation. In addition, IDB Invest is working together with Bancoldex in building a pipeline of bankable projects that could be financed in parallel by the two entities.
- 2.15 **Political.** Elections in 2022 could result in a change of priorities related to the energy transition. However, this has a low risk because: (i) MINENERGIA, Ministry of Finance and Public Credit, and the National Planning Department have been included in the planning of the Operation, due to Colombia's long-term vision of the Energy Transition and its commitment to the Paris Agreement; (ii) the energy and transport sectors regulatory framework have been stable and with a long-term vision; (iii) with Law 1715, NCRE have been promoted and a new energy transition law (Law 2099 of 2021) was recently passed by Congress; (iv) the Operation is aligned with Bancoldex's new strategy for 2022-2026; and (v) all the presidential pre-candidates have expressed their commitment to the energy transition and the Paris Agreement.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of Implementation Arrangements

- 3.1 **Borrower, EA and guarantor.** Bancoldex will be the borrower and EA of the loan, with a sovereign guarantee from the Republic of Colombia. Bancoldex, a development bank that promotes business growth and trade, is a public-private corporation organized as a bank credit institution, within the Ministry of Trade, Industry, and Tourism and subject to inspection and supervision by the Financial Superintendency of Colombia. Its purpose is to finance, principally but not exclusively, activities related to exports and national industry, acting in that field from the first and second tiers as a discount or rediscount bank, rather than a direct intermediary.
- 3.2 **Execution and management.** Bancoldex's Vice Presidency for Finance will be responsible of the management and execution of the Operation, supported by the Sustainable Development and the Vice Presidencies for Commerce and Risk. Bancoldex will be responsible for all the execution and management costs. The results of the Institutional Capacity Assessment Platform (ICAP) prepared in the second semester of 2021 confirmed that Bancoldex maintains high execution and management capacity, therefore the fiduciary risk for this Operation is low.
- 3.3 Improvement opportunities were identified in the Environmental and Social Management module, specifically in adjustments to Bancoldex's Environmental and Social Management System (ESMS) and the technical capabilities of the team to evaluate direct credit operations. Additionally, in the Technical Quality

Management module, improvement opportunities for improvement were observed to obtain data on the gender and energy performance variable in various operations that generated delays in the disbursement justification processes. Finally, to ensure the success of the Operation, it is recommended that Bancoldex prepares a detailed strategic plan for its direct lending window that incorporates aspects related to lending targets, risks and profitability for the coming years.

- 3.4 **Credit Rules (CR)**. The CR of the Operation establishes the terms and conditions for execution including the specific features of the energy transition projects eligible for financing, limits on the use of resources, and other conditions such as environmental and social management requirements, fiduciary obligations, and monitoring and evaluation requirements. No changes may be made to the CR without written consent from the IDB.
- 3.5 **Special contractual condition prior to the first disbursement of the financing: the approval of the Operation's CR by Bancoldex with the Bank's prior non objection, which must include, among other matters, information regarding the SESA, the criteria and procedures for the selection of projects; and dedicated social and environmental specialist in Bancoldex throughout project implementation, a condition to facilitate the implementation of the SESA.** This condition is justified given that the CR will include details of the type of projects eligible under the Operation, the socio-environmental conditions [REL#2](#), and fiduciary requirements as established in the Annex III.
- 3.6 **Exceptions to Bank policies.** A partial waiver of the Bank's Policy on Guarantees Required from the Borrower (OP-303), so that the Republic of Colombia guarantees only the loan payment obligations, including interest and commissions will be processed. The request is consistent with the provisions set forth in Decree 2681 and Article 40 of Law 80 of the Republic of Colombia and has as precedents the same waiver in the first two operations under the CCLIP CO-O0004 (loans 4939/OC-CO and 5169/TC-CO) and the operations approved under CCLIP CO-X1007.
- 3.7 **Procurement and contracting plan.** Since it is an Operation that will operate on demand to finance sub-loans, no procurement actions or consultant services are contemplated for the proposed loan. Sub-borrowers will use market procurement practices, which are in accordance with the Bank's policies. The proposal, therefore, does not include an Execution Plan or Procurement Plan. Any acquisition of services or consulting that may be required as part of the administration and / or evaluation of the Operation must comply with the Policies for the Acquisition of Works and Goods Financed by the IDB (GN-2349-15) and the Policies for the Selection and Hiring of Consultants Financed by the IDB (document GN-2350-15), or its subsequent updates.
- 3.8 **Disbursements.** The resources allocated for the sole component of the Operation will be disbursed primarily from the IDB to Bancoldex through the reimbursement modality³⁹, however, advance of funds and direct payments modalities may also be used. Operation resources will be committed and disbursed over a period of 48

³⁹ However, all the disbursement modalities in the Financial Management Guide OP-273-12, or in the current IDB policies, will be available to Bancoldex as long as the IDB approves their use.

months (see Table 3) from the effective date of the loan contract. For the purpose of this global credit loan Operation, it is proposed that the eligible expenditures be the disbursement of Operation resources from Bancoldex to eligible sub-borrowers or accredited FIs⁴⁰, in the case of indirect financing, pursuant to the terms of effective sub-loan agreements for eligible projects. Disbursements will be made by reimbursing Bancoldex for transfers made to the sub-borrowers or accredited FIs according to the Operation's CR. It is a special contractual clause prior to the first disbursement, the presentation of evidence that Bancoldex has approved the CR, in accordance with a draft previously agreed upon with the Bank, and that such CR is in effect. Bancoldex shall open a designated account in a first-floor banking institution for the sole purpose of managing loan's proceeds.

- 3.9 Cumulative recoveries from the amortization or prepayments of sub-loans, that exceed the loan service of the Bank, will be used to finance new sub-loans, for up to five years from the date of last disbursement made to Bancoldex by the Bank.
- 3.10 **Financial statements and auditing.** The Operation's financial statements will be audited in accordance with the procedure previously agreed upon with the Bank, and its cost will be covered by the EA. The EA will present within 120 days after the end of each fiscal year of the project, during the original disbursement period, or its extensions, the audited financial statements of the Operation, duly audited by an independent auditing firm acceptable to the Bank.

B. Summary of Arrangements for Monitoring Results

- 3.11 **Monitoring.** This Operation will follow the Bank's general procedures for monitoring and evaluation of investment operations, based on the indicators in the Results Matrix (Annex II), agreed upon by the EA and the Bank, and the Monitoring and Evaluation Plan ([REL#1](#)). The Operation will be monitored through periodic Project Monitoring Reports (PMR) prepared by the EA. The monitoring costs will be covered by the EA with its own resources. The Bank will conduct periodic visits to support and monitor the Operation execution.
- 3.12 **Evaluation.** The Final Evaluation will determine the fulfillment of the project's results matrix indicators and must be presented before the financial closing of the Operation. The EA will prepare a final report to be submitted within 120 days after the last disbursement. The evaluation will assess the success in achieving the objectives and results of the Operation, based on the Results Matrix. This will provide the necessary information for the IDB to produce a Project Completion Report (PCR) based on Bank policies. The proposed evaluation method will be based on an ex-post cost-benefit analysis of the Operation. As explained in the Monitoring and Evaluation Plan ([REL#1](#)), this methodology will make it possible to analyze the value of the Operation's impact indicators.
- 3.13 **Information.** Bancoldex will collect and keep all the information, indicators and parameters required to prepare the PCR and any ex-post evaluation that the Bank wishes to carry out.

⁴⁰ FIs include banks, financial corporations, finance companies, financial cooperatives, and financial NGOs, cooperatives with savings and/or credit activities, alternative financing platforms, accelerators, or incubators with specialized financing units, among others that comply with Bancoldex's formal accreditation processes.

IV. ELIGIBILITY CRITERIA

- 4.1 **General eligibility criteria.** The third individual Operation under the MM-I CCLIP complies with the general criteria established in policy document GN-2246-13, given that it has been established that: (i) the objectives and components of the Operation are consistent with the objectives of the CCLIP, as this Operation will finance clean and inclusive energy transition projects that will contribute to the general objective of promoting the country's productivity and competitiveness; (ii) the Operation is included in the revised Report of the Program of Operations 2021 (*Actualización del Informe del Programa de Operaciones 2021*) (GN-3034-2); and (iii) the Executing Agency (EA) (Bancoldex) has demonstrated a satisfactory level of performance in the execution of the first operation under the CCLIP.
- 4.2 **Specific eligibility criteria for the third individual Operation.** This Operation follows the guidelines for processing Global Credit Loans (PR-201) by financing one or more specific green energy transition projects whose cost, design and economic feasibility have been estimated in previous consultancy studies, developed prior this Operation (See [OEL#2](#) and [OEL#3](#)). Implementation of the first operation (4939/OC-CO) is satisfactory according to the last PMR (first semester of 2021). The implementation progress is at 50.6%, which shows Bancoldex's capacity to implement the CCLIP and a high probability of achieving the development objectives of the operation, even before the estimated disbursement timeline of four years. In addition, Bancoldex is in the last steps of completing the eligibility conditions for the second operation (5169/TC-CO) under the CCLIP CO-O0004 considering that: (i) the first operation has a satisfactory performance rating; (ii) Bancoldex justified US\$946,000 in energy efficiency subloans as part of the first disbursement of 4939/OC-CO and there is a portfolio that is under review of energy saving indicators for approximately US\$2,994,722; (iii) both operations have absolute complementarity by promoting the scaling up of energy efficiency financing for SMEs; and (iv) concessional resources have been approved from the CTF to the second operation, which will allow blended finance with resources from 4939/OC-CO to achieve the development objectives of both operations at the same time.

Development Effectiveness Matrix		
Summary		CO-L1258
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Productivity and Innovation -Gender Equality and Diversity -Climate Change	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Jobs supported (#) -Women beneficiaries of economic empowerment initiatives (#) -Emissions avoided (annual tons CO2 equivalent) -Installed power generation capacity from renewable sources (MW) -Value of investments in resilient and/or low-carbon infrastructure (\$)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN 2972	(i) Spur innovation and development in business and agriculture.
Country Program Results Matrix	GN-3034-2	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		8.1
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		1.6
3.3 Results Matrix Quality		4.0
4. Ex ante Economic Analysis		8.5
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		0.0
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.5
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
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		Medium 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	The TC to Support for Financing electricity generation projects with non-conventional renewable energy sources and electric mobility in Colombia (CO-T1626/ATN/OC-18799-CO), recently approved, supports the preparation process of the operation and aims to: (i) identify and design financing mechanisms required by the sector for the development of projects that contribute to the sustainable economic growth of the country in the energy and transportation sectors; and (ii) to strengthen Bancóldex's capacity to evaluate energy transition projects. The TC for the Support the Colombian Energy Sector to Mitigate the COVID-19 Impacts (CO-T1580/ATN/OC-18002-CO) finances studies related to the operation such as (i) estimating investment demand in future NCRE projects, storage systems, distributed energy resources, advanced metering, and electromobility; (ii) preparing the Environmental and Social Management Framework (ESMF) for the operation; (iii) assessing the financial needs and risks of electric mobility projects; (iv) assessing Bancóldex capacity for direct financing projects

Evaluability Assessment Note: The third operation of the CCLIP for an amount of US\$50 million, of which US\$45 million of ordinary capital, US\$3.5 million of co-financing and US\$1.5 million of grants, both provided by the Clean Technology Fund (CTF), without local counterpart, has the general objective of promoting the country's productivity and competitiveness through the financing of strategic projects in green energy and electric mobility. The specific objectives are: (i) to support the decarbonization of the economy by reducing greenhouse gas emissions; (ii) to accelerate the country's inclusive energy transition by financing Non-Conventional Renewable Energy (NCRE) projects and associated transmission lines, energy storage, energy efficiency, distributed generation, advanced measurement systems, and electric mobility in Colombia. The operation will be executed and monitored by Banco de Comercio Exterior de Colombia S.A. (Bancóldex).

The loan proposal presents a solid diagnosis. The proposed solutions are appropriate to address the identified problems and their contributing factors. The results matrix is consistent with the vertical logic of the project, presenting adequate results and impact indicators. The outcome indicators are appropriately defined to measure the achievements of the program and the fulfillment of its specific objectives. The impact indicators reflect the contribution to economic objectives consistent with promoting productivity and competitiveness in Colombia. No studies were cited indicating the effectiveness of the proposed interventions in similar contexts (internal validation), which resulted in a reduction of the evaluability score by 1.9 points.

The ex-ante economic analysis yielded an internal economic rate of return of 12.2% under reasonable assumptions. The results are robust in different scenarios in which changes in investments and in the price of carbon are considered. The monitoring and evaluation plan is clear in defining the relevant questions for the project evaluation and the methodology to be used for an effectiveness analysis. The main risks identified are related to lower than expected demand for loans and the ability of the executing agency to provide direct financing. Appropriate measures are indicated to mitigate these and other mapped risks.

Results Matrix

Project Objective	The specific objectives are: (i) to support the decarbonization of the economy by reducing greenhouse gas (GHG) emissions; and (ii) to accelerate the country's inclusive energy transition by financing Non-Conventional Renewable Energy (NCRE) projects and associated transmission lines, energy efficiency, energy storage, DER, AML and electric mobility in Colombia. The achievement of these objectives will contribute to the general objective of promoting the country's productivity and competitiveness through the financing of strategic green energy and electric mobility projects.
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Expected Impacts

Indicators	Unit of measurement	Baseline value	Baseline year	Expected year for achievement	Target Year 4	Means of verification	Comments
To promote the country's productivity and competitiveness							
Cost of electricity contracts for non-regulated consumers (per kWh)	COP	204	2021	2025	130	Semiannual report on operation execution by Bancoldex	See Monitoring and Evaluation Plan
Jobs related with projects financed under the operation (disaggregated by gender)	Number	0	2021	2025	1000 ¹ of which 35% will be occupied by women ²		See Monitoring and Evaluation Plan

¹ Assumption: 7 direct jobs for every US\$1,000,000 invested and 1 indirect job created for every direct job. Total investment is assumed at US\$150,000,000.

² There is no information on the number of women jobs on energy transition/renewable energy projects in Colombia. Worldwide, female participation in the renewable energy sector is on average 32% and 28% when only considering STEM jobs (IRENA, 2019). However, the study Core Women, IDB, Inсуco (2020) found that female participation in the energy sector in Colombia (electricity, hydrocarbons, and mining) is on average 27% but reduces to 19.5% when analyzing the enterprises that create the most jobs.

Expected Outcomes

Indicators	Unit of measurement	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of Project	Means of verification	Comments
Support the decarbonization of the economy										
Reduction of GHG emissions by the projects financed by the program	Thousands of tons of CO ₂	0	2021	0	0	47.4	139.6	139.6 ³	Semiannual report on operation execution by Bancoldex	See Monitoring and Evaluation Plan
Accelerate the country's inclusive energy transition										
Financing from third parties mobilized by the program	US\$ Million	0	2021	10	20	30	15	1.5 of resources mobilized for each unit financed by Bancoldex ⁴	Semiannual report on operation execution by Bancoldex	See Monitoring and Evaluation Plan
Bancoldex total loan portfolio for energy transition projects	%	4.00	2021	4.30	4.70	5.20	5.5	5.50		See Monitoring and Evaluation Plan
Battery storage installed capacity	MW	0	2021	0	0	5	0	5		See Monitoring and Evaluation Plan
Energy rating of battery storage projects	MWh	0	2021	0	0	25	25	25		See Monitoring and Evaluation Plan
Indicators	Unit of measurement	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of Project	Means of verification	Comments
Volume of direct finance leveraged through CTF funding	US\$ Million	0	2021	0	0	4.3	0	4.3	Semiannual report on operation execution by Bancoldex	See Monitoring and Evaluation Plan

³ The Assumptions used were: US\$35,000,000 in solar projects; US\$10,000,000 in electromobility; US\$5,000,000 in energy storage projects. For each US\$1,000,000 invested, the following emissions are avoided: solar projects 1,354 TCO₂/US\$1,000,000, Ion battery's 5MW and 20 MWh 760 TCO₂/US\$1,000,000, electric buses 8,843 TCO₂/US\$1,000,000. This will depend on the final projects financed by Bancoldex.

⁴ In an 80% debt 20% equity financing scheme where Bancoldex finances up to 80% of debt. This includes financing from third parties for battery storage projects (US\$5,000,000 included in the Results Matrix).

Projects undertaking concrete activities to promote gender equality	%	0	2021	0	12.5	12.5	12.5	50	See Monitoring and Evaluation Plan
Number of recruitment processes launched in accessible formats for PWD	Number	0	2021	0	0	1	1	2	See Monitoring and Evaluation Plan

Expected Outputs

Indicators ⁵	Estimated Cost US\$	Unit of measurement	Baseline value	Baseline year	Year				End of Project	Means of verification	Comments
					1	2	3	4			
Sole Component: Financing energy transition projects											
Number of energy transition projects financed by the operation	N/A	Number	0	2021	0	2	2	0	4	Biannual report on program execution by Bancoldex.	See Monitoring and Evaluation Plan
Number of women who completed the Leadership, Mentoring and Networking program for women	US\$50,000	Number	0	2021	15	15	15	15	60		See Monitoring and Evaluation Plan
Training on gender for financial intermediaries implemented	US\$25,000	Number	0	2021	1	1	0	1	3		See Monitoring and Evaluation Plan
Number of employees attending the awareness workshop on inclusion of PWD	US\$30,000	Number	0	2021	100	100	0	50	250		See Monitoring and Evaluation Plan
Strategy along with its action plan for the recruitment, training, hiring and permanence of PWD	US\$45,000	Number	0	2021	1	0	0	0	1		See Monitoring and Evaluation Plan

⁵ In the case of indicators related with disbursements as absolute numbers, the number applies when the total amount of the resources has been disbursed. In case the disbursement corresponds to a percentage of it the calculation will be done proportionally, for absolute numbers.

Country: Colombia

Division: ENE

Operation No.: CO-L1258

Year: 2021

Fiduciary Agreements and Requirements

Executing Agency (EA): Banco de Comercio Exterior de Colombia S.A. (Bancoldex)

Operation Name: Financing to support Colombia's Energy Transition (CO-L1258). Third Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) for Productive Business Financing (CO-O0004)

I. Fiduciary Context of Executing Agency

1. Use of country system in the operation (Any system or subsystem that is subsequently approved may be applicable to the operation, in accordance with the terms of the Bank's validation).

<input checked="" type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input checked="" type="checkbox"/> Information System	<input checked="" type="checkbox"/> National Competitive Bidding (NCB)
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input checked="" type="checkbox"/> Shopping	<input type="checkbox"/> Others
<input checked="" type="checkbox"/> Accounting	<input type="checkbox"/> External Control	<input checked="" type="checkbox"/> Individual Consultants	<input type="checkbox"/> Others

2. Fiduciary Capacity

Fiduciary Capacity of the EA	Bancoldex has qualified staff, functional information systems, and clear, defined procedures for carrying out all of the programmed activities; it currently has ISO-9001 quality management system certification, and its policies, procedures, and processes are well defined and published on the intranet so that they can be consulted by all employees. In addition, Bancoldex has technical staff with solid experience, tenure, and seniority in each area of the institution, enabling it to ensure the quality of its fiduciary and administrative processes, as well as accountability and efficiency in the performance of its duties. Bancoldex has experience in the execution of IDB-financed programs and has demonstrated its capacity as an executing agency since 2008.
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3. Fiduciary risks and risk response

Risk Taxonomy	Risk	Risk level	Risk response
Fiduciary	Due to new regulations enabling Bancoldex to conduct direct lending, it may experience some delays in adjusting current procedures to supervise first floor lending financed with IDB loan resources.	Low	Revise and update lending manuals and supervision procedures; train personnel in correct application of updated regulations.

4. Policies and Guides applicable to operation: Financial Management Guidelines for IDB-financed Projects GN-2811-1 (OP-273-12); Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank. Approved version GN-2349-15 & Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank GN-2350-15.

5. Exceptions to Policies and Rules: Partial waiver of the Bank's Policy on Guarantees Required from the Borrower (OP-303), so that the Republic of Colombia guarantees only the loan payment obligations, including interest and commissions. The request is consistent with the provisions set forth in Decree 2681 and Article 40 of Law 80 of the Republic of Colombia and has as precedents the same waiver in the first two operations under the CCLIP CO-0004 (loans 4939/OC-CO and 5169/TC-CO) and the operations approved under CCLIP CO-X1007.

II. Aspects to be considered in the Special Conditions of the Loan Agreement

Special contractual conditions prior to the first disbursement: The approval of the operation's Credit Rules (CR) by Bancoldex with the Bank's prior non-objection, which must include, among other matters, information regarding the Strategic Environmental and Social Assessment (SESA), the criteria and procedures for the selection of projects and the hiring of a social and environmental specialist, a condition to facilitate the implementation of the SESA.
Exchange Rate applicable to justify expenses made in a currency different from the one of the operation: (b)(ii) of Article 4.10 of the General Conditions of the Loan Contract apply.
Type of Audit: Project's audited financial statements. The fiscal year for the project will run from 1st of January to 31st of December.
Disbursements will be made primarily with reimbursement of expenses modality, however, advance of funds and direct payments modalities may also be used.

III. Agreements and Requirements for Procurement Execution

<input checked="" type="checkbox"/>	Special Procurement Provisions Applicable to The Transaction	Pursuant to paragraph 3.13 of the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-15) of May 2019, where procurement in loans to financial intermediaries involves funds re-lent to beneficiaries under another loan in order to finance subprojects, current private-sector procurement practices for goods and services acceptable to the Bank may be used. The principles of quality, economy, efficiency, competition, and transparency will be observed in such procurement procedures. Bancoldex will not engage in procurement processes using the Bank's loan proceeds. The Program Operational Manual will include the necessary provisions to mitigate risks associated with the acquisition of solar panels within the context of this operation.
<input checked="" type="checkbox"/>	Records and Archives	Documentation for sub loans financed by the operation will be kept by first-tier credit institutions, which analyse and approve the loan applications. These institutions therefore assume all the credit risk and will be solely responsible for monitoring the portfolio. The area of Bancoldex in charge of maintaining project records and files will be the International Bank Office of the Vice Presidency for Finance and Administration. Official disbursement request forms listing the sub loans subject to reimbursement of expenses will be used in the preparation and filing of reports for this program.

Main Acquisitions

N.A.

IV. Agreements and Requirements for Financial Management

<input checked="" type="checkbox"/>	Programming and Budget	Bancoldex has clear policies for budget preparation and monitoring that are defined in the budget planning and management processes established in the entity's value chain and approved by senior management. Budget execution is monitored by the Bancoldex executive committees and the Board of Directors, which meets monthly. Project's budget planning and execution will be performed through Cognos Planning and Cognos Finance.
<input checked="" type="checkbox"/>	Treasury and Disbursement Management	Bancoldex shall open a designated account in a first-floor banking institution for the sole purpose of managing loan's proceeds. The disbursement mechanism shall be electronic via the Online Disbursements system. The currency to manage the operation is Local Currency. The exchange rate to be used in the transaction will be the effective exchange rate on the date of payment of the expense in the local currency. The operation will generally work with a financial period of 12 months due to use of Bancoldex financial and budgeting procedures and systems. The preferential disbursement method will be reimbursement of expenses. The operation is expected to justify 80% of accumulated balances pending of justification.
<input checked="" type="checkbox"/>	Accounting, information systems and reporting	The specific accounting standards to be followed are IFRS. Bancoldex uses a reliable integrated system (Groupling Martínez Asociados) that runs on the AS/400 platform, with integrated accounting, treasury, portfolio, and budget modules, and will be used for the accounting record of the operation as the technology platform and the accrued base method will be used. The transactions related to the project will be clearly identified in the Bancoldex database and will be modified through an automatic data entry system on the Oracle Forms platform, in which automatic controls and validations agreed with the IDB will be implemented in order to select and manage the status of associated transactions. Sub loan transactions and their balances will be administered using the T24 core banking software solution, the standard software for managing credit transactions. In addition to the policies and guides applicable to the operation, the POR will be used with the documented definition of internal workflows and controls.
<input checked="" type="checkbox"/>	Internal Control and Internal Audit	The internal audit function applied to the project is based on Standard Internal Control Model, MECI 1000:2014, compulsory for Colombian government entities and based on the COSO global standard and is aligned and coordinated with the internal control system framework established by the Financial Superintendency of Colombia for its supervised entities. It is exercised by the Office of the Comptroller, Audit Committee, and External Audit Office.
<input checked="" type="checkbox"/>	External control: external financial audit and project reports	Bancoldex will select and contract external audit services in accordance with the terms of reference previously agreed between the borrower and the Bank. These will establish the type of review, opportunity and scope. The selected external auditor and the audit rules to be applied will be acceptable to the Bank. According to the nature and risk of the operation annual project annual financial statements performed by a private eligible audit firm will be required; the requirement may be adjusted over the life of the project depending on the Bank's supervision results.

<input checked="" type="checkbox"/>	Project Financial Supervision	The operation requires financial supervision by the financial specialist consisting of one on-site review every year and desk reviews of the audited annual and final financial statements, subject to adjustments during execution.
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FINANCING TO SUPPORT COLOMBIA'S ENERGY TRANSITION

CO-L1258

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
Clean Technology Fund	CTF	USD	3,500,000

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

11/29/2021

Maria Fernanda García

Date

Chief

Grants and Co-Financing Management Unit
ORP/GCM

FINANCING TO SUPPORT COLOMBIA'S ENERGY TRANSITION

CO-J0015

CERTIFICATION

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

Funding Source	Code	Currency	Amount Up to
Clean Technology Fund	CTF	USD	1,500,000

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

11/29/2021

Maria Fernanda García

Date

Chief

Grants and Co-Financing Management Unit
ORP/GCM

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/21

Colombia. Loan ____/OC-CO to Banco de Comercio Exterior de Colombia S.A. (Bancóldex)
Financing to Support Colombia's Energy Transition. Third Individual Operation
under the Conditional Credit Line for Investment Projects (CCLIP) CO-O0004

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 Banco de Comercio Exterior de Colombia S.A. (Bancóldex), as borrower, and with the Republic of Colombia, as guarantor, for the purpose of granting the former a financing to cooperate in the execution of the project "Financing to Support Colombia's Energy Transition", which constitutes the third individual operation under the Conditional Credit Line for Investment Projects (CCLIP) CO-O0004 approved on 11 December 2019 by Resolution DE-141/19. Such financing will be for the amount of up to COP175,000,000,000 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)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/21

Colombia. Loan ____/TC-CO to Banco de Comercio Exterior de Colombia S.A. (Bancóldex)
Financing to Support Colombia's Energy Transition. Third Individual Operation
under the Conditional Credit Line for Investment Projects (CCLIP) CO-O0004

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, in its capacity as Implementing Entity for the Clean Technology Fund, to enter into such contract or contracts as may be necessary with Banco de Comercio Exterior de Colombia S.A. (Bancóldex), as borrower, and with the Republic of Colombia, as guarantor, for the purpose of granting the former a financing to cooperate in the execution of the project "Financing to Support Colombia's Energy Transition", which constitutes the third individual operation under the Conditional Credit Line for Investment Projects (CCLIP) CO-O0004 approved on 11 December 2019 by Resolution DE-141/19. Such financing will be for an amount of up to US\$3,500,000, from the resources of the Clean Technology Fund, administered by the Bank, and will be subject to the Terms and Financial Conditions and the Special Contractual Conditions in the Project Summary of the Loan Proposal.

(Adopted on ____ 2021)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/21

Colombia. Nonreimbursable Investment Financing GRT/TC-____-CO
Financing to Support Colombia's Energy Transition. Third Individual
Operation under the Conditional Credit Line for Investment
Projects (CCLIP) CO-O0004

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, in its capacity as implementing entity of the Clean Technology Fund ("Fund"), to enter into such agreement or agreements as may be necessary with Banco de Comercio Exterior de Colombia S.A. (Bancóldex), as beneficiary, for the purpose of granting it a nonreimbursable investment financing to cooperate in the execution of the project "Financing to Support Colombia's Energy Transition", which constitutes the third individual operation under the Conditional Credit Line for Investment Projects (CCLIP) CO-O0004 approved on 11 December 2019 by Resolution DE-141/19. Such nonreimbursable financing will be for the amount of up to US\$1,500,000, from the resources of the Fund, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Nonreimbursable Investment Financing Proposal.

(Adopted on ____ 2021)