INTER-AMERICAN DEVELOPMENT BANK DOCUMENT

COLOMBIA

# IDB CLIMA: ENERGY TRANSITION SUPPORT PROGRAM (CO-L1287)

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## SUPPORT FOR THE IMPLEMENTATION OF THE ENERGY TRANSITION SUPPORT PROGRAM (CO-G1056)

#### **PROPOSAL FOR OPERATIONAL DEVELOPMENT**

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Annex I	Results Matrix

	Advanced Measurement Infrastructure (AMI)
CC (	Climate Change
CIF (	Climate Investment Funds
CMF (	Capital Markets and Financial Institutions Division
CNG (	Central National Government
oc o	Ordinary Capital
EA E	Executing Agency
ESMF E	Environmental and Social Management Framework
ESMP E	Environmental and Social Management Plan
ESPF E	Environmental and Social Policy Framework
ESRS E	Environmental and Social Review Summary
ESS E	Environmental and Social Management Specialists
	Energy Transition Index
	Financiera de Desarrollo
FFF F	Flexible Financing Facility
	Gross Domestic Product
GH2 (	Green Hydrogen
	Greenhouse Gase Emissions
GoC (	Government of Colombia
IADB I	Inter-American Development Bank
	International Labor Organization
	Investment Plan
	Institute for the Planning and Promotion of Energy Solutions for Non- Interconnected Zones
IRR I	Internal Rate of Return
ISPS I	Individual Solar Photovoltaic Systems
JET .	Just Energy Transition
LAC I	Latin America and the Caribbean
MEPU N	Mining and Energy Planning Unit
MME M	Ministry of Mines and Energy
MRV N	Monitoring, Reporting and Verification
NCFS N	National Climate Finance Strategy
NCRES 1	Non-Conventional Renewable Energy Sources
NDB 1	National Development Bank
NDC N	Nationally Determined Contribution
NIS I	National Interconnected System
NIZ M	Non-Interconnected Zones
NPD M	National Planning Department
NPV I	Net Present Value
POD (	Operation Development Proposal
PSP F	Public Services Policy

- REI Renewable Energy Integration Program
- SCX Strategic Climate Fund
- SDG Sustainable Development Goals
- tCO2q Tons of Carbon Dioxide Equivalent

#### PROJECT SUMMARY COLOMBIA IDB CLIMATE: ENERGY TRANSITION SUPPORT PROGRAM (CO-L1287)

Financial Terms and Conditions									
Borrower and Executing Ag	gency:		Ordinary Capital IDB F Financing Facility		SCX-REI <sup>(b)</sup> (reimbursable financing)	SCX-REI <sup>(e)</sup> (non- reimbursable financing)			
National Development Finance	ce (NDF)		Amortization period:	20 years	20 years	N/A			
Guarantor:			Disbursement period:	5 years	5 years	5 years			
Republic of Colombia			Grace period:	years(c)	8 years				
Source	Amount (US\$) million	%	Interest rate:	Based on SOFR	1,11 %				
IDB Loan Ordinary Capital (OC):	72	51,4							
SCX-REI Loan Climate Investment Funds (CIF) Renewable Energy Integration (REI) Program <sup>(b)</sup> :	66,5	47,5	Credit commission:	(d)	N/A	N/A			
CIF-REI non- reimbursable financing Climate Investment Funds (CIF) Renewable Energy Integration Program (SCX- REI) <sup>(b)</sup> :	1,4	1,1	Inspection and Surveillance Commission:	(d)					
Total:	<b>Total:</b> 139.9 100		Weighted Average Life (WAL):		N/A	N/A			
			Approval currency:	United Sta	ates of America do	llars (USD)			
			Project Outline						

**Project objective/description.** The overall objective is to support the decarbonization of the economy by accelerating the financing of just energy transition projects and strengthening the capacities and instruments of the Financiera de Dessarollo Nacional (FDN - a Colombian financial development institution) that will contribute to its eventual access to thematic green capital markets at the necessary scale. The specific objectives are to (i) increase financing for both Non-Conventional Renewable Energy Sources (NCRES) projects in the National Interconnected System (NIS) and Non-Interconnected Zones (NIZ) as well as for the scaling up of enabling technologies for their deployment in line with sectoral decarbonization goals; (ii) strengthen the FDN's technical capacities for the identification, design and portfolio management of climate projects; and (iii) improve the FDN's climate Monitoring, Reporting and Verification (MRV) capabilities to contribute to national climate reporting efforts and support eventual green debt issuance.

Special contractual conditions prior to the first disbursement of the IDB (Ordinary Capital) and CIF-REI loans, as well as the CIF-REI non-reimbursable financing. It shall be a condition precedent to the first disbursement of the loans and the nonreimbursable financing agreement that FDN has submitted to the Bank evidence, to the Bank's satisfaction, of (i) the approval and entry into force of the operation's Credit Regulations (CR), upon no objection by the Bank, which shall include, among others, information on the strategic environmental and social assessment, and the criteria and procedures for project selection; and (ii) the designation of a general coordinator and a financial management specialist in the FDN team for program execution.

**IDB CLIMA Pilot Program**<sup>(e)</sup>. This operation is a pilot project under the Results-Oriented Pilot Program that Rewards Development Effectiveness in Biodiversity and Climate Change Investment Lending Operations (IDB CLIMA Pilot Program) and therefore includes a non-reimbursable financing with resources from the IDB's Non-Refundable Facility for up to US\$3.6 million<sup>(f)</sup> ("IDB CLIMA *Grant*"), in accordance with the conditions and requirements mentioned in Section IV.

**Exceptions to the Bank's policies.** It is anticipated that a partial exception to the Policy on Guarantees Required of Borrowers (GP-104-2) will be requested, such that the sovereign guarantee of the Republic of Colombia will apply only to the borrower's financial obligations (including payments of principal, interest and fees) and will not cover the borrower's obligations to do (¶3.2).

	Strategic Alignment													
Objectives <sup>(g)</sup> :	O1 🛛			O2 🛛		O3 🛛								
Operational Focus Areas <sup>(h)</sup> :	EO1 🛛	EO2-G ⊠ EO2-D □	EO3 🛛	EO4 🗆	EO5 🛛	EO6 🛛	E07 🗆							

- (a) Under the terms of 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 take into account operational and risk management issues.
- (b) The Renewable Energy Integration (REI) Program is currently part of the Strategic Climate Fund (SCX), one of the funds of the *Climate Investment Fund* (CIF). These resources will be provided on a reimbursable and non-reimbursable basis, administered by the Bank. In February 2011 (Document GN-2604-3), the Board of Executive Directors authorized the Bank to act as an *implementing entity* of the CIF and approved the creation of the SCX at the Bank for the administration of these resources. The corresponding Financial Procedures Agreement was signed with the World Bank, as administrator of the CIF, on February 17, 2011.
- (c) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long as the original Weighted Average Life (WAL) of the loan and the last payment date, documented in the loan contract, are not exceeded.
- (d) The credit committee and the inspection and surveillance committee shall be established periodically by the Board of Executive Directors as part of its review of the Bank's financial charges, in accordance with the corresponding policies.
- (e) The IDB CLIMA Pilot Program was approved by the Bank's Board of Executive Directors through Resolution DE-67/23 in accordance with document GN-3168-1. Also, in accordance with Resolution AG-11/23, the Board of Governors of the Bank expressed its support for the IDB CLIMA Pilot Program.
- (f) Amount equivalent to 5% of the loan amount with resources from the Bank's ordinary capital (OC). If during the original disbursement term or its extensions, any reduction in the Bank's loan amount occurs, the amount of the IDB CLIMA Grant will be reduced in equal proportion to maintain the 5% percentage.
- (g) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Promote sustainable regional growth).
- EO1 (Biodiversity, natural capital and climate action); EO2-G (Gender equality); EO2-D (Inclusion of diverse population groups); EO3 (Institutional capacity, rule of law and citizen security); EO4 (Social protection and human capital development); EO5 (Productive development and innovation through the private sector); EO6 (Sustainable, resilient and inclusive infrastructure); EO7 (Regional integration).

## I. PROJECT DESCRIPTION AND RESULTS MONITORING

#### A. Background, problems and justification

- Macroeconomic and social context in Colombia. In recent decades, the country 1.1 has managed to reduce several socioeconomic gaps, especially monetary poverty reduced from 49.4% to 36.6%<sup>1</sup> between 2002 and 2022. Inequality improved marginally from a Gini coefficient of 0.573 to 0.556 in the same period<sup>2</sup>. The unemployment rate remained at an average of 11.7%<sup>3</sup>. In 2023, the Colombian economy experienced a slowdown, reflected in an annual real growth of 0.6%. Nevertheless, the consolidation of public finances was maintained, with a reduction in the total fiscal deficit of the Central National Government (CNG) by 1.1 percentage points with respect to 2022, reaching 4.2% of Gross Domestic Product (GDP) in 2023. The economy is expected to improve in 2024 and 2025, with projected growth rates of 1.5% and 2.7%, respectively, driven by a less contractionary monetary policy, lower inflation, and the reactivation of strategic sectors. Context of the Energy Sector and its role in the decarbonization of the economy. In Colombia, 31.7% of greenhouse gas (GHG) emissions (about 90,013 Gg CO2eq) come from the energy sector, including subsectors: transportation (12.5%), energy industries (8.1%), manufacturing and construction industries (4.3%), fugitive fuel emissions (3%), and others (2.8%). Through the 2020 Nationally Determined Contribution (NDC), considered one of the most ambitious in Latin America and the Caribbean (LAC). Colombia committed to reducing its GHG emissions by 51% with respect to the projected 2030 scenario. The energy sector is at the forefront, with the implementation of the Comprehensive Climate Change Management Plan for the mining and energy sector, which aims to reduce 11.2 million tons of carbon dioxide equivalent (tCO2eq)<sup>4</sup> by 2030 and to develop actions that lay the foundations for a carbon neutral path to 2050. The transportation subsector was also prioritized in the NDC to reduce emissions through electric mobility by 4.0 million tCO2eg by 2030. Also, in 2020, the Government of Colombia (GoC) issued the Green Taxonomy, a classification system for economic activities and assets with the potential to contribute to environmental and Climate Change (CC) objectives, in line with international commitments and the strategies and policies adopted by the government. The taxonomy aims to define green investments and provide greater clarity to financial institutions, investors and other public and private actors.
- 1.2 The Just Energy Transition (JET)<sup>4</sup> as the central axis of decarbonization of the country's economy. One of the main public policy catalysts for achieving the decarbonization goals is the implementation of a sustainable and gradual JET that guarantees energy sovereignty and democratic access to energy. This transition will have five fundamental axes: (i) migrate towards a more competitive, efficient and resilient energy mix through the massification of NCRES and the adoption of new technologies; (ii) eliminate energy access gaps through new business models that accelerate the universalization of electricity service based on NCRES; (iii) implementing Energy Efficiency (EE) policies at the residential, commercial and

<sup>&</sup>lt;sup>1</sup> Incidence of poverty and extreme poverty-national total 2002-2005 (DANE, 2010).

<sup>&</sup>lt;sup>2</sup> Monetary poverty (DANE, 2022).

<sup>&</sup>lt;sup>3</sup> Employment and unemployment rates (Banco de la República de Colombia, 2024).

<sup>&</sup>lt;sup>4</sup> According to the Ministry of Mines and Energy (MME), the JET is a "key process for the fight against climate change, which involves the transformation of current energy systems into a model low in GHG emissions, fairer and more sustainable". (MME, 2023).

industrial levels: (iv) leading the fight against CC by prioritizing sustainable and clean mobility with the widespread adoption of low-emission vehicles; and (v) reindustrializing the economy as a cross-cutting goal of JET interventions. To achieve these objectives, the Government of Colombia (GoC) has committed to the following targets by 2030: (i) increase commercial NCRES electricity generation capacity by 6GW by 2026<sup>5</sup> and close to 20GW estimated by 2032<sup>6</sup>; (ii) take advantage of the offshore wind resource with an installed capacity of 1GW7; (iii) install 545MW of distributed generation through the promotion of energy communities<sup>8</sup>; (iv) develop between 1- 3GW of installed GH2 electrolysis capacity<sup>9</sup>; and (v) achieve 100% electric power coverage<sup>10</sup>. Regarding EE, the GoC is working on programs with the residential sector and official buildings supported by the IDB<sup>11</sup>. Regarding the electrification of the vehicle fleet, the GoC established goals for 2030 to incorporate 600,000 Electric Vehicles (EV)<sup>12</sup> and the requirement that 20% of the total new fleet of the Strategic Public Transportation Systems, Integrated Public Transportation Systems and Integrated Regional Transportation Systems be zero-emission technology.

- 1.3 Colombia has an enabling public policy, legal and regulatory framework for the development of its JET. Law 1715 of 2014 established specific instruments to promote NCRES and private investment, including tax incentives and the creation of the Non-Conventional Energy and Efficient Energy Management Fund. Through the Energy Transition Law (Law 2099 of 2021), provisions on energy transition, energy storage, Advanced Metering Infrastructure (AMI), energy management and end use of green (GH2) and blue hydrogen were established. Additionally, <u>CONPES 4075 of 2022</u> seeks to consolidate the energy transition process through the formulation and implementation of intersectoral actions and strategies that promote the economic, energy, technological, environmental and social growth of the country to move towards its energy transformation.
- 1.4 For the transportation sector, regulations have been implemented to promote electromobility, contributing to the decarbonization of the sector. Law 1964 of 2019 establishes incentives for the use of vehicles with low and zero emissions, specific goals for the incorporation of EVs or zero emissions and for the implementation of fast charging stations, and creates mechanisms such as the Technology Upgrade Fund to provide financial incentives for the electrification of buses, cabs and cargo

<sup>&</sup>lt;sup>5</sup> First level indicators established in the <u>National Development Plan 2022-2026</u>.

<sup>&</sup>lt;sup>6</sup> Future capacity to 2032 (<u>UPME, 2023</u>).

<sup>&</sup>lt;sup>7</sup> Under the high scenario considered in the <u>Roadmap for Offshore Wind Energy Deployment for Colombia.</u>

<sup>&</sup>lt;sup>8</sup> Definition of (<u>Decree 2236 of 2023</u>): "Users or potential users of energy services may build Energy Communities to generate, commercialize and/or efficiently use energy through the use of FNCER, renewable fuels and distributed energy resources. The Energy Communities may be formed by natural and/or legal persons. In the case of natural persons and self-government structures of Indigenous peoples and communities and peasant, black, Afro-Colombian, Raizal and Palenquero communities that are constituted as Energy Communities, they may be beneficiaries of public resources for the financing of investment, operation and maintenance of infrastructure, based on the targeting criteria defined by the MME. The infrastructure developed with public resources may be transferred free of charge to the Energy communities, under the conditions defined by the MME, in coordination with the competent entities".

<sup>&</sup>lt;sup>9</sup> In accordance with the provisions of the <u>Hydrogen Roadmap in Colombia.</u>

<sup>&</sup>lt;sup>10</sup> Goal established the <u>CONPES 3918 of 2018</u> that defines the "Strategy for the Implementation of the SDGs in Colombia".

<sup>&</sup>lt;sup>11</sup> The IDB financed the EE Pilot Program in San Andres, Providencia and Santa Catalina (<u>3747/TC-CO</u>) and is initiating the execution of the EE Caribbean Sustainable Energy Program (<u>5738/OC-CO</u>).

<sup>&</sup>lt;sup>12</sup> According to the <u>PEN 2020-2050</u>, it is estimated that by 2025, 10% of the total number of vehicles purchased for public transportation will be electric.

vehicles. Additionally, Law 1972 of 2019 and the Policy for the Modernization of the Automotive Freight Transportation Sector of 2019 (CONPES 3963) set emission targets and promote new technologies to reduce environmental pollution in this subsector. CONPES 4129 of 2023 (Reindustrialization Policy) supports the TEJ by promoting industries related to NCRES; electromobility and vehicles with low-emission technologies. This public policy framework has been reaffirmed through the National Development Plan 2022-2026: Colombia World Power of Life, determining as one of its main public policy catalysts "the fair, safe, reliable and efficient energy transition".

1.5 Progress in the implementation of the JET. As of January 2024, Colombia had an installed electricity generation capacity of 19,919MW, based 66.3% in hydroelectric, 30.1% in thermoelectric operated with fossil fuels (mainly natural gas, followed by coal and liquid fuels), 2.5% in solar photovoltaic, 1% in biomass, and 0.1% in wind<sup>13</sup>. In the last five years, progress was made contracting generation projects with NCRES, allocating 7,300MW of new capacity through auctions held since 2019<sup>14</sup>, which seek to guarantee energy demand in the medium term. This includes the recently concluded Reliability Charge Auction of 2024, effective 2027 and 2028, where 4,441MW of new solar plants and 48MW of thermal plants with biomass were allocated, in firm energy obligations. It is important to note that despite the fact that these projects have been assigned in different auctions, there are significant delays in their materialization<sup>15</sup>. The National Interconnected System (NIS) has 29,446Km of transmission lines that interconnect 340<sup>16</sup> power generation plants with consumption centers, serving approximately 13.5 million users. The Colectora transmission line, currently under construction, will be key to evacuate close to 1GW of generation from La Guajira and is expected to be operational in 2026. However, the connection of this new renewable generation capacity requires significant investments in transmission, especially in regions where wind and solar resources are concentrated, such as La Guajira, Cesar, Magdalena, Cordoba and Sucre. In the Non-Interconnected Zones (NIZ)<sup>17</sup> an additional 309,211 users are served with local generation solutions of 324MW of installed capacity, mainly through diesel thermal (81.2%) and only 18.8% renewable<sup>18</sup>. In terms of expanding electricity coverage, between 2017 and June 2023<sup>19</sup>, the GoC managed to connect about 241,749 new users, mainly through electrification projects with NCRES and the decree on the model of energy communities was issued<sup>20</sup>, but there are still about 486,637 homes identified at the geo-referenced level that do not have access to energy<sup>21</sup>. In terms of transport electrification, between 2018 and 2022, the country increased the registration of EVs registered in the Single National Traffic Registry, from 2,165 to 6,134 units, respectively<sup>22</sup> and a fleet of 1.589 electric buses in operation, mainly concentrated in

<sup>&</sup>lt;sup>13</sup> Effective capacity by generation type (<u>PARATEC, XM</u>).

<sup>&</sup>lt;sup>14</sup> Wind and solar projects with capacity allocation resulting from firm energy auctions or long-term capacity auctions.

<sup>&</sup>lt;sup>15</sup> The main barriers identified for the materialization of these projects include environmental licenses, prior consultations, regulatory and tax changes, and project financing issues.

<sup>&</sup>lt;sup>16</sup> Sinergox, XM.

<sup>&</sup>lt;sup>17</sup> <u>CREG, 2023</u>.

<sup>&</sup>lt;sup>18</sup> According to data reported by IPSE, as of December 2023 (<u>IPSE, 2023</u>).

<sup>&</sup>lt;sup>19</sup> According to the <u>MME Accountability Report, 2023</u>.

<sup>&</sup>lt;sup>20</sup> Decree 2236 of 2023 of the MME.

<sup>&</sup>lt;sup>21</sup> According to UPME's Indicative Plan for the Expansion of Electric Power Coverage 2019-2023 (<u>PIEC</u> 20192023).

<sup>&</sup>lt;sup>22</sup> Ministry of Transportation, 2022.

Bogota, Medellin and Cali. However, the country is still far from reaching the goal of 600 thousand EVs by 2030.

- 1.6 **Despite progress, the lack of competitive, long-term financing is one of the main barriers to JET.** The country still faces significant challenges in financing JETrelated projects. The World Economic Forum's Energy Transition Index (ETI) ranks Colombia 39th out of 120 countries, giving it a score of 53 out of 100 in its readiness for energy transition<sup>23</sup>. This assessment highlights the need to implement actions aimed at increasing financing and investment in projects related to the energy transition, since between 2017 and 2022 investments in clean energy were only approximately US\$400 million per year<sup>24</sup>, when the GoC estimates that an investment of US\$14.5 billion is required to achieve a JET, including clean mobility.
- 1.7 The magnitude of these financial needs exceeds the capacities of the Colombian public sector<sup>25</sup>, which has invested an average of 1.5% of GDP in infrastructure between 2014 and 2022, according to the National Planning Department (NPD). Therefore, greater private sector participation is crucial to ensure the success of this transition to a more sustainable economy. This was emphasized in the NPD's 2022 <u>National Climate Finance Strategy (NCFS)</u>, which highlights the need for greater mobilization of private resources and leveraging of international financing sources. Specifically, debt markets represent an opportunity to channel financing from the private sector to close the financing gap and facilitate the energy transition on the scale needed to achieve Colombia's NDC goals.
- 1.8 Challenges to financing JET. Financial sectors facing market failures that generate scarcity of long-term financing. The literature agrees that macroeconomic instability together with high transaction, information and contractual execution costs cause financial institutions to offer less financing and at shorter terms. The Colombian financial system faces some of these market failures, among which the following stand out: (i) the capacity of the domestic financial sector is not able to cover: (i) the financing needs of the JET; (ii) available financing is not sufficiently competitive, tends to be costly and short-term so a does not cover the needs of long-range projects and hinders their financial closure: (iii) little knowledge and/or scale of the private sector in sophisticated financing mechanisms such as Project Finance<sup>26</sup>, which would facilitate the entry of new players into the electricity sector; and (iv) access to credit to invest in new technologies and emerging sectors, such as GH2 and electric mobility is restricted due to the low risk appetite of local commercial banks. Finally, the use of green debt markets by LAC National Development Banks (NDBs) remains incipient<sup>27</sup> . This is due to the lack of prioritization of climate considerations in investments aimed at closing development gaps; the lack of sectoral commitment to integrate climate aspects at the necessary scale; and the lack of capacities to monitor, report and verify the impacts of climate actions. In addition, there are barriers in local capital markets, such as currency risk, lack of liquidity and project risk. To harness the potential of private finance and move towards a JET, it is crucial to address these challenges.

<sup>&</sup>lt;sup>23</sup> Energy Transition Index (ETI) Colombia.

<sup>&</sup>lt;sup>24</sup> Climate scope (BloombergNEF, 2023).

<sup>&</sup>lt;sup>25</sup> Colombia has funds to support rural electrification and FNCER projects such as FAZNI and FENOGE, however, the resources are sufficient to cover the financing needs of the JET.

<sup>&</sup>lt;sup>26</sup> Project Finance is structured financing based on the long-term cash flows generated by a company incorporated for a single project and collateralized by the company's assets.

<sup>&</sup>lt;sup>27</sup> According to the "<u>State of the Sustainable Debt Market in LAC (2022)</u>" report, the LAC market is the source of only 4% of the world's Green, Social and Sustainable (VSS+) debt.

- 1.9 The role of NDBs in fostering private financing to the sustainable infrastructure sector. NDBs are essential in mobilizing and channeling private investment in sustainable infrastructure, correcting market failures to facilitate investment in highrisk sectors. NDBs help governments promote greener economies and offer innovative financing solutions for infrastructure projects with terms tailored to the financial profile of low-carbon investments. In LAC, NDBs are key to infrastructure projects by providing long-term financing (on average 13 years, 3 years longer than private financing, and close to those of development agencies), in local currency (representing 81% of their total, outperforming the private sector (54%) and bilateral and multilateral organizations (31%)<sup>28</sup>, flexible repayment profiles and with specialized risk mitigation products, thus addressing specific market needs and helping to mobilize private investors.NDBs also play a crucial role in mobilizing capital through green debt markets, which represent an attractive source of resources to finance climate-sensitive investments in the infrastructure sector. Through the issuance of green bonds (use of funds or indexed to climate indicators). NDBs can access a larger scale of financing, as well as greenium or step-down rewards for meeting key performance indicators. This allows catalyzing climate-sensitive infrastructure investments on a larger scale and potentially at a lower cost of financing.
- 1.10 The Financiera de Desarrollo Nacional (FDN) plays an essential role as a public policy instrument to promote the JET in Colombia. FDN, one of Colombia's four development banks, specializes in financing and structuring infrastructure projects, standing out among the NDBs in LAC that finance debt through Project Finance. It offers credit solutions to finance and manage risks, facilitating the entry of financing from private banks and other institutions such as IDB Invest. Since 2019, FDN extended its reach to the energy sector, supporting projects that contribute to Colombia's decarbonization goals and guidelines of its Sustainability Policy<sup>29</sup>. FDN's role is also crucial to finance projects with high social return but lower financial profitability and high risk, whose positive externalities are not adequately valued by the private sector<sup>30</sup>. Thus, the FDN can facilitate the mobilization of private investment through blended finance credit solutions and offer instruments that contribute to mitigate risks (de-risking), such as liquidity lines, guarantees, and subordinated debt, to make projects financially viable and boost access to financing for projects that would otherwise not be viable. In addition, the FDN, with its Gender, Diversity and Inclusion Policy adopted in 2023, seeks to promote the gradual incorporation of the diversity, equity and inclusion approach in all clients to whom the FDN provides its financial services<sup>31</sup>.
- 1.11 **The FDN can also play a key role in attracting financing through green debt markets.** Financing infrastructure projects positions FDN to access green debt markets. Its Sustainability Policy emphasizes the need to make sustainable projects viable. It aims to structure, finance, advise, and invest in projects that contribute to mitigating GHG emissions, adapting to climate change, closing gender gaps, or including the usually excluded population in economic life. However, their capacities must be strengthened to identify and design the portfolio of investments in the infrastructure sector, which incorporate climate-friendly interventions and therefore

<sup>&</sup>lt;sup>28</sup> Sustainable financing of economic and social infrastructure in LAC (<u>IDB, 2022</u>).

<sup>&</sup>lt;sup>29</sup> Sustainability Policy PL-FDN-04-V1 (FDN, 2022).

<sup>&</sup>lt;sup>30</sup> The future of National Development Banks (Griffith-Jones et al., 2018).

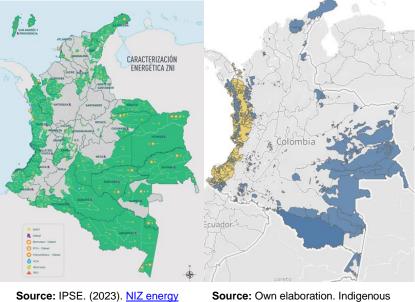
<sup>&</sup>lt;sup>31</sup> Gender-sensitive policies and projects have been shown to be often more innovative and effective, based on experiences of the CIF and the *Asian Development Bank* (ADB) (<u>2016, p. 19</u>).

contribute to sectoral decarbonization goals, and to develop better climate Monitoring, Reporting and Verification (MRV) systems. With respect to the sector's climate MRV challenges, it is worth noting that the MME has been working on the implementation of an MRV system to monitor the PIGCCme 2050 indicators. The MRV of mitigation in the mining and energy sector has generated reports since 2021, with an analysis of the 2015-2020 period, with the last consolidated report being for 2023. The development of the MRV by the FDN will be articulated with this effort by the MME, seeking the greatest possible synergies. These challenges are also analyzed in the NCFS. One of the three strategic lines of the NCFS is support for the prioritization, formulation and structuring of projects, whose objective is to articulate the country's climate policy by supporting the prioritization, formulation and structuring of projects aligned with CC goals. In terms of areas of work, mention is made of the need to strengthen the financial sector in the decarbonization of its investment portfolios, the consolidation of the green taxonomy as part of the MRV system, and the need to establish an action plan for access to international sources of climate finance in which a project prioritization process is established, and the available sources are identified so that, in a strategic and coordinated manner, the projects to be financed can be presented.

1.12 Colombia also presents gender and diversity challenges in the provision of electricity services, employment generation and equity conditions in the sector and energy use. In terms of access to energy, there are territories in the NIZ with a high proportion of indigenous and Afro-descendant population that could benefit from possible subprojects financed by the program. A large part of the NIZ in the country intersect with indigenous reservations and collective territories of black communities (Figure No.1b). The lack of access to energy sources particularly affects women as they are often responsible for household energy resources, which in turn increases their workload and poses risks to their health<sup>32</sup>. Regarding the use of NCRESs, the baseline diagnosis of the JET of the GoC<sup>33</sup> highlights the need to recognize the specific uses of energy by women and the role they play in electrification, given that they are overrepresented among the populations that do not have access to energy and have the role of providing and managing care and energy in households. It also states that it is necessary to promote the education of civil society and communities (including ethnic communities) on JET.

<sup>&</sup>lt;sup>32</sup> According to the CIF in *Building Gender into Climate Finance*: ADB *Experience with the Climate Investment Funds* (CIF and ADB, 2016), p. 18.

<sup>&</sup>lt;sup>33</sup> Base diagnosis for the JET (MME, 2024).



(a) Map of the NIZ and (b) Map of the location of indigenous reserves and collective territories in Colombia.

ource: IPSE. (2023). <u>NIZ energ</u> <u>characterization.</u> energy characterization.

Source: Own elaboration. Indigenous reserves (blue) and collective territories of black communities (yellow).

- 1.13 For Colombia to successfully advance in its JET, it is essential to have a diverse and highly qualified workforce, with representation of women and diverse populations under principles of equity. However, in the country, there is a high labor segregation in the energy sector, where, according to an IDB study<sup>34</sup>, only 33% of sectoral employment is occupied by women, compared to 67% of men. This is related to a lower number of women in areas related to the sector, such as STEM<sup>35</sup> and may also be associated with unfavorable environments for women with the presence of violence or discrimination<sup>36</sup>. On the other hand, there are important challenges in terms of accessibility and employability of people with disabilities (PwD). The labor participation of this population is almost 40 percentage points lower than that of the non-disabled population and the participation of employed PwD in the transportation and energy sectors is 8%<sup>37</sup>. Although progress has been made in regulation, challenges persist in the implementation of accessibility standards in vehicles and public transportation infrastructure, as well as a lack of training and little interest from companies to hire PwD<sup>38</sup>.
- 1.14 Proposed intervention. This program will help expand the FDN's financing offer to at least five JET-related projects, generating a catalytic effect and accelerating the decarbonization of the economy. With the proceeds from the operation, FDN will: (i) extend the project financing term, offering medium and long-term debt; (ii) offer more flexible amortization schemes with grace periods aligned with the project's cash flow;

<sup>&</sup>lt;sup>34</sup> According to the sector study conducted by the IDB, with support from Insuco and CoreWoman, (2021).

<sup>&</sup>lt;sup>35</sup> According to the (Observatorio Colombiano de las Mujeres, 2021) in Colombia only 17% of the female university population is studying a STEM career, compared to 30% of men.

<sup>&</sup>lt;sup>36</sup> According to the same IDB study (2021) only 42% of the energy sector companies analyzed implement actions to prevent violence, harassment and sexual exploitation.

<sup>&</sup>lt;sup>37</sup> In addition, the employment of PwD in the transportation and energy sectors reaches only 39,100 people while it is 1,962,200 for people without disabilities, Labor market (<u>DANE, 2024</u>).

<sup>&</sup>lt;sup>38</sup> ECLAC (2022).

(iii) offer products with greater subordination and that can assume greater risk, allowing the linkage of other financiers; (iv) optimize the project's capital structure; and (v) develop aggregation models to aggregate smaller-scale projects, achieving more efficient financing. It will also help the FDN prepare to access green debt markets, which will facilitate the financing of JET-related projects in the long term. It will also allow it to play an important role in taking risks and fostering innovative and transformational technologies as their commercial viability continues to improve. It will also help attract significant private-sector co-financing (at least a 1:5 ratio). In addition, this program will be accompanied by concessional resources from the CIF Renewable Energy Integration (REI) Program, IDB-administered.

- 1.15 The proposed financing will also help FDN-financed subprojects achieve long-term sustainability by ensuring that they adopt and maintain higher environmental and social standards than those required by local legislation. This includes measures such as improvements in the company's labor, gender, and social and environmental diversity and CC, including compliance with MDB common principles on Climate Finance. Finally, this operation will enable FDN to improve its capacity to identify and design investment portfolios with a climate perspective and to improve climate MRV, both of which are relevant for advancing potential green debt issuance.
- 1.16 Synergies with IDB Invest and IDB LAB. This program is part of the IDB Group's strategy in Colombia to support JET not only through support for policy and regulatory issues but also through co-financing of NCRES projects (13918-01 and 13918-01) or electromobility projects (14108-01 and 13896- 01) by IDB Invest, and through equity investments or non-reimbursable resources to young companies with innovative solutions such as the green financing pilots to promote community renewable energy solutions for productive uses (GRC/TC-20512-CO and GRC/TC-20515-CO) and the financing of companies that seek to improve the quality of life of people through environmentally sustainable energy solutions (SP/OC-23-61-CO) by IDB LAB. The operation also expects to have a high level of participation and resource mobilization from the private sector. Colombia's Investment Plan (IP) approved by the CIF-REI establishes that, at a minimum, these concessional resources must have leverage of 1:6, which means that the financing for these projects is expected to be close to US\$408 million<sup>39</sup>, allowing the intervention to be scaled up. IDB Invest and IDB LAB will participate, as appropriate, in supporting this operation. The CIF-REI Investment Plan establishes that, as a minimum, these concessional resources must have a leverage of 1:6, that is, a leverage of US\$408 million, so it expects to have a high participation and mobilization of resources from the private sector and other multilateral and bilateral banks with whom permanent communication and coordination is maintained through the International Cooperating Group in Colombia (GRUC) of Transición Energética de Colombia.
- 1.17 **Innovation and digitalization.** The proposed program will foster innovation and digitalization of the country's energy sector by financing investments in new technologies or those with incipient penetration, such as GH2, *offshore* wind energy, electromobility and storage. In digitization, the operation will be able to finance the installation of smart meters and the Advanced Metering Infrastructure required to

<sup>&</sup>lt;sup>39</sup> The minimum co-financing required by CIF-REI for the \$68 million of concessional resources would be \$408 million, but if the IDB's \$72 million is reduced, the minimum leverage required is \$336 million.

digitize the power grid and take advantage of data generation and advanced analytics tools.

- **IDB experience in the energy sector in Colombia and the region.** The IDB Group 1.18 has extensive knowledge of the sector as a result of technical and financial accompaniment for more than 30 years in Colombia. We are a strategic partner of the country in the technical and regulatory design of the JET, as well as in its implementation, supporting the financing of key projects. The IDB is currently implementing two investment loans related to sustainable energy transition: 5738/OC-CO finances the implementation of efficient energy management measures in the Caribbean region and <u>3610/OC-CO</u> finances energy access in hard-to-reach communities in the Colombian Pacific. In addition, seven Technical Cooperations (TC) have been executed to support the energy transition, the penetration of renewables and clean growth (ATN/PI- 19633-CO, ATN/OC-18768-CO, ATN/SX-19191-CO, ATN/OC- 20244- CO, ATN/OC- 19687- CO, ATN/OC20217CO. ATN/OC- 20173- CO). Support for the structuring of the NCRES auction, the execution of the Energy Transformation Mission (2019- 2020), the development of the Hydrogen Roadmap (2021) and the structuring of energy community projects stand out. In addition, IDB LAB is executing three rural and community energization operations with NCRES (SP/OC- 23- 61, GRC/TC- 20512- CO, and CO-G1053) and IDB Invest has financed four renewable energy and electromobility projects in the last (ATN/LE-19355-RG, three vears ATN/KS19382RG, ATN/LE-19335-RG, ATN/MC- 19446-RG).
- 1.19 In the region, the IDB also has experience in financing digitalization and smart operation projects in Brazil (2700/OC-BR) for \$218 million, Mexico (ATN/IM-13935-ME) for \$145 million, Ecuador (3494/CH-EC, 3494/OC-EC) for \$90 million, Dominican Republic (3182/OC-DR) for \$78 million, and Suriname (3059/OC-SU) for \$30 million, among others. It also has experience in battery storage systems to improve access to electricity in isolated areas through the installation of mini-grids and is working on pilot projects that will be connected to the grid. The projects are in Haiti (4900/GR-HA) for US\$38 million, Nicaragua (1435/OP- NI, 2342/BL-NI, 2342/BL-NI-2, 2342/BL-NI-3 and 2342/BL-NI-5-3) for US\$30 million, among others.
- 1.20 Lessons Learned. This will be the IDB's first operation with the FDN; however, the IDB has experience in developing long-term financing solutions for sustainable energy projects through NDBs, as well as channeling resources to investments that improve infrastructure, competitiveness and productivity in various sectors that have proven to be viable and effective. These operations include projects in Mexico (2631/TC-ME) and Brazil (3866/OC-BR) and operations with other NDBs in Colombia such as CO-X1007, CO-O0004, 5459/OC- CO and 3661/TC-CO. Based on these experiences, the need to support NDBs in the evaluation of their subprojects has been identified, including the allocation of funds and efforts to ensure that energy transition projects incorporate international environmental and social management standards that maximize their positive impact and minimize conflicts in their area of influence. Along the same lines, a strategic environmental and social evaluation of the FDN was implemented, identifying the need to strengthen its socio-environmental monitoring capacity and the adoption of a risk classification methodology that incorporates IDB standards. It also highlights the need to improve aspects such as: (i) providing extended time frames for the process of signing contracts with NDBs; (ii)

identifying subprojects eligible for financing from the preparation stage; (iii) active participation of the Executing Agency (EA) to capitalize on market studies and financial evaluation to be developed in the preparation of the POD; (iv) strengthen the capacity of the Executing Agency in financial intermediation programs and project structuring support, incorporating a gender and diversity perspective; and (v) improve the information gathering schemes of the projects financed to facilitate the definition of their eligibility, and adequately measure the results at the close of the operation.

- 1.21 The IDB also has strong experience in promoting sustainable financial flows. The Bank has been instrumental in designing financial solutions to mobilize blended finance and leverage private capital to address the challenges of nature conservation and climate action. These experiences include initiatives in debt-for-nature swaps, currency hedging strategies, green financial taxonomies, use-of-funds and sustainability-linked green bond issues, and the first Sustainability-Linked Sovereign Bond (SSLB) that includes a discounting mechanism. With IDB support, Uruguay issued its first SSLB with a mechanism that reduces the bond coupon (step-down) with independent verification of compliance with key performance indicators on mitigation and biodiversity. These experiences and exchanges with debt management units in finance ministries (including subnational partners, such as development finance institutions, among others), allowed the identification of two requirements for improvement: (i) access to financing with higher concessionality levels and (ii) greater coordination between the entities responsible for debt issuance, climate and biodiversity policies, and other sectoral ministries.
- 1.22 **IDB value added: complementarity with technical support.** The program is supported by TC operations <u>ATN/OC- 18070 -</u>RG and <u>ATN/PI-19633-CO</u> that have supported activities during the preparation process, including: (i) the analysis of FDN's institutional capacity to finance projects with IDB resources; (ii) the economic analysis of investment in future NCRES projects, storage systems, distributed energy resources, AMI and electromobility; and (iii) the technical analysis applicable to the financing of projects for the integration of renewable energy and electromobility. The operation also includes non-reimbursable resources of US\$1.5 million CIF REI to provide technical support to FDN and its sub-borrowers in the structuring of projects and the development of activities to promote gender equality in projects eligible for financing. The Bank will also support the FDN with TC resources (<u>CO-T1748</u>) associated with the IDB CLIMA Pilot Program<sup>40</sup>.
- 1.23 In a complementary manner, the FDN has also relied on TC from the Bank's Capital Markets and Financial Entities Division (CMF). The operation of TC <u>ATN/PI-19384-CO</u> has supported the development of activities to mitigate the barriers that hinder the bankability of sustainable projects and in the design of guarantees to mitigate the financial risks of long-term contracts in the commercialization of energy. Additionally, the TC <u>ATN/AC-18933</u>-RG has financed the first phase of the "analysis of climate risks and resilient solutions in infrastructure portfolio for FDN". Finally, <u>ATN/OC-20073-CO</u> has supported the formulation and review of the gender policy recently approved by the FDN and the strengthening of capacities and policies for its implementation and mainstreaming.

<sup>&</sup>lt;sup>40</sup> The ten initial pilot projects will benefit from US\$1 million in TC to be distributed starting with US\$400 thousand, with the additional US\$600 thousand conditional on meeting resource commitment (60%) and disbursement (50%) targets.

- 1.24 **IDB Group Strategy in Colombia.** The operation is aligned with the IDB Group Country Strategy with Colombia 2019-2022 (GN-2972)<sup>41</sup>, by contributing to the strategic objective of stimulating innovation and business development, as well as with the cross-cutting theme of CC.
- 1.25 Strategic Alignment. The program is consistent with the IDB Group's Institutional Strategy: Transformation for Scale and Impact (CA-631) and aligns with the objectives of: (i) reducing Poverty and Inequality by democratizing and increasing access to energy in rural and dispersed territories; (ii) addressing CC by financing projects that contribute to mitigate GHG emissions and diversify the matrix by being CC resilient; and (iii) fostering Sustainable Regional Growth as it will finance sustainable infrastructure projects. The program also aligns with the following operational focus areas: (i) biodiversity, natural capital and climate action, by strengthening the NDF's capacity to comply with national standards and/or debt markets on climate MRV; (ii) gender equality and inclusion of diverse population groups, as the program articulates with the IDB Group's Gender and Diversity Action Plan 2022-2025 (GN-3116-1) in two of its priority thematic areas: improving human capital and improving economic opportunities for women and diverse groups, by promoting the participation of women and Persons with Disabilities (PwD) in the jobs to be generated, the promotion of contexts free of gender violence, the training of women and ethnic population in the use of NCRES, as well as the possibility of financing projects in territories with indigenous and Afro-descendant population; (iii) institutional capacity, rule of law and citizen security, by strengthening the FDN's technical capacities for the identification, design and portfolio management of climate projects: (iv) productive development and innovation through the private sector by providing financing to the private sector for the development of NCRES projects; and (v) sustainable, resilient and inclusive infrastructure through the financing of projects for a just energy transition. The program is consistent with the Energy Sector Framework (GN2830-8), the CC Sector Framework (GN2835-13), the Gender-Sensitive Employment Action Framework (GN3057), and the Long-Term Financing Sector Framework (GN2768-13). In addition, this operation is aligned with the Sustainable Infrastructure and Connectivity Pillar of the IDB's Amazonia Siempre program by promoting access to electricity in urban and rural areas of the Colombian Amazon and with the Bioeconomy Pillar by promoting the inclusion of the region's sustainable productive system.
- 1.26 **The operation meets the eligibility requirements of the IDB CLIMA Pilot Program.** This operation is a pilot project of the IDB CLIMA Pilot Program and complies with the requirements and eligibility criteria established in the IDB CLIMA Pilot Program proposal (AB-3386) and its Operational Guidelines (GN-3168-6) given that: (i) the amount of the operation does not exceed \$200 million in Ordinary Capital (OC) resources; (ii) the borrower is eligible for IDB sovereign guaranteed operations in accordance with the information in the ¶3.1(iii) the operation has been designed as an investment loan under the Global Credit modality; (iv) the operation is new and is contemplated in the 2024 Program of Operations (GN- 3207); (v) the operation reflects its climate ambition through blended climate finance of at least 60% of the total IDB loan investments, following the MDB Joint Climate Finance Methodology; (vi) the operation's activities are aligned with the thematic areas of: (a) biodiversity and climate ambition; and (b) compliance with MRV of readiness to access the debt

<sup>&</sup>lt;sup>41</sup> The transition period of the Country Strategy (CS) with Colombia 2019-2022 (GN-2972, CII/GN- 402) was extended until August 7, 2024.

market; and (vii) the borrower assessed its level of readiness using the Assessment Questionnaire to determine its level on the Green Transition Framework (GTF) and developed a roadmap that identifies the steps to be taken to progress on the GTF; (viii) the overall objective of the operation is aligned with the General Objective of the IDB CLIMA Pilot Program, and includes at least three specific objectives that are aligned with the IDB CLIMA Pilot Program's Specific Objectives; and (ix) the operation includes three Key Performance Indicators (KPIs).

- 1.27 Alignment with the objectives and goals of the CIF-REI. This operation has resources from the IP approved by the CIF to Colombia in February 2023 under its REI program within the framework of the SCX, whose objective is to help low- and middle-income countries develop more resilient energy systems through technologies that allow absorbing greater resources of non-conventional renewable energy, modernizing the networks and making the operation of the system more flexible. In particular, the type of projects that will be eligible for financing under this line of credit should contribute to the integration of renewable energies and the electrification of transportation, thus contributing to the objectives of the CIF-REI and, in general, to the climate goals of decarbonization.
- 1.28 **Climate change.** According to the analysis, the operation's climate financing corresponds to 93.66% of the resources required to finance it following the MDB Joint Climate Financing Methodology.
- 1.29 Alignment with Paris. This operation has been analyzed using the Joint Multilateral Development Bank Framework for Paris Alignment Analysis and the IDB Group's PAIA (GN-3142-1). Through a simplified analysis of the transaction-based approach for financial intermediary transactions, it has been determined to be aligned with the adaptation and mitigation objectives of the Paris Agreement.
- 1.30 **Consistency with the Bank's Residential Public Utilities Policy (PSP) (GN-2716-6).** The operation is also consistent with the IDB's PSP because: (i) the electricity sector tariff covers all costs of service and seeks to provide service at the lowest possible cost; (ii) there is a regulatory framework and institutions to promote reliability, quality and efficiency of service, including a mechanism for generation projects to be selected on a least-cost basis and transparently; (iii) it promotes the environmental sustainability of the sector by diversifying the energy matrix with NCRES; and (iv) it will have a specific strategy for environmental and social risk management. In addition, the operation complies with the conditions of the policy by ensuring that (i) it is financially viable, as it will be carried out through a public financial institution that requires as an eligibility criterion that each project be financially sustainable; and (ii) has economic viability.

#### B. Objectives, components and cost

1.31 **Objective.** The General Objective (GO) is to support the decarbonization of the economy by accelerating the financing of JET projects and strengthening the FDN's capacities and instruments that contribute to its eventual access to thematic green capital markets at the necessary scale. The specific objectives are to: (i) increase financing for both NCRE projects in the NIS and the NIZ as well as for scaling up enabling technologies for their deployment, in line with sectoral decarbonization goals; (ii) strengthen the FDN's technical capacities for the identification, design and portfolio management of climate projects; and (iii) improve the FDN's climate MRV

capabilities to contribute to national climate reporting efforts and support eventual green debt issuance.

- 1.32 Component I. Financing for NCRE projects and technologies that promote NCRE integration- \$138.5 million (\$72 million IDB and \$66.5 million SCX-REI). The FDN will use IDB and SCX-REI reimbursable financing, administered by the IDB, to provide financial support through direct loans and contingent loans to at least five eligible subprojects. The minimum amount for each subproject will be \$2.5 million and the types of projects that the FDN will be able to finance with these resources are: (i) NCRES solutions in the NIS and NIZ<sup>42</sup>, energy communities<sup>43</sup>, and energy storage<sup>44</sup>; (ii) production, handling, transportation and use of GH2; (iii) AMI deployment; (iv) solutions that provide flexibility to the NIS (transmission lines, distributed energy resources, among others); and (v) electromobility infrastructure and assets that increase the demand for NCRESs<sup>45</sup> such as the acquisition of EVs (including buses, boats, or trucks) for (i) mass or integrated public transportation systems; (ii) private transportation services for companies or public service operators; (iii) individual passenger transportation (cabs); and (iv) cargo transportation.
- 1.33 In addition, this component will finance training, supporting specialists, and strengthening the FDN's green portfolio management and climate MRV systems to meet the specific objectives and indicators of the IDB CLIMA pilot operation. The estimated cost of these training activities is US\$0.8m.
- 1.34 This component will also cover expenses for external audits and mid-term evaluations with PCR format<sup>46</sup> and PCR end of operation report.
- 1.35 Component II. Institutional strengthening (SCX-REI US\$1.4 million nonreimbursable). This component is structured as an investment grant (CO- G1056) and will finance the following activities: (i) structuring of projects that can be financed with resources from the operation; (ii) strengthening of policies and plans, as well as execution of activities and actions aimed at promoting gender and diversity inclusion in the FDN and among its sub borrowers, which promote the employment and participation of women, people with disabilities and ethnic populations, as well as the prevention of gender violence in energy projects. Support will be provided for the design of an action plan for the implementation of the entity's Diversity, Equity and Inclusion Policy, the construction of guidelines and support for the design of gender, diversity and inclusion plans for energy subprojects that include lines aimed at labor inclusion of women and gender equity, prevention of Gender Based Violence, cultural adaptation for Indigenous and Afro-descendant populations and the inclusion of people with disabilities, as well as the development of capacity building pilots aimed at ethnic populations and women in areas of influence of the projects to be financed for the use of NCRES and training in areas of employability; (iii) cover swap costs for

<sup>&</sup>lt;sup>42</sup> If they are located in the SIN, they can only be financed with IDB CO resources.

<sup>&</sup>lt;sup>43</sup> Projects in ZNI and Energy Communities will be able to cover the Colombian Amazon in order to close access gaps and promote the energy transition.

<sup>&</sup>lt;sup>44</sup> At least 50% of the projects financed under this component must have a gender and diversity plan in line with the actions stipulated in Component II, and a minimum number of beneficiaries must be women and ethnic groups.

<sup>&</sup>lt;sup>45</sup> This may include projects for the acquisition of electric vehicle (EV) fleets, rolling stock, and the deployment of EV charging infrastructure, electric projects and systems for mass passenger transportation, and other infrastructure such as stations, railways, rail yards, workshops, and other works related to the provision of these services.

<sup>&</sup>lt;sup>46</sup> Project Completion Report (PCR).

the conversion of SCX resources- REI to local currency; and (iv) the costs of two environmental and social specialists and a financial management specialist.

#### C. Key performance indicators

- 1.36 **Expected results.** The operation seeks to (i) reduce GHG emissions (TonCO<sub>2</sub>); (ii) increase installed capacity (MW) and generation (MWh) with NCRES; (iii) increase support infrastructure for the integration of NCRES (AMI, Substations, Networks, Batteries, etc); (iv) capital mobilization aligned with the common principles of climate finance; (v) promotion of social inclusion and closing of gender and diversity gaps; (vi) improvement of FDN management instruments, including MRV/impact reporting and identification and planning of relevant project portfolios to achieve scale; and (vii) strengthening of FDN technical capacities. The Results Matrix (Annex I) summarizes the expected impacts, outcomes and outputs of the operation.
- 1.37 **Sub-borrowers and beneficiaries.** The subborrowers of this operation will be promoters and developers (public, private, or mixed) of NCRES projects, transmission lines, GH2 projects, energy storage, distributed energy resources, AMI, and electromobility. The beneficiaries will be the end users of the electricity infrastructure incorporated into the system, such as industries, companies, commercial users, or households, who will also benefit from the safer and more diversified provision of the service. In addition, the Colombian population will indirectly benefit from the positive externalities associated with the environmental and economic impacts of the operation, such as an increase in local income and reduced pollution, especially in poor geographic areas.
- 1.38 **Economic evaluation.** The economic analysis estimates the benefits of the operation through projected flows of the estimated economic value of CO<sub>2</sub> emissions avoided through the implementation of the operation's projects. Subtracting the costs associated with these investments and discounting future flows at a rate of 12%, the result is a Net Present Value (NPV) of US\$13.92 million and an Internal Rate of Return (IRR) of 17.83%. A sensitivity analysis was also carried out, which shows that the operation is sound in the event of extreme changes in key parameters, such as investment costs, carbon prices, etc.

## II. FINANCING STRUCTURE AND MAIN RISKS

#### A. Financing instruments

- 2.1 **Instrument and modality.** Component I of the operation is structured as an investment loan under the Global Credit Program (GCR) modality due to its nature of financial intermediation for infrastructure project developers. Component II of the operation is structured as an *Investment Grant* (IGR). The total amount of the program is \$140 million to be financed as follows: (i) up to \$72 million through a loan with resources from the IDB's CO; (ii) up to \$66.5 million through a loan with concessional resources from the SCX-REI, administered by the Bank; and (iii) up to \$1.4 million through non-reimbursable financing from the SCX-REI administered by the Bank.
- 2.2 **Funding options.** The FDN may use the proceeds of this loan to grant loans to eligible subprojects through its second-floor line. The characteristics of the subprojects eligible to receive financing with resources from this operation are described in the Credit Regulations (CR).

Components	IDB	SCX (concessional financing)	SCX (non- reimbursable financing)	Total	%
I. Financing of NCRES projects and technologies that promote the integration of NCRES.	72,00	66,50	0,00	138,50	99,00
II. Technical Assistance	0,00	0,00	1,40	1,40	1,00
Project structuring	0,00	0,00	0,65	0,65	0,46
Environmental, social, and/or financial specialists	0,00	0,00	0,30	0,30	0,21
Diversity, equity and inclusion policy implementation plan	0,00	0,00	0,15	0,15	0,11
Currency Hedges	0,00	0,00	0,30	0,30	0,21
Total	72	66,50	1,40	139.90	100

Table 1. Estimated program costs (US\$ million)

2.3 **Disbursement Schedule.** The IDB and SCX-REI loan proceeds will be committed and disbursed over a period of five years (Table 2) from the effective date of the respective sub-loan agreements. The disbursement period of the CIF-REI non-reimbursable financing will also be five years from the effective date of the respective agreement. For the purposes of this global loan facility, eligible expenditures are proposed to be the disbursement of the proceeds of the NDF operation to eligible sub-borrowers in accordance with ¶ 3.7, the terms of the CR, and the terms of the actual sub-loan agreements for eligible projects.

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total					
IDB	15	10	5	21	21	72					
SCX-REI	4	15,1	17,8	11	20	67.9					
	19	25,1	22,8	32	41	139.9					
Total	13,6%	18,0%	16,3%	22,8%	29,3%	100%					

 Table 2. Tentative Disbursement Schedule (US\$ million)

2.4 **IDB CLIMA Grant.** This operation is part of the IDB CLIMA Pilot Program and, therefore, includes a non-reimbursable financing with IDB Non-Reimbursable Facility resources up to the amount of US\$3.6 million equivalent to 5% of the loan amount with IDB ordinary capital resources (the "IDB CLIMA Grant"), in accordance with the conditions and requirements mentioned in Section IV. If, during the original disbursement period or extensions thereof, any reduction in the Bank's loan amount occurs, the amount of the IDB CLIMA Grant will be reduced in equal proportion to maintain the 5% percentage.

## B. Environmental and social risks

2.5 In accordance with the Bank's Environmental and Social Policy Framework (ESPF), and given that the operation has a financing structure that involves the provision of funds through a financial intermediary, which in this case is the FDN, an FI category has been assigned. A substantial environmental and social risk rating has been assigned to the operation, taking into account that the projects will be executed mainly in Colombia's NIZ, where there are titled territories of indigenous peoples and Black Community Councils, as well as areas of the National Natural Parks System; the executor has a very high environmental and social performance and experience with the implementation of the social and environmental standards of the International Finance Corporation (IFC).

- 2.6 In view of the type of projects to be financed and the restrictions established by the nature of the funds, the following have been identified as environmental and social impacts of the construction phase: (i) soil contamination due to improper waste disposal; (ii) alteration of water resources due to improper waste disposal; (iii) alteration of noise levels; (iv) temporary impact on the landscape; (v) temporary scaring of wildlife; and (vi) atmospheric contamination due to combustion gases and particulate matter. During the operation phase, the potential impacts are: (i) soil contamination due to improper waste disposal, (ii) alteration of water resources due to improper waste disposal, and (iii) alteration of water resources due to improper waste disposal, (ii) alteration of water resources due to improper waste disposal, (iii) alteration of water resources due to improper waste disposal, and (iii) alteration of noise levels.
- 2.7 In compliance with the provisions of the ESMF, a due diligence analysis was conducted of: (i) environmental and social policies and procedures and FDN's institutional capacity; (ii) FDN applies environmental and social legislation of the country, and that for projects and subprojects; (iii) environmental and social aspects related to the existing portfolio and those that may have in the future; and (iv) measures needed to strengthen the current Environmental and Social Risk and Impact Management System (SARAS). The analysis concluded that the SARAS, and the applicable legal framework, according to the typology of projects pre-identified for the operation, is functionally equivalent to the NDAS 1, 2, 3, 4, 5, 6, 7, 8 and 10 and partially equivalent to NDAS 9, on Gender Equality, given that they are in the process of adopting the Gender Policy, through which the gap is closed. An Environmental and Social Action Plan was agreed upon with the executor in order to ensure that an environmental and social categorization instrument is available to assess whether the projects entering the portfolio to be financed are not Category A, do not generate moderate or significant negative impacts on territories or indigenous or Afrodescendant peoples or in critical habitat. Additionally, it was agreed to include in the CR that the IDB will give No Objection ex-ante to the incorporation to the portfolio of projects that may have risks due to context conditions such as: (i) presence in the area of direct or indirect influence of the subproject of legally protected areas, indigenous territories, Territories Community Councils of Black Communities; (ii) involuntary physical resettlement activities; (iii) administrative processes related to subtraction of forest reserve or Environmental Licensing, or performance conditions of the FDN client such as: (i) clients or sub-executors with no experience in project execution under multilateral banking standards; (ii) with low or no institutional capacity in environmental and social management issues; and/or (iii) with limited allocation of resources for environmental and social supervision. The risk of natural disasters has been classified as moderate, given that the natural hazard of landslides. sea rise. earthquakes, volcanic eruptions, tsunamis, and river overflows is moderate to high. However, the type of projects to be financed have a low to moderate vulnerability. The report with the results of the SARAS analysis was published on the Bank's website prior to the analysis mission.

#### C. Fiduciary risks

2.8 The evaluation of the EA's fiduciary capacity determined that FDN maintains a high capacity to execute and manage its operations. The entity has an organizational structure, knowledge of the local market, regulations and technology and innovation support systems adequate to receive, manage and channel resources from international entities and agencies and is therefore capable of executing the program. The limited experience in the execution of BID financing has been identified as a medium-low intensity risk. As a mitigation measure, the FDN will incorporate specialized personnel to perform those activities that cannot be covered by the

Entity's own personnel. In addition, the IDB will provide the necessary training for FDN staff involved in execution.

## III. IMPLEMENTATION AND MANAGEMENT PLAN

### A. Summary of implementation arrangements

- 3.1 **Borrower, EA and guarantor.** FDN<sup>47</sup> will be the borrower and EA of the operation. The Republic of Colombia will be the guarantor of the borrower's obligations. FDN complies with the eligibility requirements of the Bank's Eligible Borrower Policy (OP-301). FDN is a financial entity focused on Colombia's infrastructure, formed as a mixed-economy joint stock company linked to the Ministry of Finance and Public Credit. The majority shareholder of FND is the Colombian State through Grupo Bicentenario, with 73.37% of the shares.<sup>48</sup> FDN has a legal personality and its own equity. The Colombian Financial Superintendency supervises FDN, is a member of the Colombian Securities Market Self-Regulator and is subject to the fiscal control exercised by the Office of the Comptroller General of the Republic. FDN has the organizational structure and personnel necessary to manage infrastructure projects and has extensive experience executing loans with other bilateral and multilateral banks.
- 3.2 **Execution Mechanism.** The FDN shall designate in writing to the Bank the general coordinator and the financial management specialist in charge of program execution and preparation of operational plans, progress reports, special purpose financial statements, special account management and monthly reconciliation in accordance with the formats established in the IDB's policies. The origination and placement of resources to eligible subprojects will be under the responsibility of the Vice Presidency of Structured Finance, with the support of the Legal Vice Presidency and the Vice Presidency of Credit and Risk. In accordance with the Institutional Capacity Analysis carried out for FDN, its capacity for environmental and social issues will be strengthened with two specialists.
- 3.3 **Partial Exception to the Borrower Guarantee Policy (GP-104-2).** It is requested a partial exception to the Policy on Guarantees Required of Borrowers (GP-104-2) will be requested so that the sovereign guarantee of the Republic of Colombia will apply only to the borrower's financial obligations (including payments of principal, interest and fees) and will not cover the Borrower's obligations to do. This request is justified by the provisions of Decree 1068 of 2015, as amended by Decree 1575 of 2022, which states that the guarantee of the Republic of Colombia may only be granted to guarantee payment obligations of other state entities, in accordance with Article 40 of Law 80 of 1993.
- 3.4 It shall be a condition precedent to the first disbursement of the IDB and CIF- REI loans, as well as the SCX-REI non-reimbursable financing that FDN has submitted to the Bank evidence, to the Bank's satisfaction, of: (i) the approval and entry into force of the operation's Credit Regulations (CR), prior no objection from the Bank, which shall include, among others, information on

<sup>&</sup>lt;sup>47</sup> According to Fitch Ratings, FDN's national long-term and short-term ratings are "AAA(col) and F1+(col), respectively, being the highest possible. The long-term rating outlook is Stable (Fitch Ratings, 2023).

<sup>&</sup>lt;sup>48</sup> Grupo Bicentenario is 99.99% owned by the Colombian Ministry of Finance and Public Credit (MinHacienda, 2021).

the strategic environmental and social assessment, and the criteria and procedures for project selection; and (ii) the appointment of a general coordinator and a financial management specialist within the FDN team for program implementation. The first condition is justified because the CR will include details on the type of eligible projects under the operation, the socio-environmental conditions and the fiduciary requirements. The second condition is essential to assure the Bank that the implementers will have adequate equipment to start program implementation.

- 3.5 **Credit Regulations (CR).** These regulations will incorporate all procedures to be used during the execution of the program and may be modified with the IDB's written No Objection. The CR will include at least: (i) the terms and conditions of execution, including the specific characteristics of JET projects eligible for financing; (ii) limits on the use of resources and other conditions such as environmental and social management requirements; (iii) fiduciary obligations and follow-up, monitoring and evaluation requirements; (iv) rules and procedures for administrative and financial management; and (v) measures, actions and procedures established in the Environmental and Social Action Plan. In addition, the CR will include the operation's Monitoring and Evaluation Plan, which will include the Verification Protocol for the IDB CLIMA component of the operation.
- 3.6 **Sub-project and Sub-borrower Eligibility Criteria for Component I.** To be eligible, subprojects must fall within the following categories of projects eligible for funding: (i) NCRE projects in the SIN (only with IDB resources; (ii) interventions that allow or facilitate the insertion of renewables in the SIN; (ii) electromobility; (iii) technologies not yet commercially viable; (iv) NCRE projects in ZNI and Energy Communities.The minimum number of sub-projects to be financed with Component I resources is five projects and the minimum amount of projects to be financed is US\$2.5 million. In addition, Category A projects, or those that generate moderate or significant negative impacts on indigenous or Afro-descendant territories or Peoples or in critical habitat, may not be financed.
- 3.7 **Retroactive Financing.** The Bank may retroactively finance, from the proceeds of the IDB loan and the CIF-REI loan, eligible expenditures incurred by the Borrower prior to the date of loan approval to finance Component I activities up to \$14.4 million and \$13.6 million (20% of the IDB loan amount and CIF- REI, respectively), provided that substantially similar requirements to those set forth in the loan agreement have been met. Such expenditures must have been incurred on or after March 8, 2024, but will not include expenditures made more than 18 months prior to the date of loan approval.
- 3.8 **Procurement of works, goods and services other than consulting and contracting of consulting services.** For Component 1, since it is a financial intermediation operation that will operate on a demand-driven basis to finance sub loans, the sub borrowers will employ market procurement practices in accordance with Appendix 4 of the Bank's Procurement Policies (GN-2349-15 and GN-2350-15), and the contracting of external audits, consultancies, and software indicated in the Procurement Plan will be carried out in compliance with the Bank's Procurement Policies GN-2350-15 or subsequent updates. Procurements required as part of the activities under Component 2 shall comply with the Bank's Procurement Policies GN-2349-15 and GN-2350-15 or subsequent updates.

3.9 **Financial Statements and Audit.** FDN will assign in its financial management system a specific budget and accounting coding to the subloans to be financed under the program. External audit services will be provided by FDN's institutional auditor, provided that it is an eligible firm for the Bank. The amendment to the institutional audit contract to include the scope of the auditor's services concerning the execution of the loan must be approved by the Bank, as well as for the financial report under IDB CLIMA. The entity's general purpose audit report is to be supplemented with a note describing the budget execution status of the IDB financing and sub-loans made during the period, which will satisfy the audit clause of the operation. The cut-off date shall coincide with FDN's fiscal closing, and the submission deadline shall be 150 days after the aforementioned date. FDN's institutional auditor shall be responsible for submitting the audit report to the Bank.

#### B. Summary of performance monitoring arrangements

- 3.10 **Monitoring.** This operation will be governed by the Bank's general procedures for monitoring and evaluating investment operations, based on the indicators of the Results Matrix (Annex I), as well as regarding IDB CLIMA. The operation will be monitored through periodic Project Progress Monitoring Reports (PMRs) prepared by the EA. The EA, in accordance with its policies, will hire an independent engineer to support it in the field supervision of subproject progress and milestones. The Bank will make periodic visits to support and monitor the implementation of the operation, including the SCX-REI resource leverage requirement.
- 3.11 **Evaluation.** The NDF shall conduct a mid-term evaluation when 50% of disbursements have been made or when half of the disbursement period has elapsed and a final evaluation when 90% of program disbursements have been made or when 90% of the disbursement period has elapsed, whichever occurs first. The final evaluation will determine compliance with the indicators of the project's Results Matrix and must be submitted prior to the financial closing of the operation. This will provide the necessary information for the IDB to generate a project completion report based on the Bank's policies. The proposed evaluation method will be based on an ex-post cost-benefit analysis of the operation. This methodology will allow the value of the operation's impact indicators to be analyzed.
- 3.12 **Information.** The FDN will collect and maintain all the information, indicators and parameters necessary to prepare the PCR and any ex post evaluation that the Bank may wish to carry out.

## C. Conditions related to the IDB CLIMA Pilot Program

- 3.13 The IDB CLIMA Pilot Program includes, in a single individual operation: (i) an investment loan with resources from the Bank's ordinary capital; and (ii) the IDB CLIMA Grant, to be disbursed once three disbursement-related Key Performance Indicators (KPIs) are achieved and independently verified, which will be equivalent to 5% of the loan amount with resources from the Bank's Ordinary Capital CO.
- 3.14 **IDB CLIMA Roadmap**. In accordance with the IDB CLIMA Operational Guidelines (GN-3168-6) the roadmap was prepared together with FDN and validated by the Colombian Ministry of Finance and Public Credit.
- 3.15 **Key Performance Indicators (KPI)**. The KPIs linked to disbursement that FDN must comply with 100% to access the disbursement of IDB CLIMA Grant resources, which are indicators of final results, are the following:

- That the installed NCRE capacity in the SIN increases by 125 MW.
- That 20.7% of the FDN portfolio, measured in number of projects, has been aligned with the country's green taxonomy.
- 60% of projects in the FDN portfolio have been reported annually under the Task Force on Climate-Related Financial Disclosures (TCFD) standards.
- 3.16 **KPI Verification Protocol**. Each of the three types of KPIs selected for the operation has a verification protocol defined in the Monitoring and Evaluation Plan that will be part of the CR. This protocol includes: (i) the definition of the respective KPI; (ii) the target against which compliance with the respective KPI will be evaluated; (iii) the schedule foreseen for the verification period, consistent with the timeframe in which the data will be available; (iv) the entity or individual consultant responsible for verifying compliance with the KPIs; and (v) any other relevant methodological information to ensure consistent and timely verification of compliance with the KPI targets.
- 3.17 **Independent External Verification of the KPIs.** FDN will hire a specialized firm or independent individual consultant (the "Reviewer") in accordance with the terms of reference previously agreed with the Bank and as stipulated in the Policies for the Selection and Contracting of Consultants Financed by the Bank (GN-2350-15) to verify, compliance with the targets of the three KPIs defined for the operation. Such verification will be carried out in the last year of the original disbursement term of the IDB (CO) loan or its extensions, provided that the Bank has disbursed 90% of the loan proceeds. In addition, the Reviewer will be responsible for verifying evidence that the project has a combined amount of climate and biodiversity financing equivalent to at least 60% of the IDB loan amount, calculated in accordance with the respective Bank methodologies used for this purpose.
- 3.18 **Preconditions for Disbursement of the IDB CLIMA Grant.** The preconditions for the disbursement of the IDB CLIMA Grant shall be the following: (i) that the FDN has provided the Bank with information on the bank account into which the IDB CLIMA Grant resources will be deposited; (ii) that the FDN has submitted to the Bank the report of the independent verification of the KPIs carried out by the Reviewer showing 100% compliance with the KPI targets; (iii) that the FDN has submitted to the Bank the indicative action plan mentioned below; and (iv) the FDN has submitted to the Bank evidence that the operation has a combined amount of climate and biodiversity financing equivalent to at least 60% of the IDB loan amount, calculated in accordance with the respective Bank methodologies used for such purpose.
- 3.19 **Disbursement of the IDB CLIMA Grant**. The disbursement of the IDB CLIMA Grant will be made during the last year of the original disbursement term of the IDB loan (CO) or its extensions, in a single tranche.
- 3.20 **Use of the IDB CLIMA Grant.** The FDN shall use the IDB Climate Grant for interventions related to biodiversity, climate change and/or sustainability, as set forth in the indicative action plan49 to be prepared according to the format provided by the Bank. The FDN shall not use the IDB Climate Grant to finance, directly or indirectly, interventions related to projects or subprojects included in the Bank's Environmental and Social Policy Framework (IDB Environmental and Social Exclusion List).

<sup>&</sup>lt;sup>49</sup> This indicative action plan should include briefly what these interventions will consist of.

3.22 **Ex-post Audit and Supervision**. The FDN shall keep the documents and records related to the interventions carried out with the IDB CLIMA Grant for a period of 3 years after the original disbursement term or its extensions of the IDB loan. FDN shall submit to the Bank a financial report<sup>50</sup> on the utilization of the IDB CLIMA Grant resources within a period of up to two years from the date of disbursement of the IDB CLIMA Grant. This financial report shall be prepared by the FDN's institutional auditor, who was in charge of the last audited financial statement for the IDB loan.

<sup>&</sup>lt;sup>50</sup> This financial report should indicate whether the interventions were carried out according to the indicative action plan.

#### Annex I. Results Matrix

**Objective of the project:** The general objective is to support the decarbonization of the economy by accelerating the financing of Colombian Just Energy Transition projects and strengthening the capabilities and instruments of the National Development Finance Bank (FDN) that contribute to its eventual access to thematic green capital markets on the necessary scale. The specific objectives are: The specific objectives are: (i) increase financing for both Non-Conventional Renewable Energy (NCRE, FNCER in spanish) projects in the National Interconnected System (NIS, or SIN in Spanish) and the Not Interconnected Zones or Off-Grid Areas (NIZ, or ZNI in Spanish) as well as for the scaling of enabling technologies for their deployment, in line with the sectoral decarbonization goals; (ii) strengthen the technical capacities of the FDN for the identification, design and portfolio management of climate projects; and (iii) improve FDN's climate Monitoring Reporting and Verification (MRV) capabilities to contribute to national climate reporting efforts and support eventual green debt issuances.

#### General Development Objective

Indicators	Unit of measureme nt	Baseline Value	Baseline Year	Expected Year for Achievement	Goal	Means of Verification	Comments				
General development objective: Support the decarbonization of the economy by accelerating the financing of just energy transition projects and strengthening the capabilities and instruments of the FDN that contribute to its eventual access to thematic green capital markets on the necessary scale.											
I.1 GHG emissions reduced or avoided through the subprojects financed by the operation	Tons CO 2 eq	0	2024	2029	200,000	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by independent engineers	CO2 emissions reduced or avoided thanks to the subprojects financed by the FDN. They will be calculated cumulatively throughout the life of the financed subprojects, regardless of the participation of the FDN in the total financing of each of them.				
I.2 Number of program beneficiaries (disaggregated by gender and ethnic population) in NIZ	Number	0	2024	2029	24,000 of which 10,800 are women and 9,600 ethnic populations	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by	Number of men and women and households of the indigenous population, Afro- descendant population, businesses and communities benefited with access to NCRE or improvements in access with NCRE in NIZ				

						independent engineers	
I.3 Jobs created – direct and indirect (disaggregated by gender)	Number	0	2024	2029	500 direct and 100 indirect, of which 150 will be women's jobs	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by independent engineers	

Indicators	Unit of measure ment	Baseline Value	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Means of Verification	Comments
	Specific development objective 1: Increase financing of NCRE in NIZ as well as the scaling of enabling technologies for NCRE penetration in the NIS in line with sectoral decarbonization goals										
R1.1 Volume of financing mobilized by the program	US\$ million	0	2024	0	16	60	150	110	336	FDN annual reports based on credit contracts	Cofinancing includes IDB resources, other multilateral, bilateral, commercial banking, FDN resources, private, etc.)
R1.2 Installed Capacity of NCRE in the NIS	MW	0	2024	0	5	20	75	25	125	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by independent engineers	Measures the installed capacity of NCRE in the NIS thanks to the financing of enabling technologies. This includes integrated capacity in association with the production of H <sub>2</sub> V, integrated capacity in association with energy delivered through electric vehicle charging stations and integrated capacity to operate an electric mass transportation system, capacity integrated into the NIS by networks of transmission and substations.

R1.3 Installed Capacity of NCRE in NIZ	MW	0	2024	0	1	1	1	2	5	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by independent engineers	Based on the installed capacity of NCRE in the NIZ for new generation or replacement of diesel.
R1.4 Renewable energy production (NIS/NIZ) as a result of projects financed by the operation (cumulative)	MWh	0	2024	0	10,000	45,000	195,000	271,000	271,000	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by independent engineers	Electricity produced (accumulated) based on the installed capacity financed by the project or by enabling infrastructure.
R1.5 Energy storage installed capacity for FNCER projects	MWh	0	2024	0	0.75	1.5	1.5	3.5	3.5	FDN annual reports on subprojects financed with resources from this operation.	CIF's GESP 1. Energy Rating
R1.6 Number of advanced monitoring and control systems installed in NIZ	Number	0	2024	0	1,200	1,200	1,200	2,400	6,000	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by independent engineers	# of users who access advanced monitoring and control systems in NIZ (Advanced Metering Infrastructure)
· · ·	ent objective	2: Strengthen	the technical ca	pacities o	f the FDN fo	or the identi	fication, des	sign and por	tfolio manage	ement of climate proje	
R2.1 Percentage (%) of the FDN portfolio measured in number of projects aligned with the	%	9	2023	9	10	12	15	17	20.7	FDN Annual Sustainability Reports	The alignment will be evaluated with respect to country's green taxonomy on the date of signing the credit contract for each project.

country's green taxonomy.												
Specific developm	Specific development objective 3: Improve FDN's climate MRV capabilities to contribute to national climate reporting efforts and support eventual green debt issuances.											
R3.1 Percentage of FDN portfolio projects reported annually under <i>Task Force on</i> <i>Climate-Related</i> <i>Financial</i> <i>Disclosures</i> (TCFD) standards.	%	0	2023	0	5	15	25	40	60	FDN Annual Sustainability Reports	The report covers GHG emissions from its lending activities and other financial intermediation activities (scope 3 category 15 of the GHG Protocol) estimated by the FDN MRV team using the Partnership for Accounting Financials (PCAF) methodology following the recommendations of the TCFD	

## Products

Component 1: Financing for projects that promote the integration of NCRE											
Indicators	Unit of measurement	Baseline Value	Baselin e Year	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Means of Verification	Comments
P1. Number of projects financed	Number	0	2024	0	1	1	1	2	5	FDN annual reports on subprojects financed with resources from this operation	The minimum proposed financing amount is US\$2.5 million
Component 2: Instit	utional strengthe	ning									
P2. Diversity Policy Action Plan; Equity and Inclusion in Implementation	Number	0	2024	0	0	1	0	0	1	Action plan approved by the FDN Internal Sustainability Committee	
P3. Funded subprojects that have a gender, diversity and inclusion plan designed and approved for implementation	Number	0	2024	0	1	0	1	1	3	FDN annual reports on subprojects financed with resources from this operation. Information on subprojects will be based on audit reports by	This indicator must comply with the requirements established in the Gender, Diversity and Inclusion Guidelines defined for this operation.

										independent engineers	
P4. Gender, diversity and inclusion guidelines designed	Number	0	2024	0	1	0	0	0	1	Guidelines approved by the FDN Internal Sustainability Committee.	This indicator will be considered fulfilled if it complies with at least: protocol for the prevention and attention of gender-based violence, guidelines for labor equity for women, guidelines for the inclusion of people with disabilities and guidelines with cultural adaptation in the financed subprojects.
P5. Women trained in areas of employability associated with renewable energies through a pilot	Number	0	2024	0	50	0	0	0	50	FDN annual reports	The training courses correspond to the two pilots that will be carried out in areas of influence of the projects to be financed: the pilot will be aimed at women in areas of employability associated with renewable energies.
P6. Training pilot for indigenous and Afro-descendant people in the use of renewable energy designed and implemented	Number	0	2024	0	0	0	1	0	1	FDN annual reports on subprojects financed with resources from this operation	The pilot must be implemented in areas of influence of the subprojects to be financed, particularly those related to NIZ and

											energy communities.
P7. Funded pre- investment studies	Number	0	2024	1	1	1	1	0	4	Annual reports of projects financed by the FDN	