

Technical Cooperation Document

I. Basic Information for the Technical Cooperation

▪ Country/Region:	Colombia
▪ TC Name:	Mitigation of Greenhouse Gas Emissions by Renewable Energy Projects in Non-Interconnected Zones (ZNIs).
▪ TC Number:	CO-T1409
▪ Team leader/Members	Maria Netto, IFD/CMF, Team Leader; Jose Ramon Gomez, ENE/CCO, Alternate Team Leader; Javier Cuervo, INE/ENE, Jose Juan Gomes, Gloria Lugo, Maria Margarita Cabrera, Leticia Riquelme, Sebastian Vargas, Alejandro Tamola, Annabella Gaggero, IFD/CMF; Alvaro Concha, CMF/CCO; Claudio Alatorre and Veronica Valencia, INE/CCS; Colin McKee, VPS/ESG; Claudia Mylenna Cardenas Garcia, Gabriele Maria del Monte, FMP/CCO; and Escarlata Baza Nuñez, LEG/SGO
▪ Indicate if: Operational Support, Client Support, or Research & Dissemination	Operational Support
▪ Associated Loan/Guarantee Name:	Operational support to program: CO-L1161- Renewable Energy Financing Program for the Non Interconnected Zones (NIZ)
▪ Loan name associated or guarantee	CO-L1161. Financing to leverage private invest in renewable energy in non-interconnected zones (ZNIs)
▪ Date of TC Abstract authorization:	N/A
▪ Beneficiary (recipient countries or entities of technical assistance):	Banco de Comercio Exterior de Colombia (Bancóldex)
▪ Executing agency and contact name:	Bancóldex
▪ Donors providing funding:	Clean Technology Fund (CTF)
▪ IDB funding requested:	US\$500,000 from CTF
▪ Local counterpart funding (if any):	US\$100,000 (in-kind Bancóldex)
▪ Disbursement period:	48 months for execution and 36 months of disbursement
▪ Required start date:	October 1 st 2015
▪ Types of consultants:	Firms and individuals
▪ Prepared by the Unit:	IFD/CMF
▪ Unit of Disbursement Responsibility:	IFD/CMF
▪ Included in Country Strategy:	Yes
▪ TC included in CPD:	Yes
▪ GCI-9 Sector Priority:	The operation of proposed technical cooperation is closely related to two institutional priorities of the IDB under the GCI-9: (i) institutions for growth and social welfare, and (ii) protecting the Environment and Responding to Climate Change

II. Description of the Associated Loan/Guarantee:

- 2.1 This Technical Cooperation (TC)'s objective is to support the execution of the program CO-L1161, Renewable Energy Financing Program for the Non Interconnected Zones (ZNI).

III. Objectives and justification of the TC

- 3.1 This technical cooperation will support the loan transaction CO-L1161 "Renewable Energy Financing Program for the ZNI". The objective of the loan is to support Colombia's actions to improve access to energy in isolated zones and promote access to clean energy sources, to promote and increase private investment in renewable energy (RE) generation in the ZNIs while reducing Greenhouse Gas (GHG) emissions by testing an innovative financial model for RE projects in ZNI. The transaction will be financed with a loan of US\$10 million from the Clean Technology Fund (CTF) from the IDB. These resources will be complemented with resources (of up to US\$10 million) from an existing IDB loan with Bancóldex (2949/OC-CO).¹
- 3.2 Colombia is a country with a high average electricity coverage index. According to the Mining and Energy Planning Unit (UPME) and the Indicative Expansion Plan Coverage of Electric Power (PIEC),² the average coverage rate nationwide is 96.1% and in urban and rural areas disaggregated is 59% and 84.84% respectively. However, two-thirds of the country are not served by the Interconnected System (SIN) and are named as ZNI. In the ZNI they are approximately 1,83 million people who live in 1,565 localities, of which only 34% enjoy access to electrical energy supply. According to UPME PIEC there is in total 11,7 million homes in the country, of which 94.3% (11 million) are connected to the SIN and 1% (0,18 million) service are in ZNI. 4.2% (0,49 million households) do not have electricity service, of which 1.9% may be connected to the SIN and 2.3% are considered ZNI and should have a diesel or hybrid-based generation renewable solution. The service in these isolated zones is provided by 94 operators³ who mostly perform the activities of generation, distribution and marketing with low technical capacity, and financial management. The main aspects related to the provision of energy services in ZNI can be summarized as the following: (i) low quality of service delivery; (ii) schemes of electricity generation economically unsustainable high environmental impact in terms of climate change from the use of fossil fuels; (iii) low use of local renewable resources for electricity generation; (iv) high component of subsidies to cover the costs of providing the service are not covered by the fees paid by end-users; and (v) low private sector participation in the model due to the lack of a legal framework for a clearly return on investment. In 2014 the Colombian government enacted Law 1715 which creates a regulatory framework and incentives to accelerate investment in energy efficiency and renewable energy, with special emphasis on ZNI.
- 3.3 To support the government to overcome the above aspects and improve access to renewable energy in ZNI, the CO-L1161 program should be accompanied by measures to ensure alignment with the legal and institutional requirements of the country to enable the participation of the key market players (financial institutions,

¹Third loan operation under execution by Bancóldex (2949/OC-CO, US\$200 million) of an existing CCLIP (CO-X1007).

²Indicative Expansion Plan Coverage of Electric Power (PIEC) - UPME, 2017-2017.

³The Regulatory Commission of Energy and Gas (CREG).

private operators, insurance companies, etc.); the current regulatory framework; and methodologies and protocols to validate the expected results of the program.

- 3.4 This technical cooperation is aligned with the IDB Country Strategy for Colombia 2010-2014 (GN-2648-1). In particular, it is proposed to support the promotion of credit lines and developing financial and non-financial products (insurance, savings, microcredit and micro franchises) through second-tier banks (Bancóldex) (see paragraph 3.11 of the strategy).
- 3.5 This technical cooperation also keeps consistency with the goal of financing the Ninth Replenishment of the Bank to climate change, renewable energy and environmental sustainability, as well as the priorities set in the IDB Integrated Strategy for Mitigation and Adaptation to Change climate, and Sustainable and Renewable Energy, adopted in March 2011 (see paragraphs 1.3, 2.9 and 3.14 of the GN-2609-1).
- 3.6 This TC will integrate results from other studies and operations undertaken with Bancóldex technical cooperation, including technical cooperation CO-T1402 and CO-L1161.

IV. Description of activities/components and budget

- 4.1 It is expected that the credit line to be established with resources of the CO-L1161 program, will consider the following information: (i) specific eligibility criteria, modalities and characteristics of the financing line; (ii) specific institutional and legal requirements to ensure the support and participation of key market players (e.g. FIs, private operators, insurance companies, etc.) in implementing the financing line; (iii) existing regulatory framework; and (iv) methodological approaches and protocols to monitor results/benefits of the financing line.
- 4.2 This technical cooperation is intended to support the implementation of the CO-L1161 operation through three main components, namely:
- 4.3 **Component 1.** Supporting the structuring of the demand side of the market promoting the financing line and by training local financial institutions and potential beneficiaries on: (i) the benefits than can be obtained through renewable energy investments in terms of improving the quality of service and / or energy savings and cost-reduction of GHG emissions; and (ii) on the real and perceived risks associated with this type of projects. As part of this component, a promotional strategy will be developed, including promotional materials and events. Requirements and basic guidelines for technical services will also be established (e.g. basic technical and financial information of a project proposal, contract type with risk mitigation measures, specifying technical requirements for eligible projects, etc.).
- 4.4 Two consulting (individuals and/or firms) will be hired to support the activities of the Component 1. One individual consultant will be required to support Bancóldex with specific technical capabilities and local coordination. A consultant or firm will also be hire to support the development of both workflows for the financing line operation as well as standards and examples of contracts and templates. The execution of this component will also include the cost of consultants and events required for dissemination, training, and consultation with relevant actors (such as local financial institutions, technical service providers and customers).
- 4.5 **Component 2:** This component will grant as investment spending, a benefit to the implementation of RE projects in ZNI resulting from the interaction in the market

between the operators and technical services or technology providers in a consistent decrease in the credit interest rate to the beneficiaries of the program to effectively implement the project. The resources of this component will be used to cover the difference between the initial interest rate of the loan and the new rate calculated by applying the reduction, for the remaining term of the loan.

- 4.6 **Component 3:** Designing and implementing a monitoring and evaluation registry for the continuous supervision of projects and the assessment of their results in terms of energy consumption/ savings and GHG emissions reduction. Monitoring of results is essential to demonstrate the improvement in the quality of the generation, energy consumption and GHG emissions reduction of the projects and the overall program. This component will include the design and implementation of a registry to monitor the quality of projects and ensure the proper reporting, monitoring and verification of the expected results of the projects and the program as a whole. Thus, this TC will support the design of the necessary templates as well as the development of a methodology to review projects and a registry or information system where Bancóldex can record all the activities undertaken within each subproject proposal as well as the monitoring of subprojects, safeguards requirements and the program results. In addition, this component will generate a report of lessons learned, to be shared with the CTF, which can demonstrate the potential for replication and transformation that the strategy of the program can achieve. Finally, this component will support an impact evaluation of the program towards the end of the execution period (including IDB Monitoring and Evaluation reports; Project Monitoring Report-PMR and Project Completion Report-PCR).
- 4.7 The implementation of this component also entails the cost of consultants or Firms and fees or travel costs.
- 4.8 To ensure proper execution of the proposed program, the project team will organize meetings and conference calls, mid-term and a final review with Bancóldex and the consultants for each of the phases of the design and implementation and the planned activities.

Indicative Results Matrix

Expected results	Unit	Baseline		Year 1		Years 2 / 4		Expected completion date	Data source
		Value	Year	Planned	Actual	Planned	Actual		
Outcome Comp. 1									
Component 1: Number of technical service providers that meet the requirements set out in the financing line.	#	0	2015	2		4		12/31/2016	IDB Systems and Bancóldex dedicated registry
Outputs Comp 1.									
Component 1: # of LFIs and clients reached through meetings, e-mail, calls, mailing and social media.	#	0	2015	100		150		12/31/2016	IDB Systems and Bancóldex dedicated registry
Component 1: # of visits to dedicated web page with information about the project.	#	0	2015	10		180		12/31/2016	Bancóldex virtual site for the program
Component 1: # of outreach and training	#	0	2015	1		5		12/31/2017	IDB Systems and

events organized									Bancóldex dedicated registry
Outcome /Output comp. 2 ⁴									
Component 2: # of projects supported by the credit line	#	0	2015	1		3		12/31/2017	IDB Systems and Bancóldex dedicated registry
Outcome comp. 3									
Component 3: Emissions Reduction of the Program	Ton CO2	0	2015			39,900		12/31/2020	IDB Systems and Bancóldex dedicated registry
Outputs comp 3									
Component 3: # of Monitoring and evaluation methodology and templates	#	0	2015	4		0		12/31/2016	IDB Systems and Bancóldex dedicated web site
Component 3: # Lessons Learned report	#	0	2015	1		1		12/31/2020	
Component 3: # Project Monitoring Report	#	0	2015	1		1		12/31/2016	Bancóldex dedicated registry
Component 3: # Project Completion Report	#	0	2015	0		1		12/31/2020	IDB Systems and Bancóldex dedicated web site

4.9 The total amount of this operation is US\$500,000 from CTF resources which will be used to hire the services of experts to implement the components 1, 2 and 3 above, as well as to pay for logistics of consulting events and travel expenses related to consultants. IDB execution would be carried out in accordance with GN-2629-1 and its Appendix 10. The Bank will contract individual consultants, consulting firms and non-consulting services in accordance with its current procurement policies and procedures. A request from the beneficiary for the IDB to execute this TC is enclosed.

Indicative Budget (in US\$)

Activity/Component	Description	CTF	Counterpart Funding	Total Funding
Component 1	Development of standards and models of concessions and templates	40,000	10,000*	50,000
	Promotional materials	20,000	10,000*	30,000
	Dissemination and training events	70,000	30,000*	100,000
	Strengthening Institutional capacity Bancóldex	80,000	40,000*	120,000
Component 2	Benefit to RE projects in ZNI /investment spending	150,000	n.a.	150,000

⁴This indicator is outcome/output level due further discussions required between the Beneficiary and IDB during the execution of the TC and Loan.

Component 3	Monitoring and tracking methodologies, Safeguards requirements and templates	30,000	n.a.	30,000
	Report Log monitoring and reporting of lessons learned	80,000	n.a.	90,000
	General impact assessment of the program	30,000	10,000*	30,000
Total		500,000	100,000*	600,000

* * In-kind resources from Bancóldex: Counterpart resources will consist on staff time, facilities for the development of planned promotional workshops and events, and office space for the consultants supporting the design of the different products envisioned under this TC.

V. Executing agency and execution structure

- 5.1 The executing agency will be Bancóldex, with the fiduciary and operational capacities necessary for the successful execution of the program, as it is governed by the Financial System act and is subject to the supervision and monitoring by the Superintendence of Finance. In addition, Bancóldex has a long history of implementing operations funded by the IDB and CTF, and the government has chosen it as one of the entities that will support its GHG emissions reduction efforts.
- 5.2 For the purposes of this program, Bancóldex will be responsible for: (i) executing and supervising the appropriate use of the resources obtained through the proposed technical cooperation; (ii) providing in due time and form the necessary human, technological and budgetary resources required, and (iii) delivering to the Bank the required documentation to meet disbursements and other performance requirements for execution. As a condition, prior, to the first disbursement of the TC, the executing agency will provide evidence to the Bank's satisfaction of (i) the formal appointment of a program coordinator at Bancóldex; and (ii) project implementation will be based on the results matrix mentioned above and the products and indicators contained therein.
- 5.3 Bancóldex will submit to the IDB the following reports: (i) progress reports every six months, within sixty (60) days from the end of the six months; and (ii) a final report within six months from the end of last project activity executed. The contents of the reports shall be jointly agreed between IDB and Bancóldex.
- 5.4 The executor will also provide the Bank's financial statements of the project, within 90 days after the date stipulated for its last disbursement, which will be audited by an independent auditor firm selected and contracted resources from Bancóldex.

VI. Major Issues

- 6.1 In view of the high technical level of the proposed TC this work, there is a risk of not obtaining good quality results if appropriate follow the work of the consultants are not given. Therefore, the proposal considers ongoing monitoring activities and overall evaluation of the program. Peer reviewers to analyze the products produced may also be required.

VII. Exceptions to bank policy

7.1 No exceptions to Bank policy are envisioned.

VIII. Environmental and social strategy

8.1 Pursuant to filter environmental and social safeguards, the proposed technical cooperation was classified as Category C. No potential negative environmental or social impacts of technical cooperation were identified and therefore no mitigation strategy is needed. See link: [Report Filter Safeguards Policy and Project Classification Form](#).

Required Annexes

- Annex I: [Letter of request](#)
- Annex II: [Terms of Reference](#)
- Annex III: [Procurement plan](#)

MITIGATION OF GREENHOUSE GAS EMISSIONS BY RENEWABLE ENERGY PROJECTS IN NON-INTERCONNECTED ZONES (ZNIs)

CO-T1409

CERTIFICATION

I hereby certify that this operation was approved for financing under Clean Technology Fund **(CTF)**, through a communication dated December 10, 2015 and signed by Goritza Ninova (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$500,000** in order to finance the activities described and budgeted in this document. This certification reserves resources for the referenced project for a period of six (6) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

Original Signed

12/15/2015

Sonia M. Rivera
Chief
Grants and Cofinancing Management Unit
ORP/GCM

Date

APPROVAL

Approved:

Original Signed

12/15/2015

Juan Antonio Ketterer
Division Chief
Capital Markets and Financial Institutions Division
IFD/CMF

Date