Document of the Inter-American Development Bank

**Colombia**

**renewable energy financing program for the non-interconnected zones**

**(CO-l1161)**

**Environmental and Social Management Report**

**(ESMR)**

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1. **Introduction**

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| Country | Colombia | |
| Sector | Financial Markets | |
| Project Name | Renewable Energy Financing Program for the Non Interconnected Zones | |
| Borrower | Banco de Comercio Exterior de Colombia S.A. (Bancoldex) | |
| Executing Agency | Banco de Comercio Exterior de Colombia S.A. (Bancoldex) | |
| Transaction Type | Loan with Sovereign Guarantee | |
| Project Cost (in US Dollars) | US$9.265 million | |
| Environmental Category | Directive B13 (Medium risk, FI-2) | |
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1. **Project Description**
   1. The goal of the program is to promote and increase private investments in RE generation in the ZNIs while reducing Greenhouse Gas (GHG) emissions. This would be achieved through a pilot program providing long term financing with adequate conditions to private investors.
   2. Program beneficiaries will be private sector operators offering and managing public electricity services and renewable technology providers who would be interested in investing in RE mini-grid generation.
   3. Eligible activities will include medium and long term (more than two years) investments in renewable energy technologies.
   4. Single component. The program will consist of a Global Credit Loan, its’ only component will be long-term funding to Bancoldex, Colombia’s public bank in charge of supporting entrepreneurial development, for on-lending to eligible first tier local financial institutions (FIs) to provide sub-loans at adequate terms to eligible private sector firms interested in undertaking RE investment projects in the ZNIs.
   5. Expected impacts of the program would be an increase in RE generation in the ZNIs and hence a reduction in GHG emissions. Its intermediate outcome would be the percentage increase in energy generation by beneficiary firms from RE sources vis-à-vis comparable, non-beneficiary firms. The outputs would be: an increase in the number of operators who access financing for RE projects; and an increase in the annual dollar amount of medium- and long-term loans granted by the program and its resulting investments in RE.
2. **Compliance Status and Project Standards**
   1. Based on Directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), the Program is classified as a Financial Intermediary and as such this operation is not categorized according to its potential E&S impacts and risks.
   2. The Program’s target is to support the financing of small-scale renewable energy projects. The expected technologies will be mainly solar, small scale hydro and biomass from agricultural waste. All sub-projects will be under 10MW. It is expected that the program will cover a maximum of 10 beneficiaries and that the projects size will be in the 500KW to 5MW range, These sub-projects are considered low to medium risk and are likely to be classified Category B. Based on the information presented, this Program is categorized as medium risk (FI-2).
3. **Key Environmental and Social Impacts, Risks and Mitigation**
4. Given the size of the projects (less than 10MW in all instances and 500KW to 5MW expected in average, concentrated in solar power and biomass from agricultural waste) these potential impacts are expected to be minimal to moderate. Main potential risks identified for this program are primarily related to land use change in the area identified as the site location for the particular plant. Those risks and any other potential risk will be (i) avoided by the application of an exclusion list or (ii) identified and mitigated via the application of Bancoldex ESMS and the issuance of the relevant permits (see below).
5. Electricity generation projects in Colombia which are under 10MW do not require a Federal license. Municipal authorities do require that projects obtain necessary permits depending on the particular circumstances (water capture, waste disposal, impact on communities, air emissions, change in land use) – See Annex 3. The projects also need to comply with the Public Consultation Directive when applicable[[1]](#footnote-1).
6. Nevertheless, in the absence of a Federal licensing process, the E&S risks management rules applicable to this program will require a thorough screening of potential risks and the design and implementation of a mitigation plan for each project.
7. The potential key environmental, social, health and safety, and labor issues and risks associated with this Program are those related to renewable energy projects. Renewable energy projects deliver long-term GHG emission reductions and are considered environmentally friendly projects as they entail cleaner energy production. However, some projects under this line, likely to average 2.5 MW in size, can entail adverse environmental or social impacts that can be moderate in nature and which need to be assessed and managed on a project by project basis.
8. Environmental and social issues that may potentially occur in the context of these projects include the following:
   * Environmental impacts caused by the associated infrastructure works of small scale construction (roads, power lines, soil erosion, habitat disturbance, increased heavy traffic, etc.).
   * Land use change caused by the project location on either existing degraded sites, or potentially new undeveloped areas possibly near sensitive natural habitat (High Value Conservation areas per Annex 2 will be excluded).
   * Occupational health and safety issues for the workforce. Social impacts and safety concerns relevant for the neighboring residential communities
   * GHG emissions ‘leakage’ if – in the case the project involves the replacement of equipment for increased energy efficiency (solar hybrid projects) – the old equipment is not disposed properly and removed from circulation.
9. **Management and Monitoring of Environmental and Social Impacts**
   1. Bancóldex has developed institutional capacity in the management of environmental and social risks and implemented a portfolio-wide Environmental and Social Management System. The system was developed with the technical assistance of the IDB (CO-T1198), and was designed for previous operations targeting SMEs, energy efficiency, and leasing. It is applied only for sub-loans at or above USD$5 million. Unique among banks in the region is that Bancoldex, as a second tier bank, has developed tools and screening forms to assist its first tier banks in undertaking E&S analysis on its on-lending. It on-lends through five first tier banks.
   2. In integrating E&S analysis into its loan appraisal process, Bancoldex evaluates individual projects on a case by case basis in all instances where the sub-loan is in excess of US$5 million. On these operations it relies on the evaluation conducted by the first tier bank in addition to information provided by the end-borrower. Gaps are identified relative to local law, and on particular permit and/or licensing gaps, Bancoldex will incorporate an action plan and agree deadlines with the commercial banks to submit necessary documentation. The current breakdown of its portfolio for sub-loans above US$5 million is Category A (26%), Category B (19.7%), and Category C (54.3%). Categorization is determined on the severity of issues identified. For sub-loans below US$5 million, Bancoldex does a more limited evaluation and categorizes on the basis of sectors financed. Bancoldex does not do site-specific due diligence itself but instead relies on its first tier banks. Under this operation, Bancoldex will extend the application of its ESMS to all sub-loans regardless of the current US$5 million threshold.
   3. Bancoldex does not have significant experience with renewable energy projects. And its ESMS is designed for Corporate lending rather than projects lending. As such, IDB will provide assistance to Bancoldex for the necessary adjustment of its ESMS tools.
10. **Requirements to be included in the Legal Agreements** 
    1. For this operation, the IDB will require Bancoldex to:

A. Throughout the Life of the Loan:

* + 1. Comply with all applicable national environmental, social, health and safety, and labor regulatory requirements, and in relation to the financing of sub-projects with IDB’s proceeds ensure that each sub-project complies with: (a) Bancoldex´s Environmental and Social Management System (independently from dollar-amount financed); (b) in-country regulations; (c) the List of Excluded Activities (see Annex1); (d) the Fundamental Principles of the Rights at Work.
    2. For the specific renewable energy projects and the application of the ESMS, develop with IDB’s assistance and provision of training adequate screening form(s) to assess specific environmental and social impacts. Bancoldex will implement these form(s) prior to the financing of the first sub-project. Those forms will integrate the verification of the possession of the relevant permits and compliance with the Public Consultation regulation. In the case of biomass projects, the forms will included a screening of potential risks in the supply chain (risk of deforestation and/or land-use change).
    3. Where particular high risks are identified in the screening process, request a management plan of the identified risks and ensure that this request is legally binding to the end-borrower. Supervise and monitor these management plans on a periodic basis, and prepare necessary summary reports. Where necessary agree with the client to corrective actions if needed.
    4. Bancoldex will not finance Category A sub-projects under this line. The determination of a Category A sub-project will be based on particular triggers (deforestation, influence on critical natural habitat, significant social impact/opposition, etc.) and incorporated into the above mentioned sector checklist.
    5. To avoid any GHG emissions leakage, a disposal protocol will be designed and implemented. Such protocol will be described in the Operating Manual designed for this Program.
    6. Notify IDB within five days in any instance of sub-project non-compliance with regard to any environmental, social, health and safety issues, and Loan Agreement Requirements, agreed Action Plans, or other pertinent legal covenants.

B. Prior to First Disbursement:

* + 1. Implement the Operating Manual designed for this Program as a condition for first disbursement, and specifically apply the contractual conditions detailing particular environmental and social procedures and standards as defined within this ESMR.

C. Reporting, Monitoring and Supervision:

* 1. During the life of the Loan Agreement, Bancoldex will prepare and submit an Environmental and Social Compliance Report (ESCR), in form, content and frequency acceptable to IDB. This is expected to be annual, and include a list of individual investments each with their environmental and social impact and risk categorization, a summary of key impact and risk issues identified during screening, a summary of mitigation measures agreed, as well as the status of compliance with these mitigation measures (for those projects that have moved into execution/supervision), and/or status of compliance with a CAP (if any).
  2. The IDB will supervise the environmental, social, health and safety, and labor aspects related to the use of the proceeds of the Program semi-annually/annually. This supervision will be conducted by an in-house specialist (and as needed, with the assistance of an external independent environmental and social consultant).

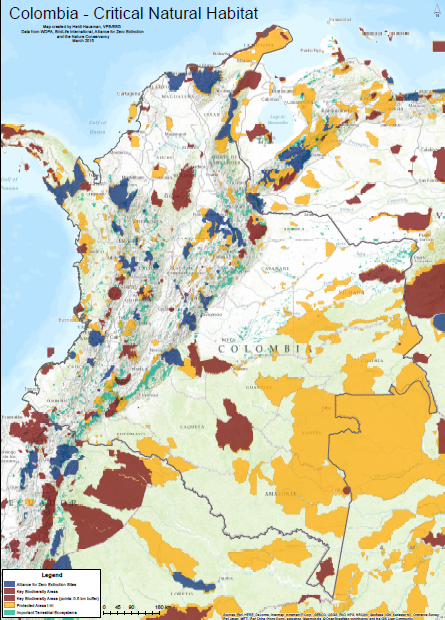
**Annex 1. Exclusion List**

1. Those that are illegal under host country laws, regulations or ratified international conventions and agreements
2. Weapons and ammunitions
3. Tobacco[[2]](#footnote-2)
4. Gambling, casinos and equivalent enterprises[[3]](#footnote-3)
5. Wildlife or wildlife products regulated under Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[[4]](#footnote-4)
6. Radioactive materials[[5]](#footnote-5)
7. Unbonded asbestos fibers[[6]](#footnote-6)
8. Forestry projects or operations that are not consistent with the IDB’s Environment and Safeguards Compliance Policy
9. Polychlorinated biphenyl compounds (PCBs)
10. Pharmaceuticals subject to international phase outs or bans[[7]](#footnote-7)
11. Pesticides/herbicides subject to international phase outs or bans[[8]](#footnote-8)
12. Ozone depleting substances subject to international phase out[[9]](#footnote-9)
13. Drift net fishing in the marine environment using nets in excess of 2.5 km. in length
14. Transboundary trade in waste or waste products[[10]](#footnote-10), except for non-hazardous waste destined for recycling
15. Persistent Organic Pollutants (POPs)[[11]](#footnote-11)
16. Non-compliance with workers fundamental principles and rights at work[[12]](#footnote-12)

Additional exclusions include:

* Projects that involve resettlement
* Biomass projects involving other resources than agricultural waste

**Annex 2 – High Value Conservation Areas in Colombia (exclusion of sub-projects within these areas)**



**Annex 3 –** **Colombian Legislation - Environmental Permits**

**Applicable permits**

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| **Applicability** | **Source** |
| Surface water drainage, including rainwater storage and public water  *(“Concesión de aguas superficiales”)* | Decree 1076/2015[[13]](#endnote-1), art. 2.2, 2.2.3.2.5.3., 2.2.3.2.16.2. |
| Occupation of rivers (channel and riverbeds)  *(“Ocupación de cauces”)* | Decree 1076/2015, art.  2.2.3.3.5.8 and 2.2.2.3.5.1 |
| Groundwater use  *(“Permiso de prospección y explotación de aguas subterráneas”)* | Decree 1076/2015, art. 2.2.3.2.16.1, 2.2.3.2.16.4 and 2.2.3.2.1 |
| Water discharges  *(“Permiso de Vertimientos”)* | Decree 1076/2015, art. 2.2.3.2.20.2 and 2.2.3.3.5.1 |
| Air emissions  *(“Permiso de emisiones atmosféricas”)* | Decree 1076/2015, art. 2.2.5.1.2.11 and 2.2.5.1.7.1 |
| Noise emissions  *(“Permiso de ruídos”)* | Decree 1076/2015, art. 2.2.5.1.7.17 |
| Forest Harvesting  *(“Permiso de aprovechamiento forestal”)* | Decree 1076/2015, art. 2.2.1.1.17.10 and 2.2.1.1.5.3 |
| Harvesting of trees outside natural forest  *(“Permiso de aprovechamiento árboles aislados de bosques naturales”)* | Decree 1076/2015, art. 2.2.1.1.9.1 |
| Hazardous waste treatment, storage and disposal  *(“Permiso de residuos peligrosos”)* | Decree 1076/2015, art. 2.2.6.1.2.1 |
| Use of natural resources in natural reserve parks  (*“Permiso de uso y aprovechamiento de los recursos naturales renovables”)* | Decree 1076/2015, art. 1.1.2.1.1  (This permit is granted by the national department responsible for the management of natural reserve parks.) |

In addition, the legislation requires permits to activities that are usually not related to energy projects (e.g. Trade of endangered species, hunting and scientific research on natural reserves).

**2. Permitting process**

The regional environmental authorities (“Corporaciones Autónomas Regionales - CAR”) have autonomy to define the permitting process to the projects that fall under their jurisdiction. The unified environmental decree (Decree 1076/2015), that regulates environmental issues in Colombia, only establishes that these applicable permits must be granted before the beginning of project execution.

Despite this autonomy, the Decree 1076/2015 (art. 2.2.2.8.5.4) establishes that all forms used to require permits must be in accordance with a national standard. Also, in order to standardize the permitting processes of the CARs and ANLA (“Agencia Nacional de Licenciamiento Ambiental” or “National Environmental Licensing Agency”), the government designed an online platform ("Ventanilla Integral de Tramites Ambientales en Línea - VITAL") in which companies and citizens can apply for the licenses and permits.

Also, some environmental authorities describe the processes and the required documents of their permits in a centralized online platform (“Sistema Único de Información de Trámites – SUIT”). Based on this information, we could identify the usual permit application flow to companies:

*Preparing solicitation*

In this step, the citizen/organization must describe the project and provide information about the activity on standard forms (e.g. National Form for surface water concessions, National Form for Forest Harvesting) and, if applicable, present required plans to manage the negative impact (e.g. Risk Management Plan for the Water discharge).

*Paying for the evaluation*

*Submitting documentation*

The documentation prepared on the first step must be submitted to the environmental authority.

*Submitting additional documentation*

After the initial assessment, the agency may ask for additional documents in order to support its decision.

*Receiving the authorization information (“Auto de inicio”)*

*Field visit to the project*

The authority verifies environmental conditions of the project (when applicable) and the accuracy of the information provided by the applicant.

**3. Prior Consultation with Traditional Communities**

Besides environmental permits, Colombian government verifies if a project affect ethnic communities (indigenous and afrocolombians). In order to ensure their legal rights to Free, Prior, Informed Consultation, the project developer must receive a certification of non-existence of traditional communities in the project-impacted lands. The certification is granted by the Ministry of Interior, after an audit that uses a database of traditional communities and, in some case, a visit to the site to validate the decision.

Whenever the Ministry of Interior identifies the presence of these communities, it will require a prior consultation process. The community’s representatives will participate in the design of impact assessment and declare their agreement or disagreement with proposed measures to manage the negative impacts

**References**:

Decree 1076/2015:

<http://wp.presidencia.gov.co/sitios/normativa/decretos/2015/Decretos2015/DECRETO%201076%20DEL%2026%20DE%20MAYO%20DE%202015.pdf>

Ventanilla Integral de Tramites Ambientales en Línea: <http://vital.anla.gov.co/SILPA/TESTSILPA/Security/Login.aspx?ReturnUrl=%2fSILPA%2fTestSilpa%2fSecurity%2fdefault.aspx>

Sistema Único de Información de Trámites:

<http://www.suit.gov.co/inicio>

Decree 1320/1998: https://www.mininterior.gov.co/sites/default/files/co-decreto-1320-98-consulta-previa-indigenas-\_2.pdf,

Decree 1220/2005: http://www.ideam.gov.co/documents/24024/36843/Decreto\_1220+de+2005.pdf/9127b232-8215-46aa-8793-c0d3ec21b076

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| **Applicability** | **Source** |
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| Occupation of rivers (channel and riverbeds)  *(“Ocupación de cauces”)* | Decree 1076/2015, art.  2.2.3.3.5.8 and 2.2.2.3.5.1 |
| Groundwater use  *(“Permiso de prospección y explotación de aguas subterráneas”)* | Decree 1076/2015, art. 2.2.3.2.16.1, 2.2.3.2.16.4 and 2.2.3.2.1 |
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1. Directiva Presidencial 010 de 2013 :Guía para la realizacion de Consulta Previa con Comunidades Etnicas. \_ \_ [↑](#footnote-ref-1)
2. This does not apply to borrowers who are not substantially involved in these activities. “Not substantially involved” means that the activity concerned is ancillary to a project sponsor’s primary operations. [↑](#footnote-ref-2)
3. This does not apply to borrowers who are not substantially involved in these activities. “Not substantially involved” means that the activity concerned is ancillary to a project sponsor’s primary operations. [↑](#footnote-ref-3)
4. www.cites.org. [↑](#footnote-ref-4)
5. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where it can be demonstrated that the radioactive source is to be trivial and/or adequately shielded. [↑](#footnote-ref-5)
6. This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is <20%. [↑](#footnote-ref-6)
7. Pharmaceutical products subject to phase outs or bans in United Nations, *Banned Products: Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or not Approved by Governments*. (Last version 2001, www.who.int/medicines/library/qsm/edm-qsm-2001-3/edm-qsm-2001\_3.pdf). [↑](#footnote-ref-7)
8. Pesticides and herbicides subject to phase outs or bans included in both the Rotterdam Convention (www.pic.int) and the Stockholm Convention (www.pops.int). [↑](#footnote-ref-8)
9. Ozone Depleting Substances (ODSs) are chemical compounds which react with and deplete stratospheric ozone, resulting in the widely publicized ‘ozone holes’. The Montreal Protocol lists ODSs and their target reduction and phase out dates. The chemical compounds regulated by the Montreal Protocol include aerosols, refrigerants, foam blowing agents, solvents, and fire protection agents. (www.unep.org/ozone/montreal.shtml). [↑](#footnote-ref-9)
10. Defined by the Basel Convention (www.basel.int). [↑](#footnote-ref-10)
11. Defined by the International Convention on the reduction and elimination of persistent organic pollutants (POPs)(September 1999) and presently include the pesticides aldrin, chlordane, dieldrin, endrin, heptachlor, mirex, and toxaphene, as well as the industrial chemical chlorobenzene (www.pops.int). [↑](#footnote-ref-11)
12. Fundamental Principles and Rights at Work means (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) prohibition of child labor, including without limitation the prohibition of persons under 18 from working in hazardous conditions (which includes construction activities), persons under 18 from working at night, and that persons under 18 be found fit to work via medical examination; (iv) elimination of discrimination in respect of employment and occupation, where discrimination is defined as any distinction, exclusion or preference based on race, color, sex, religion, political opinion, national extraction, or social origin. (International Labor Organization: www.ilo.org). [↑](#footnote-ref-12)
13. [↑](#endnote-ref-1)
14. [↑](#endnote-ref-2)