FUNDACION NATURA
INTER-AMERICAN DEVELOPMENT BANK
GLOBAL ENVIRONMENT FACILITY

TERMINAL EVALUATION

"MECHANISM FOR VOLUNTARY MITIGATION OF GREENHOUSE GAS EMISSIONS IN COLOMBIA" PROJECT

GEFSEC ID: 4135
GEF Agency ID: CO-X1008
IDB No.: ATN/FM-12891-CO

GEF Focal Area: Climate Change

GEF-4 Strategic program(s): CC-SP6-LULUCF and CC-SP2-Industrial EE

Implementing Partners: **Colombia's Mercantile Exchange**
Bogota's Chamber of Commerce

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COLOMBIA

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TERMINAL EVALUATION

I N D E X

INDEX OF TABLES

INDEX OF ANNEXES

LIST OF ACRONYMS

AFOLU	Agriculture, Forestry and Land Use
AWP	Annual Work Plan
BMC	Colombia's Mercantile Exchange
BVC	Colombia's Stock Exchange
CAEM	Corporación Ambiental Empresarial (an affiliate of CCB)
CAS	Regional Autonomous Corporation of Santander
CC	Climate Change
CCB	Bogota's Chamber of Commerce
CCBA	Climate, Community and Biodiversity Alliance
CDM	Clean Development Mechanism
CDP	Carbon Disclosure Project
CER	Certified Emissions Reduction
CF	Carbon Footprint
CMs	Carbon Markets
CONPES	Colombia's National Council for Economic and Social Policy
COP	Conference of the Parties
CORANTIOQUIA	Regional Autonomous Corporation of Central Antioquia
CORNARE	Regional Autonomous Corporation of Rivers Negro and Nare
EA	Executing Agency
ECDBC	Colombia's Low-Carbon Development Strategy
Ecoversa	Economía, Ecología y Conocimiento
FCP	Forest Carbon Project
FN	Fundacion Natura
GCC	Global Climate Change
GEF	Global Environment Facility
GHG	Green House Gas
GIZ	Germany's International Cooperation Agency
GoCO	Government of Colombia
IA	Implementing Agency
ICAA	Initiative for the Andean Amazonia Conservation
ICONTEC	Colombia's Institute of Technical Standards
IDB	Inter-American Development Bank
IDEAM	Colombia's National Institute of Hydrology, Meteorology and Environmental Studies
INE/RND	Division of Environment, Rural Development and Distaster Risk Management
INVEMAR	Research Institute for Marine and Coastal Areas
LACF	Latin American Carbon Forum
LL	Lesson learned or finding
LULUCF	Land Use, Land Use Change and Forestry
M&E	Monitoring and Evaluation
MADS	Colombia's Ministry of Environment and Sustainable Development (formerly MAVDT)
MAVDT	Colombia's Ministry of Environment, Housing and Territorial Development
MoU	Memorandum of Understanding
$MtCO_{2e}$	Million tons of carbon dioxide equivalent
MTE	Mid-Term Evaluation

MVC	Mechanism for voluntary mitigation of greenhouse gas emissions in Colombia
N.a.	Not applicable
NGO	Non-Government Organization
ONAC	Colombia's National Accreditation Agency
PDD	Project Design Document
PIF	Project Identification Form
PIR	Project Implementation Form
PMR	Project Monitoring Report
POM	Project's Operation Manual
PP	Procurement Plan
PROJECT	"Mechanism for voluntary mitigation of greenhouse gas emissions in Colombia" Project
REDD	Reduced Emissions from Deforestation and Degradation
SC	Steering Committee
SCX	Santiago Climate Exchange
SNNCM	National System of Standardization, Certification and Meteorology
TAC	Technical Advisory Committee
tC	Tons of carbon
tCO2e or tons of CO2e	Tons of carbon dioxide equivalent
TE	Terminal Evaluation
TNC	The Nature Conservancy
ToR	Terms of Reference
UCC	Costa Rican Offset Units
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VCS	Verified Carbon Standard
VER	Verified Emissions Reduction
WP	Work Plan
WWF	World Wildlife Fund

1 EXECUTIVE SUMMARY

1.1 Key aspects of the evaluation approach and methodology

The objective of the project was to create and set up a technological and institutional platform to serve as the basis for adopting a market mechanism for verified emission reductions and facilitate efforts of voluntary mitigation of greenhouse gas (GHG) emissions in Colombia. The three main project results were as follows:

i. *Creating a market platform for nationally issued VERs accessible to national or international buyers.*
ii. *Supporting the issuing of VERs from forest carbon projects developed in Colombia.*
iii. *Fostering local demand of VERs through corporate carbon mitigation and offsetting strategies.*

The methodology was designed to be as inclusive as possible and the approach of the evaluation prioritized the participation of different stakeholders which have been involved in the project. The following data gathering and analysis methods have been used in the evaluation: (i) document review; (ii) partially structured interviews (face-to-face), (iii) questionnaires; and (iv) presentation of preliminary results.

The evaluation covers five dimensions: relevance, effectiveness, efficiency, impact, and sustainability. A description of each rating is included on

Table 4.

1.2 Project background and overview

Colombia has developed low-carbon sustainable development policies to fulfill its commitments assumed under the United Nations Framework Convention on Climate Change (UNFCCC), which include fostering voluntary measures to accelerate the transition to a low-carbon economy.

As a result of this, on November 3, 2011, an agreement was signed between Fundacion Natura (as beneficiary) and the Inter-American Development Bank (the bank), in its capacity as Administrator of the IDB/GEF[1] Fund, for purposes of formalizing the terms and conditions of a grant of up to USD2,700,000 to be provided to the beneficiary to finance the procurement of goods and related services and the hiring of the consultants necessary to carry out a project aimed at creating and setting up a mechanism for voluntary reduction of GEI emissions in Colombia.

The estimated project costs by component are shown on

Table **1**.

[1] This Agreement was signed by virtue of the Memorandum of Understanding signed on May 19, 2004 between the Bank and the Secretariat of the Global Environment Facility (GEF) for purposes of providing direct access to the GEF resources through the creation of the IDB/GEF Fund, and by virtue of the Agreement on Financial Proceedings signed on that same date between the Bank and the International Bank for Reconstruction and Development (IBRD), as GEF Administrator.

Table 1: **Estimated project costs by component (in USD)**

COMPONENT	BANK/GEF	COUNTERPART	TOTAL
1. Creation of a Colombian-based market platform for verified emission reductions	296,200	250,200	546,400
2. Validation, registration and verification of a nationally-based stock of VERs generated by forest carbon projects in Colombia	1,512,800	6,119,300	7,632,100
3. Creation and implementation of a nationally-based program for corporate and institutional voluntary mitigation and offsetting activities	621,000	774,000	1,395,000
4. Administration, monitoring, and evaluation of the project	245,000	630,400	875,400
5. External audit	25,000	-	25,000
TOTAL	***2,700,000***	***7,773,900***	***10,473,900***

Source: *IDB 2012.*

1.3 Summarized evaluation ratings

The purpose of a Terminal Evaluation (TE) is to provide an independent in-depth evaluation of the achievements made through the implementation of a project. The TE follows the guidelines, rules, and proceedings established by IDB and GEF in the Guidelines for GEF Agencies conducting Terminal Evaluations, GEF Evaluation Office Ethical Guidelines.

Below are the ratings for each dimension analyzed, as required in the ToRs (

Table **4** shows the ratings key).

Table 2 **Summarized project evaluation ratings**

EVALUATION OF OUTCOMES	RATING
Relevance	Highly satisfactory (HS)
Effectiveness	Satisfactory (S)
Efficiency	Highly satisfactory (HS)
Impact	Satisfactory (S)
Sustainability	Moderately likely (ML)
Risks	Moderately likely (ML)

NB: The higher the number, the better the rating.

Source: *GEF 2008 form with 2016 evaluation results*

1.4 Main findings

1.4.1 Analysis of the design and execution

The results matrix had a vertical logic: the indicators and activities were consistent with the outputs, the outputs with the components, and the components with the objective. The objectives, components, outputs, activities, and indicators were feasible and clear, and consistent with the development issues identified. However, no impact indicators were included and some minor inconsistencies were identified in the design of the project as a result of excessive optimism about the following aspects:

- *The target for the transactions that would be carried out on the market platform (371,200 tCO2e).*
- *The turnaround times of MADS and BMC.*
- *The terms for completing the FCP validation and verification processes.*
- *The costs associated with the implementation of the market platform.*

Some operating changes were made in order to adapt the project to changes in the national context, and the monitoring and evaluation instruments developed in the POM were effectively used.

1.4.2 Relevance, Effectiveness, Efficiency, and Impact

The design of this project complied with the regulations and policies of the beneficiary country, as well as those of the Implementing Agency (IA) and GEF, namely:

- As regards the ECDBC specifically, the objectives of three of its components[2] are closely tied to the project results.
- WP-302 Project Preparation, Evaluation, and Approval, and WP-400 Technical Cooperation Policies of IDB.
- The mitigation components of GEF in the industrial and forestry sectors, and it is consistent with the SP2 "*promoting energy efficiency in the industrial sector*" in that it promotes accountability, management, mitigation, and offsetting of corporate GHG at the sector level, and the SP6 "*LULUCF management as a means for protecting carbon stocks and reducing GHG emissions*".

The target for most outputs was either exceeded or met - which evidences the effectiveness of the project -, except for output 1.2 *MoU amongst partners is signed* (institutional and governance structure for the operation of the platform).

As for efficiency, the GEF budget was executed at 100%, most outputs were achieved and many targets exceeded, the counterpart funds were properly managed[3] and exceeded by 58% the expected amount.

While the project lacked impact indicators, its result (impact) indicators (Table 10, Table 11, Table 12) were SMART[4]: specific, measurable (targets were set), mostly achievable (except for iii) by FN and the project partners, relevant, because they were consistent with the

[2] Component 1 Scenarios "Identifying and formulating low-carbon development alternatives at the sector level", and Component 2 Planning "Mainstreaming low-carbon development in the sector planning, based on the measures identified". Component 3 Implementation "Development of sector-oriented action plans".

[3] For GEF purposes, counterpart funds is the same as co-financing.

[4] SMART: specific, measurable, achievable, relevant, and timely.

development issues (and, in the vertical logic, with the components and outputs), and timely because they were limited to the period of the project. All of the result indicators were achieved, except for indicator iii) *Verified emission reductions (VERs) from forest carbon projects transacted on the market platform and which can be attributed to the project.*

1.4.3 Sustainability

For the project to be socially and institutionally sustainable, the following strategies were implemented:

- *Involving recognized national entities with great technical and financial capacity as co-executing agencies and partners.*
- *Activities aimed at building national capacities through technical assistance, training workshops, preparation of training materials, etc.*
- *Project promotion and dissemination activities which drew the attention of new domestic and international allies/stakeholders.*
- *Three bundled FCPs were validated, which will allow other initiatives to become part of them in the mid-term.*
- *Training was provided for professionals to act as FCP developers and for internal auditors from companies to verify GHG inventories.*
- *Plenty of dissemination, systematization and training materials were prepared in order to enable the replication of many of the activities and results of the project.*

However, for the market platform to be sustainable, it is critical that carbon credit transactions increase significantly, which could be achieved by activating a Government-regulated market (parallel to the voluntary market) as a Government policy, which should make carbon footprint measurement mandatory and require that emissions be reduced and offset, in line with the commitment made by Colombia at COP21 in Paris.

The ecological sustainability of the project can be achieved by increasing FCPs in order to promote a long-term protection of locally, nationally and globally relevant biodiversity.

The actual amount of counterpart funds was more than 4.5 times the IDB/GEF funds, which evidences a national commitment. Some of the activities conducted by the project can continue to be financed once the project concludes, namely:

1. *In Component 1, BMC will continue with the platform and expand it with the national protocol and other potential services.*
2. *In Component 2, the institutions in charge of the FCPs may increase the scope of their activities with the sale of carbon credits - which has already been demonstrated in the cook stove projects.*
3. *In Component 3, companies will be able to keep measuring their carbon footprint using their own resources since the internal capacities for them to do this have been created, evidencing that this is essentially an information management process.*

1.5 Summary of lessons learned and recommendations

There follows a summary of the lessons learned and most relevant recommendations.

Table 3: Lessons learned and most relevant recommendations

LESSON LEARNED	RECOMMENDATION
Involving the government, as well as the private sector, is critical to provide legitimacy and sustainability to the long-term objectives, since this is a process that requires the commitment of both sectors.	The project outputs should contemplate sufficient resources to conduct a process to involve and convince the permanent authorities of the Government institution(s) which are most relevant for the objectives and goals set for the project. The project activities should be reflected in the institutional AWP - of MADS, in this case.
The relevance of the project for the Government facilitates its ownership and the effectiveness and efficiency in the achievement of its objectives.	Political support should be sought - first from MADS - to design more concrete policies and regulations for each sector, which will be applied as a country project to achieve the expected goals and fulfill the commitment assumed by the country under the UNFCCC (COP21 of Paris).
The market demand for carbon credits (by companies or institutions) is the most critical factor for the feasibility of a market platform for carbon credit transactions.	The role of the government is critical to promote the market demand for carbon credits through clear and concrete policies for the measurement, reduction, and offsetting of the carbon footprint, activating a regulated market operating in parallel to the voluntary market. It is essential to allow enough time for the market platform to reach its financial break-even point and to provide it with more connectivity with the Government's information system.
Synergies can be created and the "scarce resources" of a project can be used more efficiently by identifying initiatives (aligned with the intended goals) which are already underway and which can be completed and/or upscaled.	A strategy for creating synergies with other projects and initiatives should be developed, so it is necessary to map and design a coordination structure which ensures the objectives of the MVC continue to be achieved.
The process for validating projects under international standards is burdensome and expensive for small and mid-sized FCPs with a community-based component, but it is nevertheless more affordable and simpler than that of the Clean Development Mechanism (CDM).	It is advisable to complement the offer of carbon credits in the domestic market with carbon credits from FCPs with a community-based component by developing national protocols which comply with the UNFCCC requirements in order to decrease transaction costs. To this end, it is a good idea to consider fine-tuning the ICONTEC protocol based on the UNFCCC requirements.

2 BASIC INFORMATION

In USD

IDB Project ID: **ATN/FM-12891-CO**; GEFSEC ID: **4135**; GEF Project ID: **CO-X1008**
Title: **"Mechanism for voluntary mitigation of greenhouse gas emissions in Colombia"**
Project Number: ATN/FM-12891-CO
Country: Colombia
Beneficiary: Fundacion Natura
Sector/Subsector: Environmental Programs

Board approval date: 08-31-2011
Effective date of grant: 11-03-2011
Eligibility date for first disbursement: 08-01-2012

Amount of the Non-Reimbursable Investment Financing Agreement
Original amount: 2,700,000 (Grant of the Global Environment Facility - GEF)
Actual amount: 2,700,000
Counterpart funds[5]: 7,773,900
Total project cost: 10,473,900

Execution period
From approval: 64 months
From the execution of the Non-Reimbursable Investment Financing Agreement: 62 months

Disbursement periods
Original date of final disbursement: 05-03-2016
Actual date of final disbursement: 12-30-2016
Cumulative extension (months): 6 months and 27 days
Special extension (months): N/A
Disbursements
Total amount of disbursements up to date: 2,700,000

[5] For GEF purposes, counterpart funds is the same as co-financing.

3 INTRODUCTION

3.1 Purpose of the evaluation

Terminal evaluations (TEs) provide an independent, comprehensive, and systematic account of the performance of a completed project. They consider the whole of the effort, from the design of the project to its implementation and termination, and also take into account its likelihood of sustainability and potential impacts. They are conceived to identify problems in the design of a project, evaluate the achievement of objectives, identify and record lessons learned, as well as provide recommendations on specific actions to be taken to improve the execution of other projects. These evaluations provide an indication of the success or fail of a project.

3.2 Scope and methodology

TEs follow the guidelines, rules, and proceedings established in the Guidelines for GEF Agencies conducting Terminal Evaluations, GEF Evaluation Office Ethical Guidelines.

They use the *relevance, effectiveness, efficiency, sustainability,* and *impact* criteria. Below are the general evaluation questions, based on which, a set of questions exhaustively covering each of the aforesaid criteria included in the ToRs were formulated (Annex 1).

- *Relevance*: How consistent is the project with the main objectives of the GEF focal area and with the environmental and development priorities at the local, regional, and national level?
- *Effectiveness:* Are the actual project outcomes commensurate with the intended project objectives?
- *Efficiency:* Was the project efficiently implemented in accordance with national and international rules and standards?
- *Sustainability:* Are there financial, institutional, socioeconomic, or environmental risks that may jeopardize sustainability of project outcomes in the long term?
- *Impact:* Is there evidence that the project has contributed to reduce carbon emissions or to make progress towards those results? Has it boosted carbon credit trading?

The evaluation must provide information based on credible, trustworthy, and useful information. The evaluation uses a participatory and consultative approach which ensures a close cooperation with government officials, especially from the GEF operational focal point, the IDB country office, the project team, the GEF/IDB Regional Technical Advisor, and key stakeholders (Annex 2). A mission was conducted to visit the project office and other key stakeholders in Bogota, Medellin, Bucaramanga, and Cerro Corredor Central Bogota-Villavicencio.

The aforesaid dimensions were rated based on the evaluator's criteria using the ratings key of the "*Guidelines for GEF Agencies conducting Terminal Evaluations"*, which is provided in

Table 4.

Table 4: Evaluation ratings key

RELEVANCE, EFFECTIVENESS, EFFICIENCY, AND IMPACT RATINGS	SUSTAINABILITY RATINGS
6: Highly satisfactory (**HS**): no shortcomings.	4. Likely (**L**): negligible risks that affect sustainability.
5: Satisfactory (**S**): minor shortcomings.	
4: Moderately satisfactory (**MS**): moderate shortcomings.	3. Moderately likely (**ML**): moderate risks.
3. Moderately unsatisfactory (**MU**): significant shortcomings.	
2. Unsatisfactory (**U**): significant shortcomings.	2. Moderately unlikely (**MU**): significant risks.
1. Highly unsatisfactory (**HU**): severe shortcomings.	1. Unlikely (**U**): severe risks.

Source: *Adapted from GEF 2008.*

4 PROJECT DESCRIPTION

The project objective was to formulate and establish the technological and institutional platform basis for a verified emission reductions market mechanism and to facilitate efforts of voluntary mitigation of greenhouse gas emissions in Colombia through a number of activities based on the following components (IDB 2012) (for further detail, see Annex 3):

Component 1: Creation of a market platform for Verified Emission Reductions operating at a pilot stage. For this purpose, the design and production of three modules that could be gradually established was to be financed: (i) a carbon-market information system and toolbox that emphasizes on information about forest carbon projects and GHG measuring/mitigation and offsetting initiatives; (ii) registry interface linked to a recognized international registry that guarantees transparency and traceability of VERs; (iii) a transactional mechanism that harnesses the technological resources of Colombia's Mercantile Exchange (BMC), the co-executing agency of this component. The modules were articulated in the aforesaid order. In order to guarantee the quality and environmental integrity of the nationally-generated VERs, the platform information system and toolbox promoted the most reputable and broadly used voluntary carbon standards in the international markets, which also include and quantify social and environmental benefits - which is critical in a country like Colombia. This component would also facilitate an institutional and governance arrangement to guarantee the quality, transparency and traceability of Colombian-generated VERs and their trading.

Component 2: Validation, registration and verification of a nationally-based stock of VERs generated by forest carbon projects in Colombia. This component aimed at promoting the formulation, validation, and verification of forest carbon projects generating VERs tradable through the aforesaid market platform. This component would also strengthen the national capacity to design and implement carbon projects. Specifically, this component would provide financial support to at least five forest carbon projects at different stages, in at least two different regions in Colombia until they generated tradable VERs. “

Component 3: Design and implementation of a nationally-based program for corporate and institutional voluntary mitigation and offsetting activities. This component aimed at promoting comprehensive corporate and institutional voluntary mitigation and offsetting strategies that include elaborating GHG emissions inventories, identifying mitigation goals, planning, and defining measures for offsetting GHG emissions. Also, a package of incentives/rewards to promote mitigation was to be created.

Fundacion Natura, as the Executing Agency (EA), signed Technical Cooperation Agreements with each of the project's co-executing agencies, which clearly define the responsibilities of each party in connection with the project and each component. These agreements were only amended to extend their effective period due to the extension approved for the project to end on December 30, 2016.

Colombia's Mercantile Exchange (former Colombia's National Exchange for Farming and Cattle Products), which is the co-executing agency of Component 1, is a partly state-owned company created in 1979 supervised by the *Superintendencia Financiera* (national authority in financial issues). The BMC serves as the main negotiating forum in Colombia for trading commodities, as well as financial instruments like bonds, securities, and contracts; it offers investors various investment alternatives, and provides producers and agribusiness with financial instruments for their activities. The BMC is the only institution authorized to trade commodities different from energy; it is also the only institution in Colombia currently authorized by the *Superintendencia*

Financiera to trade carbon certificates, a market that the BMC is highly interested in exploring and developing and that was recently included in its internal strategic plan.

Fundacion Natura was responsible for executing and leading Component 2, because of its expertise in forest management, design and implementation of projects, its capacity and experience in working in coordination with other institutions and organizations, and also because of its experience in the certification of sustainable productive systems, including agriculture, cattle ranching, forestry, biotrade, ecotourism, and tourism.

Bogota's Chamber of Commerce (CCB, by its Spanish acronym) is a private nonprofit institution that promotes the improvement of life quality and competitiveness of the inhabitants and entrepreneurs of Bogota and Cundinamarca. Created in 1878, it has played a substantial role in helping the national government to promote and strengthen entrepreneurism, and in promoting the creation of regional Chambers of Commerce. CCB is the leading chamber in offering its affiliates other services different from public registry; today it offers a comprehensive portfolio of services to increase productivity, identify new business opportunities and foster the successful participation in national and international markets. CCB has already worked on measuring corporate carbon footprint and providing technical assistance for the procurement of finance in this and other related fields.

Based on the Work Plan (WP), FN set up a Steering Committee (SC) comprising the following seven members:

- *FN, as project proponent and main executing agency.*
- *Colombia's Mercantile Exchange (BMC) and Bogota's Chamber of Commerce (CCB), as co-executing agencies of project Components 1 and 3, respectively.*
- *The Ministry of Environment and Sustainable Development (MADS), representing the government of Colombia.*
- *Colombia's Stock Exchange (BVC) and WWF Colombia, as project partners and co-financing organizations.*
- *Centro de Investigaciones Carbono & Bosques (Carbon and Forest Research Center), as a co-financing organization.*

The Steering Committee met once a year to review the progress made by the project based on M&E and to make decisions on technical and administrative issues related to the implementation of the project, including the approval of Annual Work Plans, major changes to the project, etc. The responsibilities of the Steering Committee included: (a) ensuring that the project objectives were met; and (b) approving the Procurement Plan, the AWPs, and their amendments. The General Project Coordinator was the head of the Technical Secretariat and attended the meetings of the Steering Committee as a permanent guest. The ST independently defined and approved its Internal Operating Rules.

Given the inclusive nature of the project, which required the participation of many different national and local stakeholders in order to succeed, it was necessary to guarantee the participation of different entrepreneurial and institutional stakeholders, as well as the local communities, during its execution. To this end, the WP envisaged the creation of three Technical Advisory Committees (TACs) for each of the three project components which had a mainly consultative role. Each TAC would meet at least semi-annually, would be coordinated by the co-executor of the relevant component and would be formed by a series of public and private institutions[6]. The TACs had no decision-making powers but their recommendations

[6] However, in practice only one TAC was created (for Component 3), since for the other two components monitoring meetings were held with the heads/co-executing agencies of such components.

were to be brought to the attention of the Steering Committee. The TACs would help the project create synergies with existing programs, projects or actions in the country and in the region. The roles and responsibilities of these TACs were to be backed by legally binding institutional agreements and formal partnerships with communication channels and feedback mechanisms previously defined.

The project stakeholders also include the direct beneficiaries; on the supply-side there are the FCP developers, and on the demand-side there are the companies/institutions related to Component 3 *Program for corporate and institutional voluntary mitigation and offsetting activities.*

5 FINDINGS

5.1 Analysis of the project's design and formulation

5.1.1 Analysis of the design: identification of development issues to be solved

The project's Work Plan (WP) clearly identified the development issues listed below, which were an input for the design of the project:

Table 5 Identification of development issues in the design of the project

ISSUE	DIAGNOSIS CLARITY	TARGETED BY THE PROJECT?	EXPLANATION
GHG emissions increased by 39% between 1990-2004.	VC	Yes	Colombia's emissions barely represent about 0.37 % of the world's total (around 180,010 Gg in 2004)
53 % of the national emissions come from agriculture, land use, land use change, and forestry.	VC	Yes	Land use, land use change, and forestry emissions increased by 119% between 1990-2004 due to the "conversion of forests and grasslands".
While only 5.1 % of the emissions come from industrial processes, they increased by 93.7% between 1990-2004, and this percentage could be higher if the sources of energy used in those processes were considered.	VC	Yes	Nowadays, thanks to the project, there are tools, guidelines, methodologies, and technical capacities available to measure the carbon footprint and many companies are already doing it.
There are obstacles that hinder the generation and securing of VERs.	VC	Yes	*From the demand side*: lack of know-how; ii) economic burden; iii) lack of interest in CC issues; iv) lack of public awareness. *From the offer side*: i) insufficient funding; ii) risk and profitability-related perceptions; iii) land and carbon tenure rights; iv) lack of technical capacity; v) lack of information on native species.

NB: VC= Very Clear C= Clear NC= Not Clear NM= Not Mentioned

Source: Work Plan, progress report, and interviews 2014 and 2016.

This project was thoroughly discussed at MADS in order to strengthen the government's institutional action, as well as the mechanisms for cooperation with the civil society and private sector stakeholders, and also the National Environmental System. Therefore, not only MADS, but also other Colombian government agencies in charge of protecting natural and

productive systems that affect the generation of environmental goods and services were involved in the design of the project.

5.1.2 Analysis of the design: results framework and risks identified

The results matrix had a vertical logic: the indicators and activities were consistent with the outputs, the outputs with the components, and the components with the objective. The objectives, components, outputs, activities, and indicators were feasible and clear. In addition, components and outputs were consistent and connected with the development programs identified in the Operation Manual (OM) - which was confirmed through the interviews conducted during the field work. However, the results matrix did not include impact indicators.

The project seeks to mitigate GHG emissions and also generate offsetting mechanisms to promote a carbon-neutral economy, solving the issues listed in the preceding table. To this end, the project sought to create a local carbon mechanism where the "fixing" and "issuing" agents would come together to create a win-win situation. The implementation of Component 1 resulted in the linkage of buyers (demand-side) and sellers (supply-side) and turned the carbon credit transaction system reliable. On the other hand, Components 2 and 3 created the carbon supply and offer necessary to foster trading.

The project design allowed for a mechanism to adapt the project as required by the context; FN could, on its own initiative and after an internal discussion with its project partners, suggest changes to the POM in order to adapt the project to changing conditions or circumstances during the execution phase. Suggested changes had to be discussed with the Bank staff in charge of the project supervision and required their non-objection (IDB, 2012).

The risks identified in the WP were logic and consistent with the development issues and proved to be a relevant input in determining the activities to be carried out by the project (Annex 4).

5.1.3 Analysis of the design: monitoring and evaluation, and coordination of their application by FN, IDB, and the partnering institutions

The project's Operation Manual provided for the use of monitoring and evaluation instruments (AWP, risks matrix, PMR, among others), and laid down the responsibilities of the EA, in this case FN, and the project coordinator. The Manual clearly describes the use of the systems for monitoring the AWP, the budget and the financial execution, external evaluations, audits and the reporting of the information required to establish the progress towards the project's objectives (half-yearly, accounting and financial reports, among others) (IDB 2012).

The Work Plan also had a detailed and suitable design to facilitate the fulfillment of the objectives and outputs of the project, from an internal perspective considering the administrative and technical aspect, and from an external perspective considering the co-executing agencies and partnering institutions.

It was decided that some project components would be executed with the support and leadership of the co-executing agencies, as they offered comparative advantages to achieve the objectives sought: Colombia's Mercantile Exchange (BMC) for Component 1 - Market Platform -, and Bogota's Chamber of Commerce (CCB) for Component 3 - Emissions Reduction and Offsetting. The partnering arrangements with co-executing agencies were properly designed and the roles and responsibilities of each party were duly negotiated.

Within FN, a Project Execution Unit was created to manage the project funds. The Unit was formed by a General Coordinator, an Administrative and Financial Coordinator, an Administrative Assistant, and an Accounting Assistant. It was decided that the General Coordinator would be supported by Technical Coordinators for each component and their specific responsibilities were defined.

5.2 Analysis of project implementation

5.2.1 Analysis of project implementation: results framework

Overall, the project was properly designed, except for some minor inconsistencies derived from excessive optimism about the following aspects:

- *The target for the transactions that would be carried out on the market platform (371,200 tCO_{2e}) without it being mandatory for the companies to offset and mitigate emissions.*
- *The turnaround times of MADS and BMC.*
- *The time frames to complete the procedures and fulfill the requirements to transact FCP credits*, *i.e. the processes for validating and verifying the FCPs were longer than expected.*
- *The costs associated with the implementation of the market platform.*

In addition, the following adjustments were made to the results matrix in order to address changes in the project's perspectives (Annex 5):

- *Outcome: the target for the number of forests or agro-forestry landscapes was increased by 41,200 ha.*
- *Outcome: the target for the number of companies adopting carbon emission reduction strategies was increased by 30.*
- *Output: the target for the number of new native species with carbon sequestration data and management plans was increased from 6 to 20[7].*
- *Output: In order to improve carbon emissions measurement, an alliance was made with MADS-UPME (the Planning Unit of the Ministry of Energy) to update the emission factors of Colombian fuels in order to provide information to the different sector and institutional stakeholders and prepare better GHG inventories.*

5.2.2 Analysis of project implementation: risks framework

Overall, the sustainability of this project is rated 3 Moderately Likely (ML) since, based on the commitment assumed by Colombia at COP21 in Paris, it may be reasonably expected for the future government policies to boost the demand for carbon credits and, thus, their supply and trading.

The project's risks matrix was properly managed. It was updated every year and adjusted as necessary based on the socioeconomic and environmental changes that affected the country's development context (Table 20 in Annex 7).

[7] While the project had planned to generate information on carbon sequestration (with native species) by itself, the target was changed and substantially increased because it was decided that the project would better support other research entities which were generating this type of information.

Although the project initial objectives remained unchanged, during the execution phase a number of socioeconomic and environmental developments that affected the country had some implications for the project:

- *The commitment assumed by Colombia at COP21 in Paris entailed a significant change in the involvement of MADS in the MVC, which opened a new possibility to develop the market and made the project more relevant. Nowadays, MADS is thoroughly analyzing how to develop the market for carbon credits[8] in order to fulfill the country's commitment to reduce its business-as-usual projected emissions by 20%, by assessing the results of the platform operating at a pilot stage during the second half of 2016 and throughout 2017 (FN 2016).*
- *Devaluation of the Colombian peso[9]: as regards the GEF funds, it represented more Colombian pesos per Dollar, which increased the purchasing power in local currency. However, in terms of the counterpart funds[10], the Colombian pesos represented fewer Dollars and a lower purchasing power, which had a negative impact on, for example, the projects funded by ECOPETROL.*
- *The Post-conflict Peace Agenda: the government prioritized/focused its activities on this issue and relegated others (like the MVC), although it did benefit the project in the area of development projects with communities.*
- *At the beginning of the project (2011), the price of a tCO2e was USD6.2, but at the end, in 2015, it had already fallen to USD3.3 and showed a negative trend (Ecosystem Marketplace 2015), which has a direct impact on the feasibility of FCPs, as it makes them less profitable.*

In order to adapt the project to the changes affecting the context in Colombia, a number of adjustments were made to the operation[11], most notably (Annex 7):

- *<u>Related to risk #4:</u> The project's execution term was extended from May 30 to December 30, 2016[12] in order to complete the expected outputs affected by delays at the beginning of the project, as recommended by the MTE 2014.*
- *<u>Related to risk #4:</u> It was decided to "bundle" some forest carbon projects when preparing the PDD in order to diminish both time frames[13] and transaction costs - which are high. The VCS contemplated a bundle project option within its requirements (South Pole and Carbono & Bosques).*
- *<u>Related to risk #6:</u> Due to the increasing interest in the MVC and the information gap existing in this area, the following targets for Component 3 -"nationally-based program for corporate and institutional voluntary mitigation and offsetting activities"- were increased:*
    - *From 4 to 8 guidelines, as a tool to support the companies in areas like the ABC of GHG inventories, indirect measurement, calculation, measurement and carbon*

8 These mechanisms include a tax on the carbon generated by hydrocarbons, which has been recently approved and still needs to be regulated.

9 The exchange rate changed from COP1,871.49 per Dollar on 11-1-2011 to COP3,144.72 on 11-22-2016 (BCC 2016, http://www.banrep.gov.co/es/trm).

10 For GEF purposes, counterpart funds is the same as co-financing.

11 Adaptive management: as explained in section 5.1.2, third paragraph.

12 Non-objection granted according to document CCO-333/2016, of March 7, 2016 (Annex 8).

13 Related to risk #4 of the risks matrix.

footprint, for waste, services, agroindustry, cattle raising, and fuels, among other sectors.

- *From 2 to 4 alliances with the financial sector for the financing of corporate initiatives on energy efficiency and GHG mitigation.*
- *From 20 to almost 35 companies implementing incentives, like using the carbon hallmark.*

5.2.3 Analysis of project implementation: monitoring and evaluation

The project effectively used the following instruments to monitor and evaluate its activities in spite of their complexity, which demanded a long learning process:

- *Annual Work Plan (AWP): used to plan and monitor the activities to be carried out.*
- *Risks Management Matrix updated every year.*
- *Half-yearly Progress Reports and annual supervision missions.*
- *Partial (annual) financial statements for the project: audited by an external firm, they were an internal instrument of FN required by contract.*
- *Project Monitoring Report (PMR): it included information on the progress of the outputs and outcomes of the project[14].*
- *Procurement Plan (PP): updated at least every 12 months, used for the administrative monitoring of the project's goods and services.*
- *Consulting reports: the contracts included terms of reference and had the Bank's non-objection, as provided in the POM.*
- *External audits.*
- *PIR and tracking tools.*

The above instruments allowed properly monitoring all the activities, the financial execution, and the procurement processes, among other aspects. However, according to the people interviewed, the AWP and the PMR are the most useful tools for monitoring part of the administrative aspect of the project. The PP is still perceived as a bureaucratic requirement which does not add much value.

The AWP effectively worked as a tool for planning the activities to be carried out during the following year. Those activities which due to a justified reason could not be carried out as planned, were updated in the PMR and rescheduled for subsequent years during project execution. This proceeding was conducted properly according to the Bank's proceedings.

5.2.4 Analysis of the implementation: coordination of the application by IDB and the partnering institutions

The following work sessions were held to coordinate the execution of the project and operating aspects:

- *Annual meetings of the Steering Committee: to inform the results of the project and take policy related decisions in connection with the carbon markets.*
- *Coordination meetings held for all components every six months, and technical meetings held every two months for Component 1, permanently for Component 2 due to its being executed by FN, and every six months for Component 3: to monitor the*

[14] The PMR was initially supposed to be kept on the Bank's on-line platform, which only allows placing one indicator, but this system was finally not used, and it is therefore relevant to complete the PMR.

progress of each component and take minor decisions in order to achieve the expected objectives.

- *Meetings with IDB every three months approximately or whenever requested: to request updates on the achievement of objectives, targets and outputs, and to solve operating problems as they arouse.*
- *Permanent meetings of each FCP in connection with their execution: to comply with the requirements for issuing carbon credits.*

However, the agreement between MADS, BMC, and FN for the execution of the institutional arrangement for the governance of the platform (output 1.2 "*Governance arrangement for the platform*") has not been signed yet[15], although a draft agreement has been discussed by the parties (Annex 9).

The agreements signed by the project and FN to achieve the expected results more effectively and creating synergies include:

- *VCS, Goldstandard and Plan Vivo Foundation, to disseminate their standards on forest carbon and create tools to build local capacities for using them.*
- *IICA-AEA, Colciencias and USAID, to manage counterpart funds which enabled completing the activities envisaged by the project and increasing targets. The agreements with IICA-AEA and USAID ended one year ago and the one with Colciencias, two years ago.*
- *OZCIMI, to carry out a project targeted at indigenous communities aimed at generating tools for increasing their capacities in climate change, forest carbon and REDD+. This contract continues in place and the activities related to the management of forest and post-conflict areas are being financed by The Inter-American Foundation (IAF).*
- *Carbono y Bosques, to support the PoA in small forest plantations and the first stage in El Retiro (Antioquía). This project continues and there is another one on forest carbon in rubber plantations in the department of Meta.*
- *Universidad Nacional, CAEM, Botanic Gardens of Medellín and Fundación Neotrópica, to support projects aimed at generating information on native species. The research documents and the geographic viewer of native species have been published on the websites of FN and the MVC Project.*
- *INVEMAR, to generate information on mangrove forests in the Caribbean and Pacific Oceans, and eventually develop a REDD pilot project in these ecosystems. A project to replicate an experience with mangroves in the Caribbean coast was completed and presented; it was approved by the European Union for one million Euro, for a period of 3 years.*
- *ICONTEC, to develop activities to train experts in carbon forest and potential auditors for validation and verification purposes. These activities have been completed; a course on forest carbon was carried out and material was developed to replicate the course. The works for verifying the companies' inventories and validating and verifying FCPs continue.*
- *Carbon Disclosure Project, to support the implementation of this incentive in Colombia and become the local partner, promoting the participation of Colombian companies. The agreement is still in effect and was extended for two years. In addition, a project financed by Norway to monitor value chains with "zero deforestation" was approved; the*

[15] It is not expected to be signed soon mainly because a Climate Change Director is about to be designated at MADS and, according to the Legal Department, his approval is a legally mandatory requirement.

term is 4 years and the financing amounts to 1,954,157 Norwegian Krones (USD229,164 approximately).

- *Agreements with ECOPETROL. Six agreements for the implementation of FCP activities: four on efficient cook stoves, one on plantations in the Bogota Villavicencio corridor, and another one on the Roble corridor in Santander.*
- *Agreement with MADS and the United Nations Development Program (UNDP) to establish a platform for reporting the emissions of Colombian companies.*
- *Agreement with ADMIRE (alliance between UNEP[16] and the University of Copenhagen) to remove barriers against the widespread use of wood-fired cook stoves in Colombia.*
- *Agreement with GIZ[17] to systematize the process for REDD-readiness in Colombia during 2016.*
- *Agreement with Forest Trends to monitor the national and international funding of REDD in Colombia between 2009 and 2014.*

5.2.5 Relevance

Overall, this project is rated 6 Highly Satisfactory (HS) because it harmonizes the needs and priorities of beneficiaries and stakeholders, and the results are clearly related to the development issues of the country and national and international regulations.

5.2.5.1 Relation between the project and national and international regulations.

In 2000, Colombia carried out a study named "National strategy study for the implementation of the Clean Development Mechanism (CDM) in Colombia", and in 2003 it developed an "Institutional strategy for the sale of ecosystem services related to climate change mitigation" (CONPES 3242, 2003) exclusively related to the utilization of the opportunities offered by the CDM. The Project Work Plan (IDB 2012) highlighted that the country strategy (GN-2474) prioritized environmental sustainability, risk management, and adaptation to climate change[18], and was, in turn, aligned with the National Development Plan 2010-2014, which also highlighted the importance of environmental protection, risk management, land planning, and institutional strengthening for the socioeconomic development of the country. Therefore, the project supported the implementation of Colombia's priorities related to climate change by setting up a market mechanism for carbon credits generated by FCPs, as well as those related to energy efficiency, established by the Colombian Government in the National Energy Plan, known as "*Estrategia energética integral, visión 2003-2020*" (Comprehensive energy strategy, 2003-2020 vision).

Therefore, based on its design, the project was aligned with the national objective of promoting sustainable development through environmental and risk management. The project's expected results remained aligned and contributed, among other things, to meet the indicator of number of reforested hectares and purchase options for certified GHG emission reductions.

16 United Nations Environment Program.

17 Germany's international cooperation agency

18 These policies include the Institutional Strategy for the sale of Environmental Services related to Climate Change Mitigation, the National Energy Plan (2007), the National Policy for Cleaner Production and Sustainable Consumption (2010).

During the following years, the project remained aligned with the financing priority of the Institutional Strategy[19], as it contributed to the target of financing pilot projects on climate change in the sectors of agriculture, energy, health, water and cleansing, transport, and housing of the 2012-2015 Results Framework, experimentally testing an emissions reduction criterion for agriculture, forestry and the industry based on market techniques. In addition, the project remained aligned with the 2014-2018 National Development Plan (Law 1753 of 2015), which includes a strategy called "Green Growth", which, among other issues, addresses the reduction of GHG emissions without affecting the economic development of the country.

In the last years, the project remained aligned with the policies developed by Colombia related to emissions mitigation and, in general, the strategies to address the challenges posed by climate change: approval of a new CONPES document on Climate Change (CONPES 3700) which outlined a national comprehensive strategy on climate change in 2015 which included the Colombian Low-Carbon Development Strategy (ECDBC, by its Spanish acronym) of 2013[20], the national policy on climate change, and the REDD national strategy, among other things. As regards the ECDBC specifically, the objectives of three of its components[21] are closely tied to the project results. In addition, the project contributed to the progress made in relation to the strategies of the National Policy on Cleaner Production geared towards the productive sectors. As regards the supply of VERs, the project sought consistency with the land-use change and forestry policies included in the "Colombia's Bicentennial Vision 2019" policy, the "Development Plan", and the "Promotion of Commercial Reforestation" policy.

There are no CC-specific regulations in the country, but the Congress is about to discuss the Climate Change Act, which is one of the objectives set forth in the document CONPES 3700 on climate change, which highlights the need for such law. A tax reform including instruments for emissions mitigation has been approved. Such instruments include a tax on carbon generated by hydrocarbons, which needs to be regulated and is aimed at promoting additional demand for carbon credits. In addition, the Congress is already discussing the ratification of the Paris Agreement.

The project was also directly aligned with the 2012-2014 IDB Country Strategy for Colombia, specifically in the following dialog areas[22]: ii) environmental management and adaptation to the consequences of climate change, and vi) energy efficiency and renewable energy (IDB 2015).

The project was also designed under the GEF mitigation components for the industry and forest sectors. The nature of the environmental benefits achieved by the project[23] was consistent

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[19] Related to the "granting of loans to support climate change, renewable energy, and environmental sustainability initiatives which create market incentives to promote the execution of mitigation activities through reforestation, forest conservation, and the use of low-carbon technologies and practices in the productive sectors".

[20] The ECDBC is a development planning program for the short, medium, and long term which seeks to separate the increase in GHG emissions from the country's economic growth through the design and implementation of sector-specific mitigation measures that maximize carbon efficiency in the country's economic activity and, at the same time, contribute to the country's social and economic development. The ECDBC is led by MADS through the Climate Change Department, with support from the National Planning Department (DNP, by its Spanish acronym), and Colombia's Sector-specific Ministries. The sectors that participate in the ECDBC are industry, energy, mining, transport, housing, waste, and agriculture. The objectives of the ECDBC are to identify and assess activities aimed at avoiding the accelerated growth of GHG emissions as the sectors grow, by developing mitigation action plans in each productive sector of the country, promoting the tools necessary for their implementation, including a monitoring and reporting system (www.minambiente.gov.co/index.php/component/content/article/469-plantilla-cambio-climatico-25).

[21] Component 1 Scenarios "Identifying and formulating low-carbon development alternatives at the sector level", Component 2 Planning "Mainstreaming low-carbon development in the sector planning, based on the measures identified", and Component 3 Implementation “Development of sector-oriented action plans”.

[22] The project was indirectly aligned with the following strategic areas: ii) science, technology, and innovation, iii) trade, and v) social protection; and with the following dialog areas: i) agriculture and iii) enterprise promotion policies.

[23] The project’s global environmental benefits are associated with GHG emissions mitigation arising from:

with the strategic programs SP2 "promoting energy efficiency in the industrial sector" in that it promotes the accounting, management, mitigation and offsetting of GHG emissions from companies at the sector level, and SP6 "LULUCF management as a means for protecting carbon reserves and mitigating GHG emissions" by creating feasible financing opportunities that provide incentives for local land and forest managers to improve and maintain carbon stocks. In addition, the project contributed to the strategic objectives of the GEF program related to biodiversity and land degradation. The strategic program SP6 was also significantly related to GEF's cross-cutting forest management program.

5.2.5.2 Analysis of the most relevant stakeholders

The key project stakeholders are listed on Table 16, Annex 10. Generally speaking, Fundación Natura (FN) and Corporación Ambiental Empresarial of Bogota's Chamber of Commerce (CAEM-CCB) have adequate technical and administrative capacity to perform their duties. Colombia's Mercantile Exchange (BMC) is very interested in leading the (internal) carbon offsetting transactions, but changes in its authorities and the staff allocated to the project have led to some delays. The Ministry of Environment and Sustainable Development (MADS) is willing to become actively involved in the project, but its representatives recognize that due to changes of officers like ministries, directors and chiefs, the historic knowledge and empowerment achieved at the beginning of the project has been lost, which prevented them from becoming more effectively involved.

5.2.6 Effectiveness

Overall, the effectiveness of this project is rated 5 Satisfactory (S), because it exceeded the targets in most output indicators and had only minor shortcomings due to not meeting the target for one output and one outcome.

This section analyzes the fulfillment of the output indicators according to the POM. The project created synergies with the different stakeholders in all components, which has led not only to increased awareness of voluntary carbon markets, but also to co-financing for the different outputs and targets established in the project.

5.2.6.1 Effectiveness of Component 1 outputs.

All output targets (except for output 1.2) have been met at 100%.

The platform for transacting carbon credits was properly designed and became operational:

- *The modules included project information, a registration interface for Markit, a transactional mechanism.*
- *BMC is the platform administrator and FN provides technical support.*
- *BMC created a brand named "Plataforma de Mercado Voluntario de Carbono Colombia" (Colombia's Voluntary Carbon Market Platform).*

(i) A reduction in emissions from companies participating in the voluntary mitigation program of near 100,000 tCO2e.

(ii) Mitigation of emissions due to an increase in and regeneration of carbon sinks though reforestation and avoided deforestation in forestry, agroforestry, and silvopasture projects relating to the supply of verified emission reductions and avoided deforestation in Colombia, of 204,000 tCO2.

(iii) *Voluntary mitigation in other sectors not yet included in the project, but for which there will eventually be a trading platform that will stimulate their development. Initially, priority was given to forestry projects offering verified emission reductions which had been implemented in any of the Colombian biological corridors or conservation areas created to preserve diverse natural or cultural areas. In addition, the project led to the institutional strengthening of national and regional environmental authorities in promoting voluntary carbon emission mitigation systems.*

- *Markit is the technology provider, so BMC has worked closely with them during the last two years. A requirement established by Markit to register FCPs (or projects in general) is that they should be verified under a recognized international standard like Gold Standard, Plan Vivo, VCS, and/or CCBS. Buyers should register by opening an account.*
- *Optim Consult provided consulting services on how to make the platform operate at its best, how to place offers, and how to disseminate it.*

No sales have been closed in the trading platform since it was launched, although it opens for bids all Tuesdays from 10 to 11 am[24]. According to some of the people interviewed, this is due to the fact that the bidding mechanism is not appropriate for the platform because, in a context where demand is still low and there is uncertainty among the market players, no companies are willing to bid for carbon credits every Tuesday. The bidding mechanism will be suitable when there is more liquidity and, therefore, it was necessary to leave it ready to operate, but most transactions at this initial stage will be OTC[25]. However, forward sales of carbon credits were also made (about 3,000 tCO2e), but they will not be registered in the platform until the cost of the credits is paid up.

The strategy of BMC to overcome this barrier is to seek companies willing to buy carbon credits (one by one) and include the national protocol in the transaction platform, as well as participate in government policy discussions related to the Climate Change Act, carbon taxes, and the incentives/obligations for companies that measure, mitigate, and offset their emissions.

The Memorandum of Understanding (MoU[26]) for the operation of the platform has not been signed yet, mainly due to issues with the Ministry of Environment and Sustainable Development (MADS). However, FN, BMC, and MADS have made progress on the drawing up of a draft (see Annex 9) which defines the operation of the platform, which is consistent with the existing regulations and the forest business policy.

The project did generate output 1.3, since the BMC and MADS agreed upon a proceeding for the platform to provide information on emission reduction units from the voluntary market to the national single accounting system for emission reductions. While the institutional/government support is critical for the process to be officially legitimate and sustainable, the project also benefits from the information generated by the private sector, at no cost for the Government.

Table 6 Fulfillment of the outputs of Component 1 (C1): Market Platform

OUTPUT INDICATOR	BASE LINE	TARGET	FULFILLMENT	%	COMMENTS
1.1 Number of modules of the platform developed and in operation	0	3	3	100 %	A website (*www.bmcco2.com.co*) including Module 1 with information, Module 2 with the registry and Module 3 with the transactional mechanism is operational.
1.2 MoU amongst partners is signed (an institutional and governance mechanism for the	0	1	0	0%	The Legal Department of MADS stated that the Director of CC to be designated must approve said agreement, so it has not been signed yet, but there is a draft containing the elements promoted by the project (Annex 9).

[24] Interview with Vanessa Vanegas, BMC Business Area, and Roberto Gómez, Project Coordinator, 2016.

[25] "Over the Counter", which means one-on-one (buyer/seller).

[26] "Memorandum of Understanding".

OUTPUT INDICATOR	BASE LINE	TARGET	FULFILLMENT	%	COMMENTS
operation of the platform)					
1.3 One common procedure to ensure a single accounting system is officially adopted	0	1	1	100 %	The proceeding to share the database of the CDM and NAMA registries managed by MADS was defined in order to avoid double accounting. This process is linked to the country's reporting processes, which are important in view of the commitments made by Colombia at COP21 and in connection with its NDC.
1.4 A national and international promotion, dissemination and education campaign about the voluntary exchange platform is implemented	0	16	16	100 %	National and international events where the project participated and the platform was presented. It was presented at 5 versions of the Latin American Carbon Forum, 2 versions of Carbonexpo, COP21 in Paris, COP20 in Lima, and other national events with MADS, the National Forest Symposium, Feria Internacional del Medio Ambiente (3 versions), among others.

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: Progress Report and interviews 2016.

5.2.6.2 Effectiveness of Component 2 outputs.

All output targets were exceeded.

Table 7 shows the level of fulfillment of the targets of Component 2, the carbon supply, the FCPs, all of which were met or exceeded. Under output 2.1, six projects were validated and indirect support was provided to others. It should be noticed that, although the validation and verification processes take considerable time (12 to 18 months), the target was exceeded.

The first projects are the ones directly supported, and indirect support was provided to the others in order to have additional projects in case the target could not be met with the first ones. The status of the FCPs is the following:

Portfolio projects directly supported by MVC Colombia

- *Bundle Project for the Recovery of Degraded Areas with Agroforestry Systems in Colombia (El Silencio and Guacamayas stages): both projects got validated with the support received from MVC Colombia. During the first stage, 74,555 tCO2e are expected to be reduced, and 15,000 tCO2e during the second stage.*
- *Efficient Cook Stove Bundle Project in Antioquia and Santander: the project got validated with the support received from MVC Colombia and about 60,368 tCO2e are expected to be reduced. This project has 2,000 female beneficiaries[27] of a total of 9,000 beneficiaries including their family members. The stages of Cornare, North of Santander and Guajira, funded with counterpart funds, are in the process of being included and all of them have a similar potential.*
- *REDD+ Robles Corridor: the project got validated with the support received from MVC Colombia and about 3,718 tCO2e are expected to be reduced. Of a total of 135*

[27] The participation of women in other projects with efficient cook stoves is as follows: 2,000 in the Robles Corridor, 1,350 in North of Santander, and 750 in Guajira.

beneficiaries, 24% (33) are women, and of such percentage, 8% (11) are heads of household.

- *Bundle Project with Commercial Forest Plantations in Vichada: the project got validated with the support received from MVC Colombia, its emission reductions are estimated in 1,185,191 tCO2e, and one verification has been carried out.*
- *Rubber Plantations in Mavalle: the project got validated with the support received from MVC Colombia and about 1,294,581 tCO2e are expected to be reduced.*
- *Bogota-Villavicencio Road Biological Corridor: a reforestation project along the road which already has its PDD prepared and awaiting validation, financed with counterpart funds, and with 79,075 tons of CO2e expected emission reductions. In this project, of a total of 647 beneficiaries, 34% (221) are women and 2% (13) are institutional beneficiaries.*

Portfolio projects indirectly supported by MVC Colombia

- *REDD+ Cispats Bay Mangroves: a project for avoiding the deforestation of a mangrove forest with 917.351 tons of CO2e emissions avoided. In validation process with counterpart funds from INVEMAR. MVC Colombia supported the land remediation activities aimed at estimating the carbon stocks in mangrove forests under the Plan Vivo standard.*
- *REDD Huila: it is being validated by ONF Andina and Cormagdalena; MVC Colombia supported the dissemination activities, the execution of contracts and land surveys.*
- *Coffee and Carbon: a project for agroforestry systems in coffee plantations. Emission reductions of about 515,000 tons of CO2e have been estimated by 2020. MVC Colombia supported dissemination activities and the preparation of a work plan.*
- *REDD+ Serranía de San Lucas: MVC Colombia supported the execution of a pre-feasibility assessment and the preparation of an updated PIN and a work plan.*
- *REDD+ Selva de Matavén: MVC Colombia supported the review of the PDD and provided advice on adjustments. The validation is currently being done with counterpart funds contributed by Mediamos S.A. and Acatisema.*
- *REDD+ Solano Bay: MCV Colombia supported capacity-building for community organization (Los Delfines Community Council).*

Apart from exceeding the target for the number of projects supported (6 instead of 5), the amount of verified emission reductions (in tCO2) was much higher than the target in spite of the lengthy FCP validation and verification processes; therefore, the warning given by the MTE was successfully addressed. However, the revised PMRs do not state that VERs from the Efficient Stove Bundle Project in Antioquia and Santander (about 2,500 tCO2e during the platform launch) were only sold to Banco Corpbanca and Gimnasio Fontana. In addition, credits from the ICONTEC protocol were sold to the following companies: Keyser, Citiparking, Medplus, Seguros Alliance, and Centro Comercial Platina[28].

Proposed regulations for carbon duties[29] were prepared and accepted by MADS at that time. Three consultation workshops on carbon duty regulation had been planned, but in the end eight were conducted, though only in Bogota. No workshops were carried out in the rest of the country because it had not been contemplated to do so even if doing so would have enhanced the legitimacy of the process.

[28] Face-to-face interview with Roberto Gómez, Project General Coordinator, and Vanessa Vanegas, a VMC Business Area professional.

[29] Through consulting services financed by the project and provided by Corporacion Ecoversa (Economía, Ecologia y Conocimiento), a company/organization that works for the government's "natural heritage" program.

In output 2.2, development of training tools, the translated guidelines for the three international standards used are taken into account. Twenty-one methodological guidelines were prepared (the initial target was 6). The capacity building for public or private institutions exceeded the target by far and included CARs, community groups, ethnic groups (indigenous and Afro-Colombian people), SINA institutions, private companies, certifying entities, NGOs. This target was achieved with support from the standards, ICONTEC, and different institutions from this sector.

In output 2.3, the number of institutions sensitized was directly recorded, although an additional sensitization activity was carried out on print media with wide circulation like Semana Sostenible, El Espectador, La República, Cable Noticias, and Data IFX, among others.

Table 7 Fulfillment of the outputs of Component 2 (C2): Nationally-based stock

OUTPUT INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%	COMMENTS
2.1 Number of projects in at least 2 regions supported for validation, registration and trading of their VERs under international standards	0	5	6[30]	120%	*Target exceeded.* The following projects were validated: small plantations in the Silencio and Guacamayas (Antioquia) stages, A/R Bogota-Villavicencio Road Ecological Corridor (Cundinamarca), REDD+ Robles Corridor (Bocaya and Santander), and commercial forest plantations in Vichada. VERs were only traded for the project with efficient cook stoves.
2.2 A capacity-building program in carbon accounting and monitoring, and project development, validation and verification for forest carbon projects	0	22	94	427%	*Target exceeded.* Finally, 94 participant institutions were trained, exceeding the target set in the POM.
2.3 Number of financial institutions and investors	0	40	53	132%	*Target exceeded.* Sensitization and dissemination processes targeted at BMC brokers and

[30] The following projects received indirect support and made progress, although they did not form part of the validation target of the portfolio: Productive forest systems in degraded savanna areas in Colombia (Pajonales-Mavalle), REDD+ Selva de Mataven, REDD+ Mangrove in Cispata, REDD+ Serrania de San Lucas, and REDD+ Huila.

OUTPUT INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%	COMMENTS
reached by the strategy					financial-sector institutions (10) were carried out through ANIF and the green protocol (22).
2.4 Number of new native species with carbon sequestration data and management packages	0	20	260	1,300%	*Target exceeded.* With the delivery of all the research studies carried out by the 5 partnering institutions, there is a total of 260 native species with information from allometric equations, biomass or carbon data, which exceeds the project's initial target (6 species)

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: Progress Report and interviews 2016.

As regards output 2.4, all the information is available from publications and a geo-viewer freely accessible on the websites of MVC and Fundación Natura.

An additional publication was made - "*El ABC de los Mercados de Carbono*". Support was provided to MADS for dissemination and outreach activities related to the NDC (Nationally Determined Contribution) targeted at the academics, the private sector and the civil society. The international and national financing of REDD issues was monitored, including financial support to MADS for reporting to the United Nations Voluntary REDD+ Database (VRD). Integrated land planning, sustainable production and conservation processes related to FCPs have been strengthened.

In addition, the knowledge of the VCS, Gold Standard and Plan Vivo standards increased thanks to the agreements signed with FN and the project; the same applies to the Carbon Disclosure Project (CDP).

5.2.6.3 Effectiveness of Component 3 outputs.

All output targets were met or exceeded.

Under output 3.1, five workshops on the GHG protocol and energy efficiency were carried out using the protocol of the World Resources Institute, group training sessions were held with the 60 companies which afterwards formally joined the program, and 120 companies were evaluated with the pre-diagnosis tool developed by the program. In addition, energy efficiency evaluations to identify corporate mitigation opportunities and pre-feasibility evaluations for the implementation of mitigation measures were also conducted through two consulting assignments - one of them lasted four years and the other one covered the last year of project execution.

Table 8 **Fulfillment of the outputs of Component 3 (C3): Corporate activities**

OUTPUT INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%	COMMENTS
3.1 Program launched	0	1	1	100%	*Target met.* It refers to the corporate capacity building program for an integrated management of corporate carbon footprint
3.2 Number of companies benefited by the incentives identified	0	20	35	175%	*Target exceeded.* Works are being done with 35 companies to develop incentives.
3.3 Carbon footprint guidelines adapted for the program, broadly disseminated	0	6	8	133%	*Target exceeded.* A basic carbon footprint guideline was printed and there are other ones in digital format on the MVC website.
3.4 Business case studies published and disseminated	0	4	4	100%	*Target met.* Apart from the case studies, an informational video was made for each case study for purposes of promoting the strategy.
3.5 Number of agreements signed with banks to participate and to disseminate their financing strategies amongst companies and institutions	0	2	4	200%	*Target exceeded.* BanColombia, CORBANCA, Banco ProCredit, and Finamerica.
3.6 Capacity built within the MADS on voluntary carbon markets	0	1	1	100%	*Target exceeded.* The support program was reformulated and it was agreed with MADS to update the fuel emission factors (FECOC) with UPME-MME.

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: Progress Report and interviews 2014.

In output 3.2, the MVC determined the private incentives that can be developed for the Colombian companies, namely:

1. *Voluntary reporting platform; an agreement was signed with CDP (Carbon Disclosure Project).*
2. *Implementation of the corporate carbon footprint label of ICONTEC, which shows the different actions taken by the companies to measure, decrease and offset their carbon footprint.*
3. *The evaluation and definition of proper mechanism to facilitate credit access to companies that measure their carbon footprint.*

The aforementioned incentives - especially the first two - contributed and still contribute to encourage more companies to measure their carbon footprint and, although they did not lead to a demand of 371,000 tCO2e in carbon offsets, they did lead to a reduction of 259,903 tCO2e by the companies instead of the 100,000 tCO2e originally expected - i.e. there is actually a deficit of 210,000 tCO2e.

Fifteen[31] of the country's largest companies work with the CDP[32], including banks, financial, food, trading, energy, and hydrocarbon companies. The remaining 20 companies use the ICONTEC seal.

As for the guidelines for managing GHG inventories (output 3.3), one has been printed and the other ones are available on line. The topics were defined and two additional guidelines were prepared (for a total of eight) to help companies develop their GHG inventories and reports. The guidelines are the following:

- *Guideline 1. Corporate Carbon Footprint.*
- *Guideline 2. Inventory of GHG in fossil fuels.*
- *Guideline 3. Inventory of GHG in the service sector.*
- *Guideline 4. Inventory of GHG in the agroindustrial, cattle raising, and food sectors.*
- *Guideline 5. On the calculation and management of an organization's scope 3 carbon footprint.*
- *Guideline 6. On the calculation and management of the carbon footprint related to waste management and disposal.*
- *Guideline 7. On the management of an organization's carbon footprint.*
- *Guideline 8. Corporate carbon footprint reporting.*

As regards the "*companies and institutions that adopted comprehensive strategies for calculating, managing, mitigating and offsetting their carbon footprint*", the activities covered 60 highly involved and committed companies, but diagnostic assessments were carried out for more than twice that number (130). As for the "*verified voluntary corporate GHG emissions mitigation*", the inventories of 31 companies participating in the project have been verified and approved by ICONTEC (PMR 2016).

Under output 3.4, case studies were published and an informational video was made for each of them:

- *La Clay brick factory: emissions reduction with fuel use optimization and change of fuel.*
- *Bogota Plaza Hotel: mitigation with energy efficiency projects, change of lamps and setting up of solar panels.*
- *Essentia (formerly Propilco): changes in the productive system, which reduced its use of energy and raw material, and GHG emissions.*
- *Procables: successful case of identification of technological improvements based on the carbon footprint.*

All of these case studies were disseminated at the training workshops held with the project companies, as well as in events (fairs on technological solutions), and the launch of the platform, among others.

Output 3.5 is critical to make companies interested in measuring their carbon footprint and to ultimately promote the demand for carbon credits in the local market. Therefore, workshops

[31] Seven of those 15 companies were linked to the CDP, but the project supported them in reporting their GHG and continued supporting them for two additional years (face-to-face communication with Roberto Gómez, General Project Coordinator).

[32] Carbon Disclosure Project.

were carried out to train the financial sector in the issue of GHG, and meetings were held with ASOBANCARIA, PROCREDIT, DAVIVIENDA, and BANCOLOMBIA in order to disseminate the project.

Under output 3.6, the emission factors of Colombian fuels were updated in order to provide information to the different sector players and institutions and build better GHG inventories. Additional results were achieved from the consulting assignment for the "Updating of Fuel Emissions Factors", since a larger number of fuels were included, most critically biomass, and laboratory tests (not included in the original ToRs) were carried out to improve the quality of the output.

Also, an additional consulting assignment was carried out in connection with the economic feasibility of the mitigation projects of the participating companies. An additional publication was released: a quick introductory guide to the global context of market tools for GHG emissions mitigation.

5.2.7 Efficiency: comparison between physical achievements and budget/execution

Overall, the efficiency of this project is rated 6 Highly Satisfactory (HS) since, with the GEF funds and the additional counterpart funds raised - which exceeded by 58% the counterpart funds committed in the project design - the project exceeded most of the outcome and output indicators.

Table 8 shows the project's budget and budget execution. The budget was efficiently executed, following a plan which was modified as described below, without variations in the amount contributed by GEF (USD2,700,000[33]), but with an increase in the total counterpart funds.

On July 27, 2017, a re-allocation of budget was performed between the categories (components) of the GEF funds without altering the total amount of said funds (Annex 6). The reason for this re-allocation was that the budget originally allocated to Component 1 had been underestimated in the POM.

- *The project did not reduce any of its targets; rather, it increased some of them, as described in section 5.2.6 Effectiveness. Annex 11 and Annex 12 show the changes introduced to the project's total financial execution which mainly involve an increase in the total counterpart funds, in spite of some variations (decreases/increases) in some items (outputs).*

[33] There is a balance of USD9,459 of the GEF funds which was not executed and which barely represent 0.0035% of the total amount.

Table 9 **Comparison between the budget in the POM and what has been planned and contracted by the MVC Colombia project (as of December 30, 2016,)**

OUTPUT	TOTAL BUDGET 2012-2016			EXECUTED UNTIL DECEMBER 31, 2016[34]					
	GEF	Counterpart funds	Total (USD)	GEF	%	Counterpart funds	%	Total (USD)	%
1.1: An on-line platform for trading nationally-generated VERs	190,000	250,200	440,200	189,811	100%	211,246	84%	401,057	91%
1.2: An institutional and governance mechanism for the platform is signed	0	0	0	3,496	NA	0	NA	3,496	NA
1.3: A proceeding to ensure a single accounting system for all emissions reduction units traded in the country (CERs and VERs)	100,000	0	100,000	101,676	102%	0	NA	101,676	102%
1.4: A national and international promotion, dissemination and education campaign about the voluntary exchange platform is implemented.	200,000	0	200,000	201,980	101%	1,932	NA	203,912	102%
Total	***490,000***	***250,200***	***740,200***	***496,963***	***101%***	***213,178***	***85***	***710,141***	***96%***
2.1: A portfolio of forest carbon projects supported in the validation, registration and commercialization of VERs	980,000	5,802,850	6,782,850	944,931	96%	5,371,880	93%	6,316,811	93%
2.2: A capacity-building program in carbon accounting and monitoring, and project development, validation and verification for forest carbon projects.	265,000	4,510	269,510	270,993	102%	574,908	12,747%	845,901	314%
2.3: An outreach and awareness strategy about the needs and opportunities of forest carbon projects.	20,000	0	20,000	19,527	98%	2,171	NA	21,698	108%
2.4: Growth and sequestration information generated for native species	225,000	311,940	536,940	219,763	98%	72,287	23%	292,050	54%
Total	**1,490,000**	**6,119,300**	**7,609,300**	**1,455,214**	***98%***	**6,021,246**	***98%***	**7,476,460**	***98%***

[34] The execution information is provided as of January, 2017, and Fundacion Natura is working with the auditing firm to make a final consolidation as of April 2017. Small changes can be expected in the GEF resources and counterpart funds.

OUTPUT	TOTAL BUDGET 2012-2016			EXECUTED UNTIL DECEMBER 31, 2016[34]					
	GEF	Counterpart funds	Total (USD)	GEF	%	Counterpart funds	%	Total (USD)	%
3.1: A technical training and support program for calculating, monitoring, managing, and mitigating corporate or institutional carbon footprints is launched	327,500	358,000	685,500	352,102	108%	5,709,659	1595%	6,061,761	884%
3.2: A set of incentives for voluntary mitigation identified, designed and disseminated	34,383	400,000	434,383	41,643	121%	0	0%	41,643	10%
3.3: Carbon footprint guidelines disseminated	31,617	0	31,617	34,957	111%	0	NA	34,957	111%
3.4: Business case studies	16,500	16,000	32,500	7,522	46%	0	0%	7,522	23%
3.5: A strategic partnership with financial sector institutions to facilitate financing for technological conversion	0	0	0	0	NA	0	NA	0	NA
3.6: Capacity built within the MADS in voluntary carbon markets	40,000	0	40,000	39,575	99%	0	NA	39,575	99%
Total	**450,000**	**774,000**	**1,224,000**	**475,799**	***106%***	**5,709,659**	***738%***	**6,185,458**	***505%***
Project management	270,000	630,400	900,400	262,565	97	320,687	51%	583,252	65%
PROJECT TOTAL	**2,700,000[35]**	**7,773,900**	**10,473,900**	**2,690,541**	**100%**	**12,264,770**	**158%**	**14,955,311**	**143%**

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: POM 2012, WP 2012, VCM 2016.

[35] On July 27, 2016, a re-allocation of budget was performed between the categories (components) of the GEF funds without altering the total amount of said funds (Annex 6).

It should be noted that while most project targets were exceeded by using the GEF funds allocated, two of them - an outcome and an output target - were not achieved:

- *Outcome iii) VERs from forest carbon projects, transacted in the market platform established (tCO2e) (Table 10).*
- *Output 1.2 MoU amongst partners is signed (institutional and governance mechanism for the operation of the platform) (Table 6).*

However, the total counterpart budget increased by 58% approximately as compared with the original budget (the amount approved/confirmed) even if some co-financing entities diminished their contribution, mainly due to the large contribution made by private companies to Component 3 (Annex 13).

5.2.8 Impact

Overall, the impact of this project is rated 5 Satisfactory (S), because it exceeded the targets in most output indicators and had only minor shortcomings due to not meeting one target.

The project lacked impact indicators (section 5.1.2) to be measured with the M&E system, but it did include outcome indicators, most of which were SMART[36]: specific, measurable (targets were set), mostly achievable (except for indicator iii of Component 1) by FN and the project partners, relevant, because they were consistent with the development issues (and, in the vertical logic, with the components and outputs), and timely because they were limited to the period of the project.

Outcome indicator of Component 1: the target was not achieved. The transactions indicated under actual achievement (2,671 tCO2e) attributable to the project took place during the delayed launch of the platform[37] (section 5.2.6.1). It should be noted that conditions are still not appropriate for the companies to demand VERs, although sales have been closed in the domestic market (with the ICONTEC protocol) outside the platform. Forward sales of carbon credits have been also made (about 3,000 tCO2e), but they will not be registered in the platform until the cost of the credits is paid up.

Table 10 Fulfillment of the outcome indicator of Component 1

OUTCOME	OUTCOME INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%
A VERs market for Colombian forestry and land use carbon projects functioning.	iii) VERs issued to forest carbon projects transacted in the market platform established (tCO2e).	0	371,200	2,671	0.7%

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: Progress Report and interviews 2016.

Outcome indicators of Component 2: From Table 11, it is observed that the target for the increase in the sequestration, avoidance and reduction of verified tCO2e taking 2013 as the base year was exceeded (Colombian forest VERs on Markit). Such result is wholly attributable

[36] SMART: specific, measurable, achievable, relevant and timely.

[37] The launch of the market platform was delayed due to the institutional problems of the BMC described in section 5.2.1.

to the project since only the six projects validated in 2016 were measured; there are other projects which have undergone the first verification (cook stoves, El Retiro and Forest Plantations in Vichada) (section 5.2.6.2).

The target for the increase in the number of hectares of forests or agro-forested landscapes (which was 58,800 ha, but was afterwards increased by 41,200 ha) was exceeded. This result is also wholly attributable to the project since it relates to the FCPs supported (section 5.2.6.2). Of the projects included in the portfolio or those indirectly supported, this type of actions have been implemented in the REDD+ Huila projects, the PoA Small Plantations in El Retiro, forest plantations in Vichada, and the rubber project in Meta.

Table 11 Fulfillment of the outcome indicators of Component 2

OUTCOME	OUTCOME INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%
Sequestration, avoidance and reduction of verified tCO2e by supported forest carbon projects	i) Increase in the number of t CO2e verified, sequestered, avoided or reduced	608,700	1,072,700	3,241,937	302%
Conservation or increase in carbon stocks of forests or agro-forested landscapes	ii) Number of new hectares of forests or agroforested landscapes conserved or in which carbon stock has been increased	0	100,000	199,690	200%

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: Progress Reports and interviews 2016.

Outcome indicators of Component 3: As regards the number of companies with which the project worked to adopt emission reduction strategies, the target was exceeded as the project worked with a total of 60 companies (the initial target was 20 and the revised one 50 - i.e. +30) (Table 12). The companies and institutions adopted comprehensive strategies to calculate, manage, mitigate, and offset their carbon footprint, which are fully attributable to the project (section 5.2.6.3).

Table 12 Fulfillment of the outcome indicators of Component 3

OUTCOME	OUTCOME INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%
Companies and institutions adopt comprehensive strategies for calculating, managing, mitigating, and offsetting their carbon footprint	iv) Number of companies that have adopted carbon mitigation strategies	0	50	60	120%

OUTCOME	OUTCOME INDICATOR	BASELINE	TARGET	ACTUAL FULFILLMENT	%
Verified voluntary corporate emissions mitigation	v) Tons of CO2e avoided or reduced[38]	0	100,000	397,875	398%

NB: *The color indicates a fulfillment alert, based on the information provided.*

Source: Progress Reports and interviews 2016.

The target for the tons of CO2e avoided or reduced was exceeded - which is attributable to the project since the actual fulfillment figure represents the mitigation achieved by the companies targeted by the project. Thanks to the actions taken by the companies which directly participated in Component 3 which included measuring their emissions and implementing mitigation and offsetting measures related to energy efficiency and change of fuels, the initial target for the tons of CO2e avoided or mitigated was exceeded. In addition, other companies (like EPM, Sergio Arboleda University, and ISAGEN) voluntarily offset their emissions through the implementation of forestation actions with support from FN and CCB .

Up to date, the emissions baseline for all the companies involved in the project remains above 2,740,398.73 tCO2e per year. An estimated cumulative reduction of more than 43,714.77 tCO2e/year was projected for 2016, and the 397,875 tCO2e target is expected to be met during the life cycle of the mitigation projects which are currently operating. Another 78,803 tCO2e could be mitigated as a result of other projects which could be implemented afterwards (PMR 2016).

According to the people interviewed, among other additional (qualitative) impacts of the project attributable to the three components are, most notably:

- That it *generated great knowledge of and interest in the carbon markets*. By placing the climate change and carbon market issues at the core of national discussions, the project has attracted the interest of different sectors including the government, the community, the private sector, and civil society organizations, among others.
- *It has turned Colombia into a prominent player in the voluntary carbon markets under the UNFCCC.*
- *It has emphasized that the most important aspect of FCPs is not the carbon credits they generate, but the environmental and social co-benefits they bring, which are mostly enjoyed by the society at large.*
- *It has stimulated increasing interest among the companies in reducing their GHG emissions by showing that measuring the carbon footprint is a good tool for using energy more efficiently and reducing production costs.*
- *It has succeeded in implementing mitigation projects related to energy efficiency, change of fuels, and alternative energies with the companies, which have had a demonstrative effect.*

[38] The indicator remained unchanged but the method for calculating it was modified, as indicated in the section entitled "Means of verification and observations on the result indicators" of the PMR. The indicator was modified by eliminating the verification and replacing it with the emission reductions projected for the energy efficiency and technological conversion measures implemented, during the life cycle of such measures. Every year, the projected reductions of companies which implemented mitigation measures during that year will be presented, provided that they have been confirmed and verified by the project team and reported in their GHG corporate inventories (PMR 2016).

5.2.9 Sustainability

Overall, the sustainability of this project is rated 3 Moderately Likely (ML) because there are moderate risks to the sustainability of its activities.

Contributing to the voluntary mitigation of GHG in Colombia in the long term was one of the main objectives of the project. In order for the project results to remain sustainable once the project concludes, the project implemented the strategies described in the following sections.

5.2.9.1 Social and Institutional Sustainability

In order to achieve social and institutional sustainability, the project effectively implemented the following strategies (IDB 2012):

- *It placed great emphasis on involving highly renowned and technically capable national entities as co-executing entities of the project components and as allies of the project (as members of the Steering Committee or partners). This will contribute to the continuation and sustainability of the processes started during the project (sections 5.1.3 p. 21, 5.2.4 p. 24, 5.2.5.2 p. 28, Annex 10 p. 85 and , Annex 14 p. 96).*
- *It included national (institutional) capacity building activities in the three project components, which included technical assistance, training workshops, and preparation of materials, among other things (Table 5, Table 6, Table 7, and Table 8)*
- *It included activities for promoting and disseminating the project and the activities proposed under the three components, which enabled effectively communicating the project objectives and attracted the attention of new national and international allies/stakeholders (Table 5, Table 6, Table 7, and Table 8).*
- *Three bundle FCPs got validated, which will allow other initiatives to become part of them in the mid-term (Table 7).*
- *Training was provided for professionals to act as FCP developers and for internal auditors from companies to verify GHG inventories (Table 7).*
- *The project generated a large number of dissemination, systematization and training materials which can be independently used by anyone interested in this subject to replicate many of the activities and results of the project (Table 5, Table 6, Table 7, and Table 8)*
- *Agreements have been signed with different institutions/organizations to finance FCPs and to disseminate different standards and methodologies to trade carbon credits on the market platform, and staff have been trained to become experts in forest carbon and potential auditors for validation and verification (section 5.2.4).*

FN has demonstrated its value as an Executing Agency (EA) since it managed the project and showed good technical and administrative capacities, experience, and knowledge of the climate change and carbon market issues, apart from its capacity to find partners and raise co-financing.

Considering this, it was a good idea for the project to add co-executing entities to create synergies with FN. Colombia's Mercantile Exchange (BMC) was responsible for the execution of Component 1 (market platform) and, although it had some issues in terms of its turnaround times, it is committed to securing the continuation of the market platform. Corporación Ambiental Empresarial, an affiliate of Bogota's Chamber of Commerce (CAEM-CCB) was responsible for Component 3 (demand - nationally-based program for corporate and

institutional voluntary mitigation and offsetting activities) and continues with the activities related to the inventories and contributing to the issue of public policies. Finally, the Ministry of Environment and Sustainable Development (MADS) operated as the institutional-government counterpart, and proved to be interested in continuing, boosting, and taking advantage of the results achieved through the different project components.

In fact, based on the interviews made, project ownership by the key partners was outstanding, and by other stakeholders (like FCP proponents and entities demanding carbon credits) it was acceptable (Table 25 in Annex 14).

However, for the market platform to be sustainable, it is critical that carbon credit transactions increase significantly, which could be achieved by activating a Government-regulated market (parallel to the voluntary market) as a Government policy, which should make carbon footprint measurement mandatory, and require emissions reduction and offsetting, in line with the commitment made by Colombia at the COP21 held in Paris.

5.2.9.2 Ecological Sustainability

The ecological sustainability of the project can be achieved by increasing the number of FCPs, as they provide long-term protection of locally, nationally and globally relevant biodiversity (Table 7).

The carbon standards being applied by FCPs include monitoring the impacts on biodiversity[39] and on the communities: FN and the project designed and selected FCPs that would promote the conservation and sustainable use of ecosystems, so the projects with VCS were required - if possible - to have the CCBA (Climate, Community and Biodiversity Alliance[40]) certification. The project selection process also took into account considerations related to ecological benefits, that the projects be located in biological corridors or buffer zones of protected areas, and that they protect strategic ecosystems[41].

In general, the FCPs carried out by the project have mechanisms that guarantee long-term sustainability, but the mechanisms are different for each project: in the projects located in the Robles and Bogota-Villavicencio corridors, conservation agreements for a term of 10 years were signed with each producer[42], in the Vichada project producers have long-term sustainable forest management plans for 25 to 30 years, and in the El Silencio project the reserve is dedicated in perpetuity to conservation.

5.2.9.3 Financial Sustainability

Generally speaking, looking at Table 9 it is observed that the actual amount of counterpart funds is more than 4.5 times the amount of the IDB/GEF funds (which is consistent with the GEF co-financing requiremens), which suggests the country is truly committed to and interested in achieving and sustaining the proposed objectives.

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[39] In fact, the monitoring of the FCPs is related to the protection of watersheds, springs and threatened ecosystems (Andean and upper Andean forests, and gallery forests in Orinoquia), and to the creation of a link between CC mitigation and adaptation through more resilient ecosystems.

[40] It should also be noted that GoldStandard and Plan Vivo already assess these same criteria as part of their basic standard.

[41] Face-to-face interview with Roberto León Gómez, Project Coordinator. The CCBA certification may be checked in the PDDs (prepared for VCS and CCB separately) and, therefore, in the public record of the projects. For Gold Standard projects, there is no separate certification since the standard itself includes the monitoring of biodiversity and community issues.

[42] The long-term agreements ensure the involvement/presence of FN in the area during that period. Beneficiaries must honor the obligations assumed under such agreements or otherwise return the supplies received in kind or cash.

Some of the activities carried out by the project may continue to be financed because they could be taken on by the following stakeholders[43] (please, also refer to the explanation for Table 25):

1. *In Component 1, BMC will continue with the platform and expand it to include the national protocol and other potential services[44]. The costs of the platform will be assumed by BMC in its capacity as administrator, but part of them will be transferred to users (buyers and sellers) through the fees they will be charged. This component will significantly increase its feasibility if a regulated market parallel to the voluntary market is implemented.*
2. *In Component 2, the institutions in charge of the FCPs may increase the scope of their activities with the sale of carbon credits - which has already been demonstrated in the cook stove projects, which have sold almost three thousand credits under futures contracts with two companies[45]. The demand for carbon credits from FCPs and other alternative projects could grow if the regulated market complements the voluntary market as explained in the previous paragraph.*
3. *In Component 3, companies will be able to keep measuring their carbon footprint using their own resources since the internal capacities[46] for them to do this have been created, evidencing that this is essentially an information management process. In addition, internal auditors have been trained to internally verify the inventories and, eventually, deliver that service to other companies. The commitment assumed by the companies under the agreement signed at CAEM is to measure their carbon footprint every year. In a regulated market, conditions will be the same for all companies and they will be more likely to measure their carbon footprint.*

The key to activate this market is to promote the demand of carbon credits (offsets) by companies and institutions, as mentioned in the last paragraph of section 5.2.9.1, as it is necessary to create enabling conditions (regulated market in parallel to the voluntary market) and an increasing demand, which will, in turn, boost offer (FCPs and alternative projects) and increase the financial feasibility of the platform.

Consistently with the commitments assumed in Paris (under the UNFCCC), the Government of Colombia is tending to promote the obligation for companies/institutions to mitigate and offset their emissions, so the demand for carbon credits is expected to increase by 2020, when the commitments assumed by the country become effective. Based on the interviews conducted, companies are also realizing that, even if investments are required, being energy-efficient (emissions mitigation) may bring their production costs down and thus increase their productivity. In addition, energy efficiency is becoming an increasingly required condition worldwide, so companies are growing less and less reluctant to measure their carbon footprint.

FCPs are expected to be financially sustainable by themselves as they depend on the profitability of a forestry product or service like timber, or soil fertility, or productivity of a farming

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[43] It is worth highlighting that, based on the interviews conducted, the interaction between FN and its partners/stakeholders was very positive and created synergies which are important for achieving and sustaining the project's objectives.

[44] Other sustainability mechanisms for the platform described in the final consulting report of OPTIM include the sale of other services (like consulting services).

[45] Those resources are already being invested in monitoring the cook stoves for verification purposes (a cost not paid by the project) and building new cook stoves in the same project areas, which will, in turn, generate a larger number of credits in the near future (interview with Roberto León Gómez, Project Coordinator).

[46] Internal capacities were created by training the staff of the 60 companies in how to gather and store information and how to use the emissions calculation tool (jointly created with MADS). The evidence of such training is the certificates of attendance granted to both the companies and the people that participated.

or cattle raising system, and the carbon component is an additional element that can increase their feasibility. Some of these projects are being promoted by the REDD+ mechanism which, through the sale of carbon credits, provides additional incentives for such projects to be developed and for their owners to change their productive practices, increase their productivity and thereby reduce the pressure exerted on forests. The expectations are that, in the near future, voluntary carbon markets in general (the market platform in this case) will consider selling or will be able to sell credits from other types of projects like energy, solid or liquid waste, and transport, among other project types.

Table 13 **Investment v. future income projections for FCPs (as of December 30, 2016)**

Name of project	Lifetime of project (years)	GEF investment (USD) (1)	Projected emission reductions (tCO2e)	Sales price of credits (USD) (2)	Difference (USD) (2-1)	Percentage (1/2)
Bundle Project for the Recovery of Degraded Areas with Agroforestry Systems in Colombia: El Silencio stage	100	17,332	59,319	301,811	284,479	6%
Program of Activities (PoA) with Efficient Wood-Burning Stoves	21	58,903	60,368	345,539	286,637	17%
Bogota-Villavicencio Road Biological Corridor	30	54,161	79,075	402,325	348,164	13%
Plan Vivo Mangroves	30	17,500	917,351	4,667,384	4,649,884	0.4%
Bundle Project for Commercial Forest Plantations in the Department of Vichada	30	53,395	1,185,191	6,030,127	5,976,732	1%
TOTAL		**204,791**	**3,611,122**	**18,411,394**	**18,206,604**	1%

NB: *The color indicates an alert, based on the information provided.*

Source: MVC 2016.

Although Table 13 provides only a brief comparison because there was little information available, without making an exhaustive financial analysis[47] it is observed that in most cases significant returns are expected. It is important to make this type of analyses because they show that the greater the return on investment (profit) in the carbon component, the more attractive the projects are - and the lower the costs are in case of using the national protocol (ICONTEC) once it has been refined according to the UNFCCC requirements.

[47] An exhaustive analysis of the investment in FCPs should include the discounted investment (present value - a discount rate) and, ideally, an analysis of the project as a whole including the earnings and costs related to the project's main activity (e.g. timber production) and externalities. However, it should be noted that there is no consensus among experts in how to choose a discount rate for long-term projects, as is the case of FCPs (for further details, please refer to Edwards 2002. Discount rate for long-term investment projects http://www.rae-ear.org/index.php/rae/article/view/21/42).

6 LESSONS LEARNED, CONCLUSIONS, AND RECOMMENDATIONS

This section is structured around the lessons learned from the MVC Colombia Project, based on which conclusions are derived and recommendations are suggested. The lessons learned, conclusions and recommendations cover the dimensions of design and relevance, effectiveness and efficiency, impact and sustainability.

6.1 On the design and relevance

1 Involvement of the Government:

- *LL:* Involving the government is critical to provide legitimacy and sustainability to the long-term objectives, with a strong involvement of the private sector.
- *Conclusion*: Involving the government in development projects like this one provides legitimacy, facilitates the securing of supplementary funds and promotes the sustainability of the objectives and goals sought, but is a process that takes time. Society benefits from the information generated without a direct cost for the State.
- *Recommendation:* The project outputs should contemplate sufficient resources to conduct a process to involve and convince the permanent authorities of the Government institution(s) which are most relevant for the objectives and goals set for the project. The project activities should be reflected in the institutional AWP - of MADS, in this case.

2 Relevance to the Government:

- *LL:* The relevance of the project to the Government facilitates its ownership and the effectiveness and efficiency in the achievement of its objectives.
- *Conclusion*: This project is highly relevant as a government policy in terms of the development issues identified, the national policies, the goals of MADS, the country's existing regulations, and the objectives and goals of GEF, among others.
- *Recommendation:* Political support should be sought - first from MADS - to design more concrete policies and regulations for each sector, which will be applied as a country project to achieve the expected goals and fulfill the commitment assumed by the country under the UNFCCC (COP21 of Paris).

3 Achievement of indicators:

- *LL:* It is necessary to have impact indicators; it takes a lot of work, resources and time to consolidate a "process" to achieve the objectives set in this type of development projects which yield fruit in the long term, apart from the results reflected by the outputs and outcomes achieved.
- *Conclusion*: The real impact of a project is difficult to measure and it cannot be quantified by only considering the final outputs and outcomes achieved, since in doing so we would be overlooking the progress made during the process necessary to achieve them.

- *Recommendation:* The design of a carbon project should include impact indicators. It is advisable that the activities started by the VCM be monitored, not only in the field of carbon, but also in terms of biodiversity, health, organization, and rural development in general.

4 Materialization of risks and assumptions:

- *LL:* The materialization of the risks and assumptions of the logical framework influences the achievement of the project's outputs and indicators. In addition, due to the possibility that the context in the country may change (in projects that last several years), it necessary to include an adaptive management scheme.
- *Conclusion*: Risks were properly identified in the Project Document (Operation Manual), which helped implement effective mitigation measures. Effective adaptation measures were also taken for the operation (Annex 7 and section 5.1.2).
- *Recommendation:* Many of the original recommendations related to the mitigation of risks are still valid and point at the development and strengthening of a communications and awareness-raising strategy at the political level, so they should continue to be implemented, if possible.

5 Project management

- *LL:* The procurement and financial reporting processes in this type of projects are complex (section 5.2.3).
- *Conclusion*: Based on interviews with the staff of FN, financial processes in general require experienced staff or staff trained by the Implementing Agency in order to comply with administrative requirements.
- *Recommendation:* The Implementing Agency should include in its operations plan more activities aimed at training and supporting the administrative staff in charge of the project's financial processes.

6.2 On effectiveness and efficiency

6 The market platform:

- *LL:* The market demand for carbon credits (by companies or institutions) is the most critical factor for the feasibility of a market platform for carbon credit transactions.
- *Conclusion*: The commitments assumed by the Government of Colombia at COP21 provide an unprecedented opportunity to increase the market demand because it demands reducing emissions in all the economic sectors.

  The market platform became operational in the last months of the project, when the government policy conditions were barely materializing for the platform to be feasible (due to the commitments assumed at COP21 in Paris).
- *Recommendation:* The role of the government is critical to promote the market demand for carbon credits through clear and concrete policies for the measurement, reduction, and offsetting of the carbon footprint, activating a regulated market operating in parallel to the voluntary market.

  It is essential to allow enough time for the market platform to reach its financial break-even point and to provide it with more connectivity with the Government's

information system. There are many initiatives that will generate additional resources to make the platform more profitable, for example:

- *Expanding the platform to include transactions under the national protocol.*
- *Having the BMC seek companies to close carbon credit sales transactions (one by one).*
- *Trading carbon credits under the ICONTEC national protocol.*
- *Selling other consulting services[48].*

7 Information management by the companies:

- *LL:* While the calculation process is simple, it is difficult to create emissions inventories if the companies lack the necessary historic information and a proper information management system.
- *Conclusion*: Companies should systematize their processes for gathering information about their activities in order for them to have accurate emissions inventories and increase their profitability.
- *Recommendation:* A government policy is necessary to expand companies' technical capacities to use carbon footprint indicators, improve their productivity, and bring production costs down. Public policies - especially for GHG mitigation - should be linked to these initiatives, promoting public-private alliances. In this type of projects, it is necessary for companies to make a financial contribution to the process in order to improve their ownership of the project and ensure the continuation of the activities.

8 Public nature of the project's outputs:

- *LL:* It is critical for the outputs of projects financed with GEF resources to be public and, therefore, available to the society at large.
- *Conclusion*: The outputs generated by this type of project should be used as a source of information and work as an input so that other organizations/institutions may progress towards the achievement of the country's objectives. In this case, the outcomes and outputs of the project have been posted on the Internet (http://www.mvccolombia.co/ and http://www.natura.org.co/mvc-mecanismo-de-mitigacion-voluntaria-de-gases-efecto-invernadero-en-colombia/).
- *Recommendation:* All the outputs generated by this type of projects should be posted on the Internet in order to facilitate the public use of the information generated.

[48] Described in the final consulting report of OPTIM.

9 Capacity of the civil society organizations:

- *LL:* The civil society organizations are capable of carrying out complex projects, from a technical and administrative point of view, if closely supported by the Implementing Agency, as is the case of this project.
- *Conclusion*: FN demonstrated that this type of projects, with national objectives for the society at large, can be efficiently and effectively carried out by civil society organizations.
- *Recommendation:* The civil society organizations selected to carry out nationally relevant technical assistance projects should have proven experience and reputation and be continuously supported by the implementing agency.

10 ***Synergies with other projects and initiatives:***

- *LL:* Synergies can be created and the "scarce resources" of a project can be used more efficiently by identifying initiatives (aligned with the intended goals) which are already underway and which can be completed and/or upscaled.
- *Conclusion*: The synergies between MVC and other projects and initiatives are worth mentioning, as they resulted in greater ownership of the project by the key stakeholders and have saved human and financial resources. A good example of this is output 2.4 *number of new native species with carbon sequestration data and management plans* (explained in Table 7).
- *Recommendation*: A strategy for creating synergies with other projects and initiatives should be developed, so it is necessary to map and design a coordination structure which ensures the continuation of the achievement of the MVC objectives.

11 ***Counterpart funds:***

- *LL:* The securing of counterpart funds (especially from the private sector) or additional resources for GEF projects is a challenge that can be overcome, but which demands work.
- *Conclusion*: The IDB/GEF projects provide a good opportunity to leverage resources, since they inspire confidence and credibility, and create an atmosphere of transparency and safety.
- *Recommendation:* The design of a project should contemplate time and resources to raise counterpart funds, especially from private sources.

12 ***Offer of credits:***

- *LL:* Carbon market projects should include not only FCPs, but also other types of projects like energy, solid and liquid waste, and transport projects, among others.
- *Conclusion*: This pilot project only included FCPs due to being a subject closely related to the Executing Agency, but this type of projects should contemplate generating carbon credits from other types of projects in order to foster competition and enable reducing costs – related to carbon credits.
- *Recommendation:* Carbon market projects should include other types of carbon credits like those from energy, solid and liquid waste, and transport projects, among others, provided that there is an estimation of the environmental and social co-benefits.

6.3 On impact and sustainability

13 ***Environmental impact and sustainability***:

- *LL:* The ecological sustainability not only depends on the FCPs. It is important to create opportunities for dialog aimed at encouraging the conservation of natural resources.
- *Conclusion*: The ecological sustainability largely depends on knowing the relevant resource and on the ownership of the project by the target community and stakeholders.

  An example of the experience of Fundacion Natura in this area are the processes of formulation and community involvement it has been carrying out in connection with the Robles Corridor and the Road Ecological Corridor under REDD for more than five years. Such processes enrich the projects from an environmental perspective; they are not simply aimed at sequestering and mitigating carbon emissions, but have a wider scope as they involve land planning, ecological restoration, watershed conservation, and life-quality improvement.
- *Recommendation:* It is critical to continue with the community involvement processes carried our by FN and refined during the implementation of the FCPs.

14 ***Additionality of carbon projects:***

- *LL:* Carbon credits do not make a project feasible by themselves.
- *Conclusion*: Carbon project beneficiaries should be clear about the fact that the main activity and, thus, the feasibility of such projects do not depend on the sale of carbon credits as this is only an additional output.
- *Recommendation:* Before promoting a carbon project, it is necessary to conduct a financial and a market assessment in order for beneficiaries to be clear about what to expect.

15 ***Terminology and costs related to international standards:***

- *LL:* The process for validating projects under international standards is burdensome and expensive for small and mid-sized FCPs with a community-based component, but it is nevertheless more affordable and simpler than that of the Clean Development Mechanism (CDM).
- *Conclusion*: The feasibility of validating small and medium-scale FCPs (less than 1,000 ha) with a community component is questionable due to the costs involved in the processes, and thus bundle projects are a good solution.
- *Recommendation:* It is advisable to complement the offer of carbon credits in the domestic market with carbon credits from FCPs with a community-based component by developing national protocols which comply with the UNFCCC requirements in order to decrease transaction costs. To this end, it is a good idea to consider fine-tuning the ICONTEC protocol based on the UNFCCC requirements.

16 ***Measurement of the carbon footprint:***

- *LL:* Incentives and the obligation to mitigate and offset carbon emissions from economic activities are determining factors for companies to measure their carbon footprint.
- *Conclusion*: Measuring the carbon footprint results in energy and cost savings and added value for the companies, but, since it is a voluntary practice, it will take time for it to be massively adopted by companies, so concrete government policies are necessary in this respect.
- *Recommendation:* The Paris agreements create a great opportunity to cooperate with the Government of Colombia in the definition of national and sector policies for GHG reduction and mitigation. In addition, it is important to identify opportunities and disseminate the economic benefits that companies may obtain by making inventories.

17 ***Gender and youth-related considerations***:

- *LL:* The carbon mitigation and offsetting strategy should contemplate the participation of women and young people who are part of the relevant stakeholders and the impact on them. An example of this are the FCPs described in section 5.2.6.2.
- *Conclusion*: In many development projects communities carry out activities (training courses, generation of jobs, awareness raising, among others) where -sometimes due to the nature of the project - the beneficiaries are adult men, and which do not foster the participation of women and young people.

  This project has shown that the participation of women is critical for the success of FCPs. For instance, in the case of efficient cook stoves, women's participation has been active and critical to diminish the pressure exerted on forests (due to the need for fire wood) and improve the family's economy and health.
- *Recommendation:* It is necessary to improve communication in order to more efficiently reach the women and young people in the communities.

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8 ANNEXES

Annex 1:

INTERVIEW QUESTIONNAIRE

Voluntary GHG Reduction Project TE

Name of interviewer: _____

Person interviewed (name, contact): _____

Date of interview: _____

Interview method (telephone, face-to-face, etc.): _____

INTRODUCTION
IDB is conducting the TE of the project named Mechanism for Voluntary Mitigation of GHG Emissions in Colombia. The idea is to make a critical evaluation of the project's performance providing a comprehensive and systematic analysis from the design of the project, to its implementation and the generation of outputs and outcomes, and potential impacts.
What was your role in the development of the project?
I. RELEVANCE
1. How consistent is the project with the main objectives of the GEF focal area and with the environmental and development priorities at the local, regional, and national levels?
2. Were the problems to be addressed properly identified from the beginning? Have the design and the implementation of the project been in line with the country's reality and existing capacities? Please, explain.
3. Have the problems addressed by the project improved or worsened?
4. Has there been consistency between the needs of stakeholders and those of IDB-GEF? And between the internal logic and the expected outputs/outcomes? And between the design and its implementation approach?
5. Thinking about the project execution, what adjustments to the original plan have been necessary (at the technical, financial, economic and institutional levels) and what were the reasons for those adjustments made to guarantee the achievement of results? Or, have relevant adjustments been made to keep the project relevant?
6. Lesson learned?
II. EFFECTIVENESS
7. What project components/outputs have been completed/achieved? What was the baseline? Planned? Which outputs have been fully achieved? Which ones have been partially achieved? Which ones have not been achieved?

8. Do the indicators properly describe the progress of the outputs expected and planned for establishing a voluntary market in Colombia? Lesson learned?
9. What have been the main risks (and assumptions) which affected the effective development of the project? Were they properly identified? Have they been mitigated? How? Lesson learned?
10. Have links with institutions or organizations been fostered?
11. What other non-planned achievements has the project had? Strengths and weaknesses?
12. Now that the project execution has ended, looking back, what would you have done differently? What went well and didn't went well?
13. With a view to future agreements, what learnings can you draw from this project execution?
III. EFFICIENCY
14. Have the actual expenses for each component/activity/output been consistent with the estimations made in the budget and have they been enough? Have adjustments (to terms, resources, etc.) been necessary?
15. How adequate was the time allocated to the execution of each output/component?
16. What key problems have arouse? Strengths and weaknesses of the financial execution?
17. If you had more economic resources for the project right now, what would you do?
18. How could the project have been executed more efficiently? Lesson learned?
IV. SUSTAINABILITY
19. Is there a sustainability strategy? What are the key activities? How will they be financed?
20. Have the investments made been sustainable?
21. Have the outputs/outcomes or benefits of the project been sustainable up to now?
22. Do you think the project will be sustainable? If yes, what factors do you think have contributed to its sustainability? From a technical and institutional point of view? Why?
23. What are the weaknesses of the project?

24. Who are the beneficiaries, partners and local stakeholders of the project? How many are they? Have they taken ownership of the project? What commitments have they assumed? Have they cooperated? How have they complemented each other? What activities have been assumed by the counterpart or other stakeholders?
25. Is there cooperation and complementarity with other projects or initiatives in Colombia or worldwide? What commitments have they assumed? Have they cooperated? How have they complemented each other? Are there any value-added outputs?
26. What do you think are the key stakeholders to guarantee the continuation and/or sustainability of the outcomes/benefits of the project? What are the key activities to strengthen the EA?
27. What are the main challenges to the sustainability of the project? Have they been addressed? What potential measures could be taken? Lesson learned?
V. MONITORING AND EVALUATION
28. What instruments have been used to monitor and evaluate the project? (Mid-term and Final Reports, Field Visits, PMR/PCR, Evaluation Reports, etc.). What indicators have been used?
29. How good was the supervision? What could be improved?
30. Has a results-based management approach been used? Please, explain.
31. How often were they applied? Lesson learned?
VI. IMPACT
32. What innovative experiences, processes, methodologies or services have come up or have been adopted? Have they been successful? What activities have fostered innovation?
33. What are the impacts or potential impacts of the project (environment, level of income, socioeconomic matters)?
34. Has the project contributed to obtain any unforeseen impact?
35. How can the project build upon its successes and learn from weaknesses? Lessons learned?

Annex 2:

FIELDWORK AGENDA AND PEOPLE AND ORGANIZATIONS INTERVIEWED

Table 14 **Fieldwork agenda and people and organizations interviewed**

<table>
<tr><th></th><th>Monday, Nov 28</th><th>Tuesday, Nov 29</th><th>Wednesday, Nov 30</th><th>Thursday, Dec 1</th><th>Friday, Dec 2</th><th>Saturday, Dec 3</th></tr>
<tr><td>6:00 a.m.</td><td></td><td></td><td>Departure for the corridor</td><td>Trip to Medellin Avianca AV9340, 6:20 am</td><td></td><td></td></tr>
<tr><td>7:00 a.m.</td><td></td><td></td><td rowspan="5">Visto to the Bogota-Villavicencio Road Biological Corridor</td><td rowspan="4"></td><td>Trip from Bucaramanga to Charalá</td><td rowspan="5">Tours</td></tr>
<tr><td>8:00 a.m.</td><td></td><td>ICONTEC Carrera 37 N.° 52 - 95</td><td rowspan="4">CORNARE Rionegro</td></tr>
<tr><td>9:00 a.m.</td><td rowspan="3">Fundacion Natura Carrera 21 No. 39-43</td><td></td><td></td></tr>
<tr><td>10:00 a.m.</td><td>MADS</td><td></td></tr>
<tr><td>11:00 a.m.</td><td></td><td></td></tr>
<tr><td>12:00 a.m.</td><td colspan="5" rowspan="2">Lunch</td></tr>
<tr><td>1:00 p.m.</td></tr>
<tr><td>2:00 p.m.</td><td></td><td rowspan="2">UPME Av.Calle 26 # 69 D-91 Torre 1, Piso 9°</td><td></td><td rowspan="2">South Pole Calle 10A # 34-11 ·Oficina 4005</td><td rowspan="4">Tours</td><td>Trip back to Bucarmanga</td></tr>
<tr><td>3:00 p.m.</td><td rowspan="2">BMC Carrera 21 No. 39-43</td><td></td><td></td></tr>
<tr><td>4:00 p.m.</td><td>MADS</td><td></td><td rowspan="2">MGM Innova Carrera 43A No. 1-50 Torre 4 Oficina 315</td><td></td></tr>
<tr><td>5:00 p.m.</td><td></td><td></td><td>MADS</td><td></td></tr>
<tr><td>5:30 p.m.</td><td rowspan="2">IDB Carrera 7 # 71 – 21, Torre B, Piso 19</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>6:00 p.m.</td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

	Monday, Nov 28	Tuesday, Nov 29	Wednesday, Nov 30	Thursday, Dec 1	Friday, Dec 2	Saturday, Dec 3
8:00 p.m.				Trip to Bucaramanga (from Rionegro) EasyFly, EF7776M, 8:00 p.m.		Return to Bogotá Avianca AV8567, 8:41 p.m.

Annex 3:

PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

8.1 Start and duration of the project

The agreement which kick-Started the project was signed on November 3, 2011. About nine months later the prerequisites were met (August, 2012), and the fist disbursement took place (October 2012). The project execution period was expected to last 48 months and the disbursement period 54 months. The proposed operating closing of the project was planned for May 2016, but upon request of the Executing Agency (Fundacion Natura) the term was extended to December 30, 2016[49].

8.2 Issues that the project sought to address (IDB 2012)

Although Colombia's contribution to global GHG emissions is low (approximately 0.37% of the world's total)[50], the country's emissions have been growing over time. Between 1990 and 2004, emissions increased by 39% and reached an approximate total of 180,010 Gg in 2004, with agriculture (38.1%) and land use, land use change and forestry (LULUCF) (14.5%) representing 53% of total national emissions[51].

Between 1990 and 2004, LULUCF emissions have grown from 11,880 Gg to 26,015 Gg, which is a 119% increase, mainly due to the category called "conversion of forests and grasslands" (3,406 Gg CO2e in 1990 and 16,639 Gg CO2e in 2004). Despite the lack of agreement around the extent of annual deforestation in Colombia, this is undoubtedly one of the country's major sources of emissions. In 2007, the *Instituto de Hidrología, Meteorología y Estudios Ambientales* (IDEAM; Hydrology, Meteorology and Environmental Studies Institute of Colombia) recently calculated that the annual average forest cover loss in Colombia is approximately 330,000 hectares[52],an amount three times higher than previous estimations.

On the other hand, although industrial processes account for 5.1% of the country's total GHG emissions, they showed a 93.7% increase between 1990 and 2004 - a percentage that would be even higher if the emissions from the energy sources used in industrial processes were considered.

As regards the demand side, a survey conducted with 45 large companies and institutions from different sectors revealed the main reasons why companies are not participating in self-generated initiatives to mitigate and offset their carbon footprint: (i) lack of essential know-how, (ii) economic burden, (iii) lack of interest in climate change-related issues, and (iv) lack of public awareness. However, a recent survey conducted by Asociacion Nacional de Empresas de Colombia (National Association of Colombian Companies, or ANDI, by its Spanish acronym) and the consulting firm Deloitte revealed that 97% of the surveyed companies are interested in learning about options to measure and mitigate their GHG emissions, and 94% believe that offsetting their emissions would be a good investment for their companies[53]. However, although 69.7% of the members of ANDI consider that their companies will suffer the effects of climate change, only 24.4% of them are willing to take measures to mitigate their emissions[54]. When

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[49] Non-objection granted according to document CCO-333/2016, of March 7, 2016 (Annex 8).

[50] IDEAM, Second National Communication, 2010.

[51] Based on the 2010 national reports on deforestation rates in Colombia -three times larger than reported in the previous reports- this percentage is likely to have increased in subsequent years.

[52] USAID/Colombia, Report on tropical forests and biological diversity, 2010.

[53] http://m.portafolio.com.co/negocios/empresas-y-empresarios-dejan-su-huella-decarbono/8516081/home.

[54] Second National Communication to the UNFCCC, 2010.

asked if they had an inventory of their GHG emissions associated with their operations, 62% answered no and only a 16% stated that their companies continuously measure their carbon footprint.

On the supply side, Colombia has great potential for devising forest carbon mitigation projects (and sell their voluntary emission reductions) thanks to the large surface area which is fit for forestry (17 million ha, of which only 1.5% is being exploited), the proportion of its territory which is covered by natural forests (~50% increasingly threatened by deforestation and degradation) and its tropical location[55], which create enabling conditions for a comparatively greater yield of timber, greater production of biomass, and smaller forest change. In spite of this, Colombia has failed to formulate and implement forest carbon projects under the CDM or the voluntary markets due to some obstacles, which include: i) insufficient funding; ii) risk and profitability-related perceptions; iii) land and carbon tenure rights; iv) lack of technical capacity; v) lack of information on native species.

8.3 Immediate and development objectives of the project and expected results

The global objective of the project is to generate global environmental benefits related to the mitigation of GHG emissions and enhanced removal of such gases as a result of: (i) verified emissions mitigation related to the supply of VERs (about 464,000 tons of CO2e); (ii) a direct reduction in emissions by companies participating in the voluntary mitigation program (about 100,000 tons of CO2e); and (iii) voluntary mitigation in other sectors not directly supported by this project but for which a trading platform and information will be available. In addition, Support will be given to at least 58,800 hectares of forests, agro-forestry landscapes and REDD under carbon capture regimes, with positive externalities on protection of biodiversity and watershed conservation. Indirect benefits of the project include the mitigation of around 6 million tons of CO2e over the 10-year lifetime of the forest and agro-forestry projects included in the portfolio of the project, as well as a reduction in emissions by companies of about 1 million tons of CO2e) (IDB 2012).

In this context, the general objective of the project was to create and set up a technological and institutional platform to serve as the basis for adopting a market mechanism for verified emission reductions and facilitate efforts of voluntary mitigation of greenhouse gas (GHG) emissions in Colombia through the following components:

(i) creating a market platform for nationally issued VERs accessible to national or international buyers;

(ii) supporting the issuing of VERs from forest carbon projects developed in Colombia; and

(iii) fostering local demand of VERs through corporate carbon mitigation and offsetting strategies.

8.4 Baseline indicators established

The main baseline indicators established in the project's Work Plan are listed below (IDB 2012):

[55] For example, in Colombia, the production of acacia mangium, tectona grandis, eucalyptus spp, and gmelina arborea -widely used worldwide- is equal to or higher than that in the Philippines, Indonesia, India, Brazil, Malaysia, Argentina, and Chile.

Table 15 **Baseline indicators established in the project's Work Plan**

RESULT INDICATOR	BASELINE
Increase in the number of t CO2e verified, sequestered, avoided or reduced	608,700
Number of new hectares of forests or agroforested landscapes conserved or in which carbon stock has been increased	0
VERs from forest carbon projects, transacted in the established market platform (tCO2e)	0
Number of companies that have adopted carbon mitigation strategies	0
Tons of CO2e avoided or reduced	0

Source: *IDB 2012.*

Table 15 shows the general indicators to meet the general objective o MVC Colombia and indicators for each project result: market platform, forest carbon projects, and nationally-based program for emissions mitigation and offsetting.

8.5 Main stakeholders

The key project stakeholders are listed in the following table.

Table 16 **Key project stakeholders**

KEY STAKEHOLDER	ROLE
1. Fundacion Natura	Project general manager and coordinator and member of the Steering Committee (SC).
2. Colombia's Stock Exchange (BVC)	Partner and co-financing entity, member of the Steering Committee.
3. Colombia's Mercantile Exchange (BMC)	Coordinators of Component 1 Market Platform and member of the Steering Committee.
4. Corporacion Ambiental Empresarial (CAEM), an affiliate of Bogota's Chamber of Commerce (CCB)	Coordinators of Component 3 Local demand for VERs and member of the Steering Committee.
5. Ministry of Environment and Sustainable Development (MADS)	Government counterpart and member of the Steering Committee.
6. Organizations that promote forest projects	Developing forest carbon projects (supply side).
7. Companies/institutions linked to the program with CAEM	Companies interested in measuring their carbon footprint, implementing energy efficiency measures, and offsetting (demand side).
8. WWF Colombia.	Partner and co-financing entity, member of the Steering Committee.
9. Centro de Investigaciones Carbono & Bosques	Co-financing entity and member of the Steering Committee.

Source: *Progress Reports, IDB 2012.*

The activities financed under Component 2 had positive socioeconomic effects on the communities derived from the forest and agro-forestry projects supported by the project. The activities carried out under this component also benefited non-governmental environmental organizations, forest research institutes, universities, local environmental administrations, base

communities, and land owners through the strengthening of capacities for the formulation of forest carbon projects. Component 3 benefited the companies and government agencies that develop strategies aimed at voluntarily reducing GHG emissions.

8.6 Project cost

The estimated project costs are shown on Table 17 and

Table **1**: the total project costs amounted to USD10,473,900, of which 26% was contributed by IDB/GEF and 74% was counterpart.

Table 17: Estimated project cost by component (in USD)

COMPONENT	BANK/GEF	%	COUNTERPART	%	TOTAL
1. Creation of a Colombian-based market platform for verified emission reductions	296,200	54%	250,200	46%	546,400
2. Validation, registration and verification of a nationally-based stock of VERs generated by forest carbon projects in Colombia	1,512,800	20%	6,119,300	80%	7,632,100
3. Creation and implementation of a nationally-based program for corporate and institutional voluntary mitigation and offsetting activities	621,000	45%	774,000	55%	1,395,000
4. Administration, monitoring, and evaluation of the project	245,000	28%	630,400	72%	875,400
5. External audit	25,000	100%	-		25,000
TOTAL	***2,700,000***	26%	***7,773,900***	74%	***10,473,900***

Source: *IDB 2012.*

Annex 4:

RISKS FORESEEN IN THE PROJECT'S OPERATIONS PLAN

Below are the risks identified and the mitigation measures specified in the WP.

Table 18 Risks foreseen in the project's Work Plan (WP)

TYPE OF RISK	EXPLANATION	PROPOSED MITIGATION
Unawareness and scepticism	Among the market players, in connection with the carbon markets and the credibility and quality of the VERs transacted in those markets.	National and international communications campaigns and sensitization and advocacy campaigns geared towards stakeholders and market players.
Deficient offer of VERs	to satisfy the demand of companies interested in mitigation and offsetting activities	• Alliances with the financial sector to address the difficulties associated with the funding of forest carbon projects and voluntary corporate emission reduction activities • Capacity building at national level to promote the supply and demand of VERs • Creating means of information and other means to stimulate the market mechanism • Feasibility assessment for the market platform and a business plan to ensure its feasibility
Insufficient demand	Which may prevent the financial feasibility of the market platform	
Lack of incentives or inefficiency	Of those existing to cause voluntary mitigation to be adopted and to get public support	Alliance with renowned institutions in the country like the co-executing agencies of the 3 components, MADS as a Government representative and other renowned parters at the national and international levels
Non-fulfillment of the targets set	for emissions mitigation or sequestration due to non-compliance with project obligations	
Not reaching an international agreement	On mitigation targets in the next Conference of the Parties of the UNFCCC	Some renowned companies have conducted studies that point at the feasibility of the voluntary carbon markets to become more active in filling the gap created by the absence of regulated markets
Discrepancy over permanence	Discrepancy over emissions permanence and permanence of the trees associated with emissions reduction in the long term	[This issue is not included in the risks matrix because it is a matter of perception. The mitigation measure is to use the risk mitigation tools of each standard]
Effect of natural phenomena	Such as droughts, fires, diseases and pests, among others, worsened by global climate change or social conditions (riots, armed conflicts, or migration)	[This issue is not included in the risks matrix. This risk has not materialized, but it is nevertheless contemplated in the design and development of forest carbon projects]

NB: *Likelihood of materializing, in the opinion of the evaluator, based on the information available:* *Low* *Modest* *Substantial* *High*

1. **High Risk (H):** There is more than 75% likelihood that the assumptions will not be valid, will not materialize or the project may face high risks.
2. **Substantial Disk (S):** There is 51% to 75% likelihood that the assumptions will not be valid, will not materialize or the project may face substantial risks.
3. **Modest Risk (M):** There is 26% to 50% likelihood that the assumptions will not be valid, will not materialize or the project may face only modest risks.
4. **Low Risk (L):** There is up to 25% likelihood that the assumptions will not be valid, will not materialize or the project may face only modest risks.

Source: WP and GEF risk rating.

Annex 5:

CHANGES TO THE RESULTS MATRIX

Table 19 Changes to the results matrix

SECTION	CHANGE	REASON	DATE
RUSLTS			
ii) Number of new hectares of forests or agroforested landscapes conserved or recovered or in which carbon stock has been increased.	The target was increased by 41,200 ha, i.e. the new target is 100,000 ha. The target was exceeded by almost twofold, reaching to 199,690 ha.	It was increased by suggestion of IDB because already from the 3rd year of the project the numbers were higher than initially expected.	February, 2014
iv) Number of companies that have adopted carbon mitigation strategies.	The target was increased by 30 companies and it was nevertheless exceeded with 60 companies adopting those strategies (120%).	It was increased by suggestion of IDB because the program to involve companies was successful right from the beginning of the project.	February, 2014
COMPONENTS			
1. Creation of a Colombian-based market platform for Verified Emission Reductions (VERs).	The original budget was USD296,200, but USD 193,800 were transferred to it from Components 2 and 3.	The cost for fulfilling Component 1 had been underestimated in the design of the project, so adjustments had to be made to the other two components.	July 27, 2016 (Official communication in Annex 6)
2. Design, validation, registration and verification of a portfolio of Forest Carbon Projects in Colombia.	The original budget was USD1,512,800, but USD22,800 were transferred to Component 1 and the budget was thus adjusted to USD1,490,000.		
3. Creation and implementation of a nationally-based program for corporate and institutional voluntary mitigation and offsetting activities.	The original budget was USD621,000, but USD171,000 were transferred to Component 1 and the budget was thus adjusted to USD1,450,000.		
OUTPUTS			
2.4 Number of new native species with carbon sequestration data and management packages.	The target was increased from 6 to 20 species and was exceeded, as the actual number achieved was 260 new native species (1,300%).	With the change of strategy (supporting research institutions), the original target was lower than the one expected to be achieved.	February, 2014
3.6 Capacity built within the MADS on voluntary carbon markets.	The support program was reformulated and it was agreed with MADS to update the fuel emission factors in Colombia.	Due to difficulties in defining subjects of mutual interest, the strategy used with MADS was modified. However, the indicator and the target were maintained.	February, 2015

Annex 6:

BUDGET REALLOCATION BETWEEN PROJECT CATEGORIES

FUNDACION NATURA COLOMBIA
PBX: [57 + 1] 245 57 00
Carrera 21 No. 39-43 A.A 55402
Bogotá, D.C. – Colombia
fundacionnatura@natura.org.co
www.natura.org.co

BMM-2016-146
(Haga referencia este número en su respuesta)

Bogotá D.C., julio 27 de 2016

Doctor
FERNANDO BALCÁZAR
Especialista en Recursos Naturales
BANCO INTERAMERICANO DE DESARROLLO
Representación en Colombia
Cra. 7 No. 71-21 Torre B Piso 19, Edificio BVC
Tel: 325 70 00
Bogotá D.C.

Referencia: Convenio de Financiamiento Técnico No Reembolsable No. ATN/FM-12891-CO. "Mecanismo para la Mitigación Voluntaria de Emisiones de Gases de Efecto Invernadero en Colombia. Alcance a la justificación del intercambio entre categorías de presupuesto.

Apreciado Fernando:

Dando alcance a nuestra comunicación BMM-2016-144 del pasado 25 de julio, nos permitimos aclarar la solicitud de intercambio de presupuesto entre las categorías 1, 2 y 3 del Convenio de la Referencia, así:

- Incrementar el valor de la Categoría No. 1 "Creación de una plataforma colombiana de mercado para la transacción de Reducciones de Emisiones Verificadas (VERs)"en USD $193.800.
- Disminuir el valor de la Categoría No. 2 "Validación, registro y verificación de un acervo nacional de VER generados por proyectos de carbono forestal en Colombia" en USD $22.800.
- Disminuir el valor de la Categoría No. 3 "Creación e implementación de un programa nacional de actividades corporativas e institucionales de mitigación y compensación voluntarias" en USD $171.000.

La variación en los valores intercambiados entre esta y la comunicación precedente se debe a una revisión que hicimos de valores que no habían sido tenidos en cuenta pero que ya estaban facturados y pendientes de pago en el mes de julio.

En el Anexo a esta comunicación, adjuntamos la relación del presupuesto original del proyecto y el presupuesto ajustado, por categoría, de acuerdo con las necesidades previamente expresadas.

FUNDACIÓN NATURA COLOMBIA
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www.natura.org.c

Agradecemos su atención a la presente y quedamos a su disposición para cualquier aclaración adiciona sobre el particular.

Cordialmente,

ROBERTO LEÓN GÓMEZ CHARRY
Coordinador General del Proyecto
Fundación Natura Colombia

Anexo: Lo anunciado

Copia: Josué Avila, BID

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ANEXO
INTERCAMBIO DE PRESUPUESTO SOLICITADO ENTRE LAS CATEGORÍAS DEL CONVENIO

CATEGORIA	NOMBRE DE LA CATEGORIA	PRESUPUESTO ORIGINAL	TRANSFERENCIA	COMO QUEDA LA CATEGORIA
1	Creación de una plataforma colombiana de mercado para la transacción de Reducciones de Emisiones Verificadas (VERs)	296.200	193.800	490.000
2	Validación, registro y verificación de un acervo nacional de VER generados por proyectos de carbono forestal en Colombia	1.512.800	(22.800)	1.490.000
3	Creación e implementación de un programa nacional de actividades corporativas e institucionales de mitigación y compensación voluntarias	621.000	(171.000)	450.000
4	Administración del Proyecto	245.000	0	245.000
OTROS	Auditoría Externa	25.000	0	25.000
TOTALES		**2.700.000,00**	-	**2.700.000,00**

Annex 7:

UPDATED PROJECT RISKS MATRIX WITH COMMENTS FROM THE TERMINAL EVALUATOIN

Below is the risks matrix updated as of January 2015 based on the update made in the MTE of the risks identified at the beginning of the project for which mitigation actions were implemented. It also includes updated comments and a final assessment of each risk (MVC Colombia 2015).

Table 20 Updated project Risks Matrix and mitigation measures implemented

TYPE OF RISK	LIKELIHOOD	IMPACT	PRIOR RATING	MITIGATION MEASURES	FINAL ASSESSMENT AND RATING[1]
1. Local market players' lack of familiarity and skepticism in connection with the carbon markets and the credibility and quality of the VERs transacted there	3	1	S	The general communications strategy of the project was fully defined and implemented from 2014 onwards, and specific actions were carried out to get the different players, including the media, potential financiers, and brokers, among others, more familiar with this subject. The first VCS Workshop in Colombia was enlightening not only about the voluntary markets, but also as regards specific actions aimed at implementing forest carbon projects in the country using the most best known and renowned standard for this type of projects. A second VCS Workshop dealing with jurisdictional issues, REDD and changes in the methodologies of the standard was carried out. Several workshops geared towards stock brokers, administrators, and potential project financiers were carried out with BMC. A workshop with Gold Standard was held in Medellin. Attendants included project developers, local authorities, entities supporting efficient cook stove projects, MADS, CORNARE, and ICONTEC. A second workshop was held with Gold Standard in Bogota for purposes of presenting a new AFOLU methodology of the standard and other issues in connection with energy and efficient cool stoves. Dissemination of the standards continued, the Plan Vivo standard was further disseminated, and the Foro Latinoamericano de Carbono was used as an opportunity to increase local stakeholders involvement.	*The risk decreased.* The mitigation actions implemented resulted in: Knowledge and acceptance of the voluntary markets and, especially, a post-Kyoto positioning for such markets. A more generalized understanding of the potential advantages that the different players (buyers, sellers, and institutions) will get after the COP21 of Paris. ***UNLIKELY (U)***
2. Financial feasibility of the market platform (Component 1)	2	3	A	The risk did not lie in the implementation of the platform, but rather in the trading of Colombian VERs due to the low demand from national companies and institutions. A consulting assignment on the conceptual design of the platform was carried out, based on which a financial feasibility assessment was made (business plan) and the platform was implemented. The different stakeholders were involved - brokers and other stock exchange employees. Under the UNFCCC, specifically at COP21 in Paris, Colombia undertook to reduce its emissions by 20% by 2030 (under a business as usual scenario). This, together with the country's Low-Carbon Strategy, makes the project more relevant and increases the financial feasibility of the platform.	*The risk decreased.* The feasibility of the platform depends on the continuation of the positive attitude of the Government and the international agreements (COP21). The country is also on the right path to create a secure and less costly national standard which can be supported by the platform.

[1] The rating key is included in Table 4, page 3.

TYPE OF RISK	LIKELIHOOD	IMPACT	PRIOR RATING	MITIGATION MEASURES	FINAL ASSESSMENT AND RATING[1]
					MODERATELY UNLIKELY (MU):
3. Absence or lack of relevance of the incentives for voluntary mitigation and real support from the public sector. (Component 3)	2	3	A	Through a consulting assignment on the identification, design, and dissemination of a set of incentives for the private sector to perform voluntary mitigation activities, this risk has been mitigated. Three (3) incentives were defined as a result of said consulting assignment: *1. Voluntary reporting platform: an agreement was signed with CDP (Carbon Disclosure Project).* *2. Implementation of a corporate carbon footprint label: preliminary agreements with Neutral Carbon.* *3. The evaluation and definition of proper mechanism to facilitate credit access to companies that measure their carbon footprint.* In 2013, a workshop on the validation of incentives was held with entities like MADS, ANDI, and several private companies linked to the project. The use of the ICONTEC seal was defined for companies; more than 23 companies are already using it and this figure could increase to more than 30 in the near future. A consulting assignment on legal and tax issues analyzed potential tax benefits that could be obtained by purchasing carbon credits, but the scenario is expected to change with the new tax reform which includes a tax on emissions from hydrocarbons. Communication and visibilization strategies on the environmental and social benefits of the projects and their VERs were carried out; special emphasis was put on those benefits rather than on the impact of the projects in terms of GHG mitigation. Communication materials were prepared for the portfolio of forest carbon projects with international features - video and print material putting the stress on this issue. The project participated in all the discussions held on tools like the carbon tax and the allowance exchange system so that offsetting through carbon credits would be included as an option and those tools would work as real incentives to increase the demand of VERs.	*The risk decreased.* Incentives are still not enough to generate real demand, but there is a commitment assumed by the Government at the UNFCCC COP21 of Paris. The Government has pointed out that all sectors must cooperate and a tax on emissions from hydrocarbons has already been approved. While there are more incentives now, they are still not enough either for the private or the public sector. ***MODERATELY LIKELY (ML)***
4. The emissions mitigation or sequestration targets for the project are not	2	3	A	Additional counterpart funds for direct investment were procured, mainly through ECOPETROL and investment funds (meetings to disseminate the projects were held with Permian Global, Terra Global, and other funds).	*The risk decreased.* The mitigation targets were met and verification is about to be completed. ***UNLIKELY (U)***

TYPE OF RISK	LIKELIHOOD	IMPACT	PRIOR RATING	MITIGATION MEASURES	FINAL ASSESSMENT AND RATING[1]
met due to delays in the implementation of effective actions of the forest carbon projects (Component 2).				Additional international projects were included in the portfolio as a backup in case any FCP failed to perform as expected, and the target was finally exceeded. About USD4 million were raised from ECOPETROL to implement activities in some of the projects prioritized in the portfolio.	
5. Ethnic communities do not get to participate in capacity building programs (Component 2).	1	1	B	Capacity building activities geared towards Afro-Colombian and indigenous communities were carried out. Resources in the amount of USD60 million were raised from USAID to work with indigenous groups, and a pilot initiative which could be replicated with other indigenous communities was carried out. USD100 thousand were raised from COLCIENCIAS and used to carry out a project on Social Appropriation of Knowledge of Climate Change and REDD projects.	*The risk decreased.* The target was met. ***UNLIKELY (U)***
6. The level of implementation of mitigation measures that will enable reducing emissions is not met (Component 3).	3	1	S	The project created scenarios to (i) make the technological solutions necessary for a reconversion available, by identifying existing solutions in the market and creating scenarios to disseminate and sell them, and by including in the AWP a consulting assignment on this issue (which had not been originally planned), and (ii) mobilize funds towards such reconversion (three technological round tables were held with potential financiers and a number of deals were closed). The processes for getting information on existing FCPs and funding alternatives in connection with energy efficiency were streamlined in order to attract demand. Two companies bought VERs for offsetting purposes, apart from implementing mitigation measures.	*The risk decreased.* Corporate mitigation targets were exceeded more than twofold. ***UNLIKELY (U)***
7. The MoU for the platform to become operational is not signed by the partners.	2	3	A	The MoU to guarantee an institutional and governance mechanism that ensures the quality, transparency and traceability of the nationally-generated VERs and their commercial transactions has not been signed due to issues with MADS. The Legal Department informed that the MoU must be signed by the Director on Climate Change, who is still to be appointed.	*The risk decreased.* Although there is a draft MoU (Annex 9), it will not get signed before the project finishes, as it is necessary for a Director on Climate Change to be appointed at MADS.

TYPE OF RISK	LIKELIHOOD	IMPACT	PRIOR RATING	MITIGATION MEASURES	FINAL ASSESSMENT AND RATING[1]
					This issue is suggested to be included in the AWP of MADS. ***MODERATELY UNLIKELY (MU)***

NB: *Likelihood/Impact: 1 low, 2 medium, 3 high.*
Sum/Rating:

5-6= **High Risk (H):** There is more than 75% likelihood that the assumptions will not be valid, will not materialize or the project may face high risks.
4= **Substantial Disk (S):** There is 51% to 75% likelihood that the assumptions will not be valid, will not materialize or the project may face substantial risks.
3= **Modest Risk (M):** There is 26% to 50% likelihood that the assumptions will not be valid, will not materialize or the project may face only modest risks.
2= **Low Risk (L):** There is up to 25% likelihood that the assumptions will not be valid, will not materialize or the project may face only modest risks.

The color indicates an alert in the relevant risk. N.a.= not applicable

Source: *Risks matrix and interviews 2014 and 2016*

Annex 8:

PROJECT EXTENSION ATHORIZATION

BID
Banco Interamericano de Desarrollo

BANCO INTERAMERICANO DE DESARROLLO
REPRESENTACION EN COLOMBIA

CCO - 333 / 2016
Refiera este número en su respuesta

Bogotá, D.C., 07 de marzo de 2016

Señor
Roberto León Gómez Charry
Coordinador General del Proyecto
Fundación Natura Colombia
Presente

Asunto: ATN/FM-12891-CO. Mecanismo Voluntario de Mitigación de Gases Efecto Invernadero para Colombia. Solicitud de ampliación del plazo de ejecución del proyecto - Mecanismo para la Mitigación Voluntaria de Emisiones de Gases de Efecto Invernadero en Colombia.

Estimado Sr. Gómez,

Nos referimos a su nota BMM-2016-113 del 06 de marzo de 2016, por medio de la cual se solicita al Banco una prórroga para el Plazo para Desembolsos a fin de poder cumplir con obligaciones contractuales.

Al respecto, por medio de la presente, le comunicamos que el Banco ha autorizado la prórroga, por un período de seis (6) meses y 27 días, por lo que el nuevo plazo para desembolsos se extiende hasta el 30 de diciembre de 2016. Cabe mencionar que los montos no comprometidos y no desembolsados, serán cancelados por el Banco.

Asimismo, le informamos que estaremos dando un seguimiento cercano a los hitos en la ejecución establecidos en la planificación anual remitida, entre ellos:

1. Los recursos disponibles deben ser comprometidos en su totalidad a julio del 2016 (de acuerdo a la meta establecida en el del POA).
2. La plataforma tecnológica (producto 1.1) debe estar operación, incluyendo las pruebas respectivas, en junio del 2016.
3. El instrumento vinculante del mecanismo de gobernabilidad de la plataforma entre el MADS, BMC y Fundación Natura (producto 1.2) debe estar firmado en junio del 2016.
4. Los 5 proyectos del Portafolio de Carbono Forestal deben haber comenzado su proceso de validación y/o verificación a junio del 2016.

Sin más por el momento, saludamos a usted atentamente,

Rafael de la Cruz
Representante BID

Annex 9:

DRAFT MEMORANDUM OF UNDERSTANDING INSTITUTIONAL MECHANISM FOR PLATFORM GOVERNANCE (OUTPUT 1.2)

DRAFT MEMORANDUM OF UNDERSTANDING TO BE SIGNED BY THE MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT, BMC BOLSA MERCANTIL DE COLOMBIA S.A. AND FUNDACION NATURA

RECITALS

Bolsa Mercantil de Colombia S.A. ("BMC"), Fundacion Natura, and Corporación Ambiental Empresarial ("CAEM", an affiliate of Camara de Comercio de Bogota) are participating in the structuring and execution of the project entitled “Mechanism for Voluntary Mitigation of Greenhouse Gas Emissions in Colombia” (hereafter "MVC"), which is being financially executed by the Inter-American Development Bank as the Implementing Agency of the Global Environment Facility ("GEF"), with the participation of the Ministry of Sustainable Development (hereafter "The Ministry" or "MADS").

The project is divided into three components. Component one, led by Bolsa Mercantil, seeks the creation of a trading platform for carbon credits which incorporates operative, technological and information elements to enable this trading environment. Component two entails generating supply of carbon credits that will be traded in the voluntary market through the development of GHG emissions sequestration and mitigation projects. This component is led by Fundacion Natura. Component three, which entails creating demand for carbon credits by involving companies that voluntarily measure their carbon footprint, carry out activities aimed at mitigating it through a technological transformation, or evaluate the possibility to purchase carbon credits on the platform. This component is led by Corporacion Ambiental Empresarial (CAEM).

The Ministry of Environment has been informed of the development of the platform and has monitored the fulfillment of commitments related to building it and making it operational. It has also supported BMC in technical aspects related to the description of the tradeable product included in the Fact Sheet necessary to list the product in BMC. Both entities are examining the database of the participant registration system of the BMC platform to determine which fields need to be linked between such platform and the Ministry's registry of projects.

Based on section ii), chapter 5.1, of the project description section of the project document entitled "Colombia: Mechanism for Voluntary Mitigation of Greenhouse Gas Emissions in Colombia" submitted to the Board of the Global Environment Facility on July 29, 2011, one of the activities that will be carried out is:

Facilitate an institutional and governance arrangement to guarantee the quality, transparency and traceability of Colombian-generated VERs and their trading. This arrangement shall, among other things, ensure avoiding double accounting for emission reduction units (from CDM and voluntary-market projects). During the first year of the project, BMC, Fundacion Natura, and MADS, with the participation of other stakeholders, shall agree on the nature and features of said arrangement. As a result of this, periodic reports from the platform shall be available to MADS to ensure that no double accounting is taking place. VERs means verified emissions reductions or carbon credits of the voluntary market.

Proposed clauses

1. PURPOSE: The purpose of this Memorandum of Understanding is to establish the activities and roles of THE PARTIES in connection with the administration and operation of the technological platform that will enable companies and other entities offset their GHG emissions through transactions performed in the market of carbon credits. This Memorandum of Understanding is governed by the Law of Colombia, is consistent with the roles of the institutions involved, and shall on no account be contrary to the Law. The queries, developments, tests, and articulation strategies shall be consistent with the roles of stakeholders and reflect the efforts being made in the country to comply with the National Development Plan, especially as regards the National Registry of Emission Reductions, the implementation of the Colombian Low-Carbon Development Strategy (ECDBC), the Monitoring, Reporting and Verification System, and any development in relation to climate change management in the country.

The following activities shall be carried out as part of said purpose:

- Building a Voluntary Market in Colombia through the creation and administration of a carbon credit transaction platform by BMC, as a pilot project for the mitigation of climate change in the country.

- The Colombian Voluntary Carbon Market shall serve as a tool to develop instruments that enable progress towards climate change management in the country.

- BMC is a channel that shall contribute to accounting for national emission reduction units. In this regard, BMC and MADS shall jointly build a mechanism to link their electronic platforms so that BMC may report the following information on-line and upon request of MADS:
    - Information of the registered projects.
    - The number of carbon credits periodically registered by the projects for negotiation.
    - The number of carbon credits traded on the BMC or with transactions registered through the platform.
    - The companies linked to the carbon voluntary market and their voluntary carbon footprint mitigation commitments.
    - The fulfillment of the carbon footprint mitigation commitments by the companies linked to the voluntary carbon market through the purchase of carbon credits.
- BMC shall be responsible for administering the Voluntary Carbon Market Platform, and shall be in charge of the following tasks:
    - Keeping the public website updated so that the public in general may learn about current projects registered in the platform, projects with carbon credits available for sale, companies linked to the voluntary carbon market and their voluntary emission reduction commitments.
    - Provide the voluntary market players access to the Participant Registration Platform in order for i) project developers to update the information on their projects and their progress status, and ii) companies interested in participating in the voluntary market to register as participants and upload information on their voluntary commitments.
    - Provide stock brokers access to the Trading Platform set up by BMC for them to register, in the name of their clients, carbon credit purchase and sale orders so that the system may link them and generate transactions, or for stock brokers to register the transactions made -which shall comply with the BMC rules and be

offset and liquidated through the mechanisms provided by BMC.

- For purposes of the aforesaid, BMC shall create and update an internal regulatory framework that shall regulate the participation of the different players in the platform, informing the Ministry of Environment and the players who have already joined the platform for them to cooperate in maintaining the market in operation.

- Furthermore, BMC shall keep stock brokerage firms trained on commercial and operative issues and shall provide them with commercial support for them to carry out market promotion and monitoring activities.

- Project developers, in order to sequester, remove or mitigate GHG emissions and voluntarily participate in the carbon market, shall register their projects in the Participant Registration Platform and certify and sell their carbon credits through the platform, or register the transactions through it.

- Fundacion Natura shall operate as the technical authority of the Voluntary Carbon Market Platform. It shall evaluate and guarantee the nature and feasibility of each project seeking to participate in the Platform to offer their carbon credits. The projects seeking to participate in the Colombian Voluntary Carbon Market shall be evaluated by a Verification Committee formed by: (i) a professional expert in the field of carbon projects, (ii) a professional in the area of geographic information systems (GIS), (iii) a legal professional (when necessary), and (iv) a professional in the social area.

- Fundacion Natura shall also act as a liaison between MADS and BMC, advising them on issues related to the MVC Colombia initiatieve, carbon markets, MRV, policies and other related issues.

Annex 10:

KEY PROJECT STAKEHOLDERS

Table 21 **Key project stakeholders**

KEY STAKEHOLDER	ROLE	CAPACITY TO PERFORM ITS ROLE	EXPLANATION
1. Fundacion Natura	Project manager and general coordinator	E	FN was the project manager and has the necessary knowledge, technical staff and administrative capacity for the proper progress of the project.
2. Bolsa Mercantil de Colombia (BMC)	Coordinator of Component 1 Market Platform	R	BMC is the entity authorized to trade carbon credits at the national level, as well as other commodities. However, since this is a new subject, there have been delays due to changes in the management of BMC and the staff allocated to the project; they nevertheless have confirmed their commitment to the continuation of CO2e transactions.
3. Corporación Ambiental Empresarial (CAEM)	Coordinator of Component 3 Demand of VERs	E	CAEM is part of CCB[1] and was in charge of dealing with the environmental issues with companies, so it had the technical and administrative infrastructure, as well as the legal support, necessary to carry out those activities.
4. Ministry of Environment and Sustainable Development (MADS)	Government counterpart	R	It is the official (government) entity related to the environmental and climate change issue and the one that makes national policies. The changes of ministers and heads and the restructuring of MADS have affected the continuation and execution of the project, and some specific outputs related to this ministry have not been fully obtained.
5. Organizations that promote forest projects	Developing forest carbon projects (supply)	G	Organizations that develop forest projects, usually REDD, which included a carbon credit sales component.
6. Companies/institutions linked to the program with CAEM	Companies interested in measuring their carbon footprint, implementing energy efficiency measures, and offsetting (demand)	G	Companies are very interested in implementing GHG mitigation measures through energy efficiency initiatives, among others, and, to a lesser extent, in carbon offsetting measures through the purchase of carbon credits.

***NB**: E= excellent G= good R= regular B= bad.*

The color indicates a fulfillment alert, based on the information provided.

Source: Progress Reports and interviews 2014 and 2016.

[1] Cámara de Comercio de Bogotá.

Annex 11:

OUTPUTS PLANNED AND GENERATED VS. BUDGET PLANNED AND EXECUTED (AS OF DECEMBER 30, 2016)

Table 22 **Outputs planned and generated vs. budget planned and executed (as of December 30, 2016)**

Output	Total Cost (USD)		2012	2013	2014	2015	2016	Project end/Progress to date
Component 1: Creation of a Colombian-based market platform for Verified Emission Reductions (VERs).								
1.1: An on-line platform for trading nationally-generated VERs	Number of modules operational	P		1	2	3	3	3
		A		0	0	0	3	3
	USD313,400	P		USD156,314	USD70,000	USD125,000	USD59,844	USD313,400
		A		*USD58,565*	*USD69,991*	*USD70,220*	*USD202,261*	*USD401,057*
1.2: An institutional and governance mechanism for the platform is signed	Memorandum of Understanding	P		1	1	1	1	1
		A		0	0	0	0	0
	USD6,000	P		USD4,800	USD5,457	USD2,460	USD0	USD6,000
		A		*USD543*	*USD2,997*	*USD0*	*USD-44*	*USD3,496*
1.3: A proceeding to ensure a single accounting system for all emissions reduction units traded in the country (CERs and VERs)	Proceeding	P			1	1	1	1
		A			0	0	1	1
	USD70,000	P		USD70,000	USD40,000	USD70,000	USD0	USD70,000
		A		*USD0*	*USD0*	*USD20,178*	*USD81,498*	*USD101,676*
1.4: A national and international promotion, dissemination and education campaign about the voluntary exchange platform is implemented.	Number of events	P	0	4	5	5	6	16
		A	1	4	2	3	6	16
	USD157,000	P	USD9,371	USD54,754	USD47,731	USD47,750	USD14,718	USD157,000
		A	*USD9,371*	*USD15,307*	*USD69,854*	*USD 73,414*	*USD35,966*	*USD203,912*
TOTAL	*USD546,400*	*P*	*USD9,371*	*USD301,034*	*USD163188*	*USD245,210*	*USD74,562*	*USD546,400*
		A	*USD9,371*	*USD74,415*	*USD142,842*	*USD163,812*	*USD319,701*	*USD710,141*
Component 2: Validation, registration and verification of a nationally-based stock of VERs generated by forest carbon projects in Colombia								
2.1: A portfolio of forest carbon projects supported in the validation, registration and commercialization of VERs	Projects	P		1	3	2	3	5
		A		0	0	2	4	6
	USD 6,856,314	P	USD27,664	USD1,115,067	USD1,076,893	USD2,422,892	USD1,813,986	USD6,856,314
		A	*USD27,664*	*USD937,771*	*USD1,654,001*	*USD1,236,941*	*USD2,460,434*	*USD6,316,811*
2.2: A capacity-building program in carbon accounting and monitoring, and project	Institutions trained	P	1	7	7	5	2	22
		A	1	20	15	58	0	94
	USD168,686	P		USD118,772	USD25,036	USD26,541	USD17,000	USD321,138

Output	Total Cost (USD)		2012	2013	2014	2015	2016	Project end/Progress to date
development, validation and verification for forest carbon projects.		A	-	USD*100,109*	USD*177,488*	USD*236,265*	*USD332,040*	*USD845,902*
2.3: An outreach and awareness strategy about the needs and opportunities of forest carbon projects.	Financial institutions and investors	P	0	10	15	25	14	40
		A	0	1	0	25	27	53
	USD26,000	P		USD9,750	USD8,250	USD11,500	USD12,952	USD26,000
		A			*USD1,548*	*USD 20,102*	*USD48*	*USD21,698*
2.4: Growth and sequestration information generated for native species	Native species with information	P	0	2	10	35	0	20
		A		0	65	195	0	260
	USD581,100	P	USD2,340	USD411,550	USD146,620	USD248,363	USD89,516	USD581,100
		A	*USD2,340*	*USD34,731*	*USD206,150*	*USD96,277*	*- USD47,448*	*USD292,050*
TOTAL	*USD7,632,100*	*P*	*USD30,004*	*USD1,655,139*	*USD1,256,799*	*USD2,709,296*	*USD1,933,454*	*USD7,784,552*
		A	*USD30,004*	*USD1,072,611*	*USD2,039,187*	*USD1,589,585*	*USD2,745,074*	*USD7,476,461*
Component 3: Creation and implementation of a nationally-based program for corporate and institutional voluntary mitigation and offsetting activities								
3.1: A technical training and support program for calculating, monitoring, managing, and mitigating corporate or institutional carbon footprints is launched	Program executed	P			20%	15%	6%	100%
		A		60%	22%	12%	0%	100%
	USD783,000	P	USD217,047	USD65,203	USD200,000	USD258,600	USD80,009	USD1,440,289
		A	*USD217,047*	*USD563,444*	*USD321,189*	*USD5,003,576*	*- USD43,494*	*USD6,061,762*
3.2: A set of incentives for voluntary mitigation identified, designed and disseminated	Companies benefited	P		4	0	7	23	35
		A		0	7	5	23	35
	USD469,000	P	USD599	USD113,901	USD102,471	USD282,000	USD79,000	USD366,529
		A	*USD599*	*USD4,930*	*USD0*	*USD28,794*	*USD7,320*	*USD41,643*
3.3: Carbon footprint guidelines disseminated	Guidelines	P		3	3	2	3	7
		A		1	1	2	4	8
	USD44,000	P		USD28,800	USD26,897	USD7,600	USD7,600	USD23,293
		A		*USD1,903*	*USD6,190*	*USD12,743*	*USD14,121*	*USD34,957*
3.4: Business case studies	Studies published	P		1	1	3	0	4
		A		0	0	4	0	4
	USD31,000	P		USD15,500	USD7,750	USD15,500	USD7,750	USD23,250
		A		*USD0*	*USD0*	*USD7,523*	*USD0*	*USD7,523*
		P		1	1	1	0	4

Output	Total Cost (USD)		2012	2013	2014	2015	2016	Project end/Progress to date
3.5: A strategic partnership with financial sector institutions to facilitate financing for technological conversion	Agreements signed with banks	A		0	3	1	0	4
	USD154,000	P		USD152,500	USD1,500	USD152,500	USD0	USD152,500
		A		*USD0*	*USD0*	*USD0*	*USD0*	*USD0*
3.6: Capacity built within the MADS on voluntary carbon markets	Program carried out	P			0	0	1	1
		A		0	0	0	1	1
	USD48,000	P		USD24,000	USD12,000	USD24,000	USD12,000	USD36,000
		A		*USD0*	*USD0*	*USD39,216*	*USD359*	*USD39,575*
TOTAL	*USD15,29,000*	*P*	*USD217,646*	*USD399,904*	*USD350,618*	*USD740,200*	*USD186,359*	*USD2,041,861*
		A	*USD217,646*	*USD570,277*	*USD327,379*	*USD5,091,852*	*- USD21,694*	*USD6,185,460*
	USD900,400	P	USD135,365	USD240,110	USD241,800	USD223,250	USD220,911	USD900,400
		A	*USD135,365*	*USD190,808*	*USD130,066*	*USD75,740*	*USD51,273*	*USD583,252*
TOTAL PROJECT COST	***USD10,607,900***	***P***	***USD392,386***	***USD2,596,187***	***USD2,012,405***	***USD3,917,956***	***USD2,415,286***	***USD11,273,213***
		A	***USD392,386***	***USD1,908,1118***	***USD2,639,474***	***USD6,920,989***	***USD3,094,354***	***USD14,955,314***

NB: *The color indicates an alert in the achievement of the target for outputs which are essential for the proper performance of the project, based on the comparison between outputs and budget execution. A= Actual P= Planned*

Source: Final project PMR 2016.

Annex 12:

CHANGES TO THE FINANCIAL EXECUTION OF THE TOTAL PROJECT RESOURCES (AS OF DECEMBER 30, 2016)

Table 23 **Changes to the financial execution of the total project resources (as of December 30, 2016)**

OUTPUTS BY COMPONENT	*Planned*	*Executed*
1.1: An on-line platform for trading nationally-generated VERs	USD313,400	USD401,057
1.2: An institutional and governance mechanism for the platform is signed	USD6,000	USD3,496
1.3: A proceeding to ensure a single accounting system for all emissions reduction units traded in the country (CERs and VERs)	USD70,000	USD101,676
1.4: A national and international promotion, dissemination and education campaign about the voluntary exchange platform is implemented.	USD157,000	USD203,912
Total	***USD546,400***	**USD710,141**
2.1: A portfolio of forest carbon projects supported in the validation, registration and commercialization of VERs	USD6,856,314	USD6,316,811
2.2: A capacity-building program in carbon accounting and monitoring, and project development, validation and verification for forest carbon projects.	USD168,686	USD845,902
2.3: An outreach and awareness strategy about the needs and opportunities of forest carbon projects.	USD26,000	USD21,698
2.4: Growth and sequestration information generated for native species	USD581,100	USD292,050
Total	***USD7,632,100***	***USD7,476,461***
3.1: A technical training and support program for calculating, monitoring, managing, and mitigating corporate or institutional carbon footprints is launched	USD783,000	USD6,061,762
3.2: A set of incentives for voluntary mitigation identified, designed and disseminated	USD469,000	USD41,643
3.3: Carbon footprint guidelines disseminated	USD44,000	USD34.957
3.4: Business case studies	USD31,000	USD7,523
3.5: A strategic partnership with financial sector institutions to facilitate financing for technological conversion	USD154,000	USD-
3.6: Capacity built within the MADS on voluntary carbon markets	USD48,000	USD39,575
Total	***USD1,529,000***	***USD6,185,460***
Project management	USD900,400	USD583,252
GRAND TOTAL	**USD10,607,900**	**USD14,955,314**

***NB**: The color indicates a fulfillment alert, based on the information provided.*

Source: MVC 2016.

Annex 13:

SOURCES AND AMOUNTS OF CO-FINANCING (AS OF DECEMER 30, 2016)

Table 24 Sources and amounts of co-financing (as of December 30, 2016)

SOURCES OF CO-FINANCING[58]	NAME OF CO-FINANCIER	TYPE OF CO-FINANCING[59]	CONFIRMED/ APPROVED	DISBURSED BY PROJECT MID-TERM	DISBURSED BY MTE	DISBURSED BY PROJECT CLOSING	DISBURSED BY PROJECT CLOSING
			(USD)	(USD)	(%)	(USD)	(%)
Private sector	BMC	Other -in cash	168,900	43,713	26%	213,178	126%
Private sector	BMC	In kind	81,300	0	0%	0	0%
Private sector	CCB	Other -in cash	258,000	13,213	5%	145,138	56%
Private sector	Investment from private companies	In kind	516,000	708,983	137%	5,709,659	1,107%
Other (research institutes)	C&Bosques, UNal Medellín, JBJAU, Neotropical	In kind	441,200	46,940	11%	140,853	32%
NGO/private sector/others	Forest carbon project promoters	In kind	5,644,000	1,047,011	19%	5,735,254	102%
NGO	Fundacion Natura	Other -in cash	536,800	177,720	33%	143885	27%
NGO	Fundacion Natura	In kind	127,700	176,802	138%	176802	138%
GEF agency	IDB	Other -in cash	N.a.	N.a.	N.a.	N.a.	N.a.
		TOTAL	**7,773,900**	**2,214,382**	**28%**	**12,264,769**	**158%**

Source: MVC 2016.

[58] Sources of co-financing may include: bilateral cooperation agencies, foundations, GEF agencies, local governments, national government, civil society organizations, other multilateral agencies, and private sector, among others.

[59] Type of co-financing may include: grant, soft credit, hard credit, guarantee and in-kind financing, among others.

Annex 14:

PROJECT OWNERSHIP BY KEY STAKEHOLDERS

Table 25 Project ownership by key stakeholders

KEY STAKEHOLDER	ROLE	OWNERSHIP	TERMINAL EVALUATION
1. Fundacion Natura	Project manager and general coordinator	E	There are financial sources for the following projects: • *Strategy to build seed funds in El Silencio* • *Management of the Robles Corridor and the Bogota-Villavicencio Road Corridor* • *More cook stove projects are managed* Potential buyers for credits from the aforesaid FCPs have been found.
2. Bolsa Mercantil de Colombia	Coordinator of Component 1 Market Platform	G	It conducted negotiations for the tax reform that was being discussed by law makers to favor market demand[60] and they are trying to increase the number of projects (FCPs and others) that will trade on the platform in order to increase its liquidity.
3. Corporación Ambiental Empresarial (CAEM)	Coordinator of Component 3 Demand of VERs	E	It keeps working with FN on the voluntary corporate emissions and reductions registration system (with MADS). They work with companies from Bogota on managing and measuring their carbon footprint. They are starting to develop a NAMA with the industry which includes measuring and reducing emissions.
4. Ministry of Environment and Sustainable Development	Government counterpart	G	Progress is being made in accord with COP21 and NDC to fulfill the emission reduction targets through a wide range of initiatives like the ECDBC, the tax on carbon, and the system of GHG emission quotas, among others (contained in the national CC policy).

[60] Mainly the tax on carbon from hydrocarbons, which is still to be regulated - in order to generate additional demand of carbon credits.

5. Organizations that promote forest projects	Developing forest carbon projects (supply)	G	They are stronger and manage different projects in the country[61].
6. Companies/institutions linked to the program with CAEM	Companies interested in measuring their carbon footprint, implementing energy efficiency measures, and offsetting (demand)	G	Increasingly interested in managing GHG inventories and taking measures to mitigate their emissions and improve their competitiveness[62].

***NB**: E= excellent G= good R= regular B= bad.*

The color indicates a fulfillment alert, based on the information provided.

Source: Progress Reports and interviews 2014.

[61] The government policy should focus on promoting the internationalization of externalities on water production and watershed protection, scenic beauty, land protection, and biodiversity, etc. in order to promote the feasibility of FC projects. The CDM has a very complicated and costly system, so the voluntary carbon markets have boomed. The international validation, registration and verification process (Markit) is burdensome and very expensive, so the development of a national protocol recognized by the UNFCCC is expected to lead to more FCPs. Projects should be financially attractive to facilitate private activity, i.e timber production, development of projects related to eco-tourism or rural community tourism, among others. Income from carbon credits is additional to the main project output. Financial entities play a key role in terms of FCP feasibility.

[62] The country undertook to reduce its emissions by 20% by 2030 at the COP in Paris. If there is demand for carbon credits for offsetting purposes, this will encourage the creation of the necessary supply and a market that facilitates and regulates those transactions. Under the UNFCCC, it is expected that all countries will be bound to diminish and offset their emissions on a mandatory basis by 2020, which will result in an increase in the demand, and thus supply, of carbon credits. Financial entities play a key role in having companies implement energy efficiency - and offsetting - measures. There is still uncertainty about how the target will be met and what instruments will be used. The Government has pointed out that all sectors must cooperate and a tax on emissions from hydrocarbons has already been approved.