

**Terminal Evaluation of the
IDB Clean Tech Fund (CTF)**

**Terminal Evaluation
Draft**

GRT/FM-9758-RS or RS-X1058

GEF ID: 3005

Date of Report: July 29th, 2020

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I. List of Acronyms and Abbreviations

BANOBRAS	Banco Nacional de Obras y Servicios Público, S.N.C
CAF	Corporación Andina de Fomento
CNG	Compressed Natural Gas
CO2	Carbon Dioxide
CoP	Conference of the Parties
EIC	Econergy International Corporation
FMC	Fund Management Company (Econergy)
FMO	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.
GEF	Global Environmental Facility
GHG	Greenhouse Gas
GMA	Grant Management Agreement
IA	Implementing Agency
IDB	Inter-American Development Bank
kW	kilowatt
kWh	kilowatt-hour
LAC	Latin America and Caribbean
LFGTE	Landfill Gas to Energy
MIF	Multilateral Investment Fund
NGO	Non-Governmental Organization
OP	Operational Program
RE	Renewable Energy
SME	Small- to medium-size enterprise
UNFCCC	United Nations Framework Convention on Climate Change
VC/PE	Venture Capitals / Private Equity

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II. Basic Information

Critical Dates	
GEF CEO Approval Date	2/6/2006
IDB Approval Date	3/28/2006
GEF Agreement Signature Date	9/18/2006
Project Implementation Start Date	9/25/2006
First Disbursement Date	2/5/2007
Investment Period	10/22/2004 – 10/22/2014
Close Date	04/01/2017
Fully Disbursed and Justified (CO)	2/13/2019

CTF Limited Partners	US\$ Committed Capital	% Participation
MIF	US\$ 10.0 MM	39.68%
CMIC	US\$ 5.0 MM	19.84%
Keystone	US\$ 4.0 MM	15.88%
FMO	US\$ 3.7 MM	14.68%
Banobras / FONADIN	US\$ 1.5 MM	5.95 %
CAF	US\$ 1.0 MM	3.97 %
Total	US\$ 25.2 MM	100.00 %

Portfolio Investments	Technology	Country	Amount Invested
Areia Branca	Hydro	Brazil	\$3,653,796.57
Roncador Hydroelectric	Hydro	Perú	\$3,807,127.21
CH Langui	Hydro	Perú	\$694,625.00
NEOgas	CNG	Brazil	\$775,000.00
Energreen Cancun	LFGTE	México	\$3,074,500.04
Mexstarch	Ethanol	México	\$4,064,165.76
Vehizero	Hybrid Vehicles	México	\$3,740,000.01
Total			\$19,809,214.59

Distribution of Grant Funds	MIF	GEF
Monitoring and evaluation	\$ 180,000.00	\$ 35,000.00
Funds available for projects	\$ 820,000.00	\$ 960,000.00
Total Funds	\$ 1,000,000.00	\$ 995,000.00

III. Background

The IDB Clean Tech Fund (CleanTech Fund, GEF ID: 3005), from now on the Fund, the Project or the CTF, was created to address the perceived lack of commercially viable financial resources available to the Renewable Energy (RE) project developers and sponsors in Latin America and the Caribbean (LAC). Established as a venture capital/private equity fund, it sought to invest in small scale generation, energy efficiency, water supply, and transportation projects developed by small and medium enterprises. Its main purpose was to produce superior risk-adjusted returns by capitalizing on exit strategies. The Fund aimed to mobilize over US\$20 million in capital commitments from the fund's limited partners, composed of national, bilateral and multilateral development banks as well as private equity participants. It was anticipated that such funding in turn would leverage investments of up to US\$60 million in RE projects in the region.

The IDB approval date for the Fund was November 14, 2000, however the Fund only started operating in October 2004. An IDB Lab's (former Multilateral Investment Fund, or MIF) Non-Reimbursable Technical Cooperation for US\$1,000,000, was signed on July 26, 2005, and a GEF Non-Reimbursable Technical Cooperation (GEF ID: 3005) for US\$995,000, was signed September 18, 2006. In its inception (2004), the Fund raised US\$ 25.2 million in capital commitments, of which US\$ 19.8 million were invested in clean technology and renewable energy projects in a range between US\$ 0.7 and US\$ 4.0 million from 2004 to 2014.

The Fund's objective was to make investments in: (1) small scale generation, energy efficiency, water supply, and/or transportation projects supported and developed by small and medium enterprises in Latin America that utilize clean technologies to improve processes or replace the need for fossil fuel and fossil-based input use, (2) primarily equity or equity-like securities and instruments, and (3) to promote the adoption of sustainable development practices in the region in order to promote efficient natural resource utilization (collectively, the "Investment Objectives"). The Fund was designed to reduce the barriers to successful financial structuring and investment in these types of projects hence catalyzing the market for projects that deliver important climate change benefits.

The GEF participation in the Fund responded to the challenge of the Convention on Climate Change (the Convention) to engage the private sector in financing climate change-friendly techniques and technologies. The Convention encouraged the increased use of improved and innovative environmentally sound technologies to minimize the impact on the global environment. Moreover, the Convention considered the need for the transfer of advanced technologies to emerging markets. The Fund would demonstrate a financing method for investing in the sustainable use of natural resources, while generating global environmental benefits.

GEF's funding was to be focused on supporting primarily grid connected renewable energy power projects typically supplied directly to the retail customer through energy service agreements. The Fund aimed to catalyze and encourage the development and financing of renewable energy projects by bringing together investment management expertise, advanced sector know-how, and both local and foreign investment capital and make these resources available to those SMEs that use natural

resources in a sustainable manner. The intended success of the project was to have an important demonstration effect with respect to the economic viability of such projects and to be a catalyst for further investment in small and medium scale renewable energy projects.

GEF Technical Assistance was specifically allocated to provide professional engineering, financial analysis, business planning and other technical services needed to evaluate projects of the Fund in terms of market, technical and environmental risks, and to reduce the costs of appraising companies and projects with lower yields, in particular those of small-scale.

GEF Technical Assistance was divided in different subgroups:

- ***Project Feasibility Study Support:*** to analyze and justify Fund-eligible investments;
- ***Business Plan Support:*** to enhance SMEs business plan design, justification and presentation, so that projects could be proposed to the Fund Management Team and eventually the Fund Investment Committee;
- ***Expert Due Diligence Support:*** to retain industry experts to validate both feasibility studies and business plans, as well as to identify market opportunities and potential risks associated with the project, including environmental and social impacts; and
- ***Financial Access and Structuring Support:*** to hire financial professionals to analyze the project risk/return, financial modeling and project finance structure.

Since the CleanTech Fund inception in 2004, the Fund made seven (7) investments, covering different clean technologies and sectors. It is important to note that with the exception of Neogas, all investments received the support of the Grant facility to improve the project quality and structure.

The main outcome intended by the implementation of the Fund was direct GHG emission reductions of over 3 million tons by 2014, as a result of investments in RE projects. In addition, the project aimed to establish a successful and replicable model for similar efforts to reduce financial barriers for cost-effective small-scale renewable energy investments elsewhere in the world.

IV. Scope of the Evaluation

The Terminal Evaluation Report examines and assesses the perspectives of the various relevant stakeholders. Relevant stakeholders are all those who have been or are likely to be affected by the project or activity, those who have participated in or contributed to the project, and those who in other ways have a stake in the outcomes of the project or activity.

In particular the Terminal Evaluation seeks to respond the following questions:

- What was the relevance of the CTF in the participating countries?
- How effective was CTF in meeting its planned outputs and outcomes?
- How efficient was project delivery? By checking adherence to the Fund policies and procedures.

- What direct and indirect impacts did the CTF deliver? What was the additionality of the projects?
- To what extent are the CTF's results likely to be sustained in the long term?
- In what degree the intended purpose of the GEF's grant was achieved?

V. Evaluation of Project Results and Execution of Activities

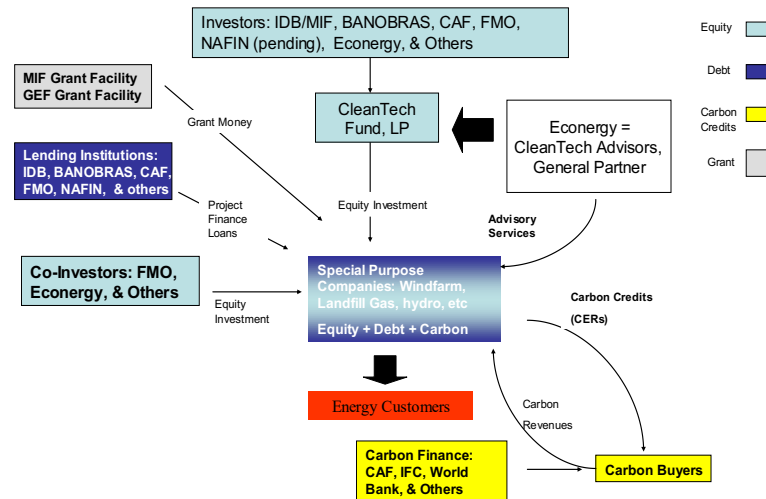
a. Evaluation of Fund Rules and Governance Procedures

In accordance with IDB procedures and criteria, the MIF selected the consortium of A2R and Econergy International Corporation (EIC) to manage the CleanTech Fund. The selection process took place over the course of two to three months, and after receiving proposals from numerous potential fund managers. It initially entailed sending out requests for expressions of interest to eight different potential managers that were known to possess the attributes necessary to manage this type of Fund. A total of six of the eight entities submitted expressions of interest, along with details of their relevant experience and expertise. The final selection process involved deciding between two different finalists. Experiences and strengths of each of these two potential fund managers were analyzed along with in person interviews to determine the best match for this initiative. Included in this assessment was an analysis of the proposed strategic approach that would be undertaken in managing the Fund, which differentiated the two finalists significantly. Given the solid ability of the combination of A2R's fund management skills and Econergy's technical expertise, which would allow the Fund to have a diversified portfolio across many sectors, it was this partnership that was ultimately selected. A2R eventually exited the consortium in 2003, before the Fund reached financial closure.

Econergy International Corporation was incorporated as a special purpose company, CleanTech General Partner, LLC to manage the Fund, and it also created a new advisory company, CleanTech Advisors, LLC to be the Fund's investment advisor. The new entity was a new Fund Management Company ("FMC" or "Fund Manager"), with its principal offices in Boulder, Colorado and Fund offices in São Paulo and Mexico. The Fund Manager utilized its presence in the region in order to identify, evaluate and make investment decisions in small and medium enterprises.

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Graph 1. Cleantech Fund Structure



Source: Medium-sized Project Proposal Request for GEF Funding

- **Grant Funding Process and Funding Criteria.**

According to the documentation provided, the Fund carried out the following process to process both, the GEF and the MIF Grant Facilities, in order to award the grant resources:

1. **CTF's screening and identification:** was the first stage of the process where the Project Manager or the Developer looked for projects that could fit into CTF's investment needs.
2. **Identification of studies or services required:** the Fund performed a technical overview of the potential project in order to find out the kind of assessment that was needed.
3. **Development of Terms of Reference and Request for Grants:** after selecting the proper technical analysis to be performed, the Fund engaged in the preparation of the Terms of Reference which traced the objectives and the activities that had to be carried out in order to obtain the desired insight of certain project. Also, in this stage, CTF approached the IDB with a formal inquiry for grant funding. Usually this stage lasted from one to three weeks, depending on the complexity of the study.
4. **Review and Approval:** CTF's grant inquiry was analyzed by the IDB, who decided whether to award the grant or not. Also, the IDB analyzed the compliance with its environmental and social impact guidelines.

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5. **Request for Proposals and Selection Process:** the Fund requested the proposal of the consultants and selected one in terms of their expertise, industry knowledge and business offer. This stage commonly lasted from 30 to 40 days according to the IDB guidelines.
6. **Contacting of Consultants:** according to the business proposal, the Fund contacted the correspondent consultant in order to start the evaluation.
7. **Carrying out of assignment:** the engagement between the Fund and the consultant began, in order to fulfill the tasks of the evaluation or analysis.

Based on the information provided by CTF, we understand that since inception, the Fund applied GEF Grant Funds accordingly with the Grant Management Agreement (GMA) and its grant funding criteria. In conclusion, the General Partner complied consistently with the GMA and with every stage and guideline of its Grant Funding Process.

b. Evaluation of the Investment Guidelines

The CTF was required to follow the investment guidelines and procedures (the “Investment Guidelines”) outlined in Limited Partnership Agreement. The following is a brief summary of those guidelines:

- **MIF Investment Guidelines for the CleanTech Fund:**

The Fund aimed to invest up to 45% of the aggregate Capital Commitments in each of Brazil or Mexico, given their respective market size. For each country other than Brazil and Mexico, the Fund may invest no more than 30% of the aggregate Capital Commitments. The Fund may invest up to 30% of the aggregate Capital Commitments in a single target technology or sector (e.g., small hydro, wind energy, biomass cogeneration, waste-to-energy, methane recovery for energy production, and geothermal power). Maximum investment in any single company (i.e., the original investment plus any follow-on investments) will not exceed 15% of the aggregate Capital Commitments. The Fund may set up intermediate investments through which it will invest in one or more projects, such as to minimize taxes or for other regulatory considerations.

- **CAF Investment Guidelines for the CleanTech Fund:**

The General Partner and Investment Adviser agree to use their best efforts to make Fund Investments in the countries of Bolivia, Colombia, Ecuador, Peru and Venezuela (collectively the “Andean Region”), such that, at the end of the Investment Period, the ratio of the sum of Capital Contributions used in Fund Investments in the Andean Region to the Capital Contributions made by CAF is approximately equal to at least 4:1, subject to the Investment Guidelines, Investment Objectives, and Investment Restrictions, and the favorable recommendation by the Fund’s Investment Committee. However, at the end of the Investment Period, the ratio of the sum of

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Capital Contributions used in Fund Investments in the Andean Region to the Capital Contributions made by CAF must be at least 2:1. (Limited Partnership Agreement, Annex E).

- **Countries Eligible for MIF Financing**

Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, Venezuela.

- **IDB/MIF Environmental and Social Investment Limitations:**

The Fund was required to make investments only in a prospective Portfolio Company: (a) which is not engaged in or does not intend to engage in a Prohibited Activity nor engage in an activity classified as Category III¹. (b) (i) whose operations are in compliance with the applicable Environmental and Labor Requirements and the Environmental and Social Guidelines, or (ii), if such prospective Portfolio Company's operations are not so in compliance, such prospective Portfolio Company has adopted a Corrective Action Plan which addresses such non-compliance.

- **FMO's Policy on Sustainable Development and Participation in Funds**

In the case of participation in funds, the following additional guidelines are applicable:

Projects financed by funds in which FMO plays an active role in the selection of new clients will be examined on FMO's environmental and social standards according to the methods used for FMO financings.

When the project in which the fund has invested complies with FMO's criteria in the stage of approval, but ceases to do so at a later stage and the fund has only a minority position or has too little influence to press for improvement, the fund manager must try to arrange a solution. If that is not possible, the fund must then sell the shares of the project as soon as possible, while keeping the liquidity and market restrictions in mind.

In the case of co-financing with other (multilateral) financial institutions, FMO will strive for common environmental and social requirements and co-operation in the assessment of the project.

In order to comply with the cited guidelines, the CTF offered three classes of interests (Class A, B and C Interests). Class A Interests participate in all Fund investments. Class B Interests participate only in Fund investments in Mexico. Capital commitments in Class B Interests could not exceed

¹ Projects with large resettlement components and all projects with potentially major impacts on human populations. Projects affecting indigenous or tribal populations. Projects that include the manufacture, use or disposal of environmentally significant quantities of pest control products. Manufacture, transportation and use of hazardous and/or toxic materials. Domestic and hazardous waste disposal operations. Projects which pose serious occupational or health risks

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20% of the aggregate capital commitments. The Fund also issued a Class C Interest solely to one limited partner. The Class C Interest represented allocations of the Carried Interest. The Class C Interest didn't have any voting rights.

Table 1. Investments by Technology and by Country

Portfolio Investments	Country	%	Technology	Generation Capacity	%	Amount Invested	%
NEOgas	Brazil	38%	CNG		18%	\$ 3,653,796.57	14%
Areia Branca	Brazil		Hydro	19.8 MW		\$ 3,807,127.21	15%
Roncador	Perú	7%	Hydro	3.8 MW	27%	\$ 694,625.00	3%
Langui	Perú		Hydro	3.3 MW		\$ 775,000.00	3%
Energreen	México	55%	LFGTE	5 MW	16%	\$ 3,074,500.04	12%
Mexstarch	México		Starch and by-products	~50K tons/yr prodn.	21%	\$ 4,064,165.76	16%
Vehizero	México		Hybrid Vehicles	1k/Yr	19%	\$ 3,740,000.01	15%
Total		100%			100%	\$19,809,214.59	79%²

Source: CTF Reporting Files.

The evaluation concludes that CTF complied with all the investment guidelines: a) the fund invested 55% of aggregate capital commitments in México and 37% in Brazil, striving to invest up to 45%, b) the fund invested less than 30% in any other country (7% in Peru), c) the fund invested less than 30% in a single technology or sector. The fund invested less than 15% in most companies, except in Mexstarch where the fund invested 16% of the total fund capital. However, the Fund Manager explains that small discrepancies arise over the years with "how" to account for due diligence & structuring legal costs, which in some cases are capitalized into the investment amount.

The CTF's primary focus was to invest in renewable energy projects sponsored by a small to medium sized companies, defined by the CTF as energy produced from non-fossil fuel, non-nuclear sources and hydroelectric resources with run-of-river schemes. Technology applications included thermal applications, such as biomass for heat or steam. Renewable technologies considered for investment included small (5-30 MW), mini (1-5 MW) or micro (<1 MW) hydro projects, wind energy for electricity or irrigation, biomass for heat or electricity, solar thermal or photovoltaic, geothermal projects, and other related projects, such as landfill gas recovery and energy generation projects.

² The Fund invested US\$19.8 in the companies (79%) of the US\$25.2 capital calls. The other US\$5.4 (21%) corresponds to the fund management expenses for the ten years of operations.

As initially conceived in the Logical framework, the CTF aimed to make direct investments in about 10 projects and \$130M in alternative or additional renewable energy projects, or construct up to 85 MW of additional or alternative renewable energy power generation facilities. With regards to renewable energy generation capacity, the CTF added 32MW, mainly in Hydroelectric generation, still far from the target, in number of projects, investments and renewable energy power generation.

In terms of the Environmental and Social aspects, the CTF needed to comply with both IDB/MIF as well as FMO's guidelines. The CTF was required to use these criteria in the due diligence process to help identify and eliminate potentially harmful deals from consideration. All deals had to meet social eligibility criteria. The CTF used a significant portion of GEF resources, along with MIF grant resources to assess the environmental and social aspects of the projects, and enhance their quality. From the US\$715,821,00 total of GEF resources assigned to project studies, the CTF spent US\$123,489.00 (17%) in the development of Expert-Due Diligence Studies to assess critical environmental and social aspects of the following projects: Areia Branca, Cancun LFG, Langui, Mexstarch and Roncador. During an interview carried out with Management from Langui, the interviewee expressed that GEF resources were instrumental to develop the social review to identify and manage a critical social situation with the local communities living in close proximity to the Langui Lagoon. Although that particular issue wasn't completely solved in that moment, the interviewee recognized that such issue left critical lessons learnt, including the understanding that social and environmental issues need to be addressed timely no matter if they require a lot of resources. Today, the company devotes a lot of attentions and resources to the evaluation and management of social and environmental aspects on all of their projects.

c. Analysis of Project Investments

At inception, the Fund was formed with a total committed capital from the limited partners of US\$20,200,000. The Fund was focused primarily on investments in renewable energy projects sponsored by a small to medium sized enterprise. It invested in projects representing a minimum total investment of about \$62 million (equity and debt) over the ten-year period 2004-2014, which would represent about 3.4% of the total potential investment over five years. This assumed that the CTF was capitalized at only \$20.2 million.

Technology applications included thermal applications, such as biomass for heat or steam. Renewable technologies considered for investment will include small (5-30 MW), mini (1-5 MW) or micro (<1 MW) hydro projects, wind energy for electricity or irrigation, biomass for heat or electricity, solar thermal or photovoltaic, geothermal projects, and other related projects, such as landfill gas recovery and energy generation projects.

Since the CTF inception in 2004, the Fund made seven (7) investments, covering different clean technologies and sectors. It is important to note that with the exception of Neogas, all investments received the support of the Grant facility to improve the project quality and structure.

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Table 2. CTF's Investments

Portfolio Investments	Technology	Country	Investment date	Holding (%)	Amount Invested
Areia Branca	Hydro	Brazil	Dec-07	25%	\$3,653,796.57
Roncador	Hydro	Perú	Mar-08	30%	\$3,807,127.21
CH Langui	Hydro	Perú	Sep-09	30%	\$694,625.00
NEOgas	CNG	Brazil	Jan-06	8%	\$775,000.00
Energreen Cancun	LFGTE	México	Apr-08	40%	\$3,074,500.04
Mexstarch	Ethanol	México	Dec-07	13%	\$4,064,165.76
Vehizero	Hybrid Vehicles	México	Jul-08	41%	\$3,740,000.01
		Total			\$19,809,214.59

Source: CTF Reporting Files.

The following section presents a summary description and financial narrative about each one of the investments.

1. Areia Blanca



Legal and trading Name:	Areia Branca, S.A.	
Location of head office or management	Minas Gerais, Brazil	
Description of the business	Small hydropower plant with a generation capacity of 19.8 MW	
Date of CTF Investment	Jan-01-2008	TOTAL
CTF Investment (USD)	\$3,500,000	\$3,500,000
Percentage ownership	15.1%	
Deal Structure	Convertible Note / Divested investment	
Current Exit Strategy	Exit on October 20 th , 2008	

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Areia Branca was a 19.8 MW run of river hydroelectric project in the state of Minas Gerais, Brazil. The original investment thesis was that CTF lent US\$3.2 million to Econergy to buy 20% of Econergy shares of the company. The CTF entered into a loan agreement effective December 31, 2007 in the amount of \$3,5 million (US\$3,807,127 including legal and due diligence costs) with “EnGen”, Econergy’s parent company and the sole shareholder of HAB, for a purchase of 15.1% of the equity held in HAB. HAB was a Brazilian Special Purpose Company that owned 100% of Areia Branca.

The loan aimed to cover 66.4% of the total project cost. The loan carried a term of 14 years, post an initial grace period on payment of interest and principal during construction and six months after commercial operation. Econergy, who was acquired by parent company GDF Suez, repaid CTF’s note in full in November 2008, along with US\$211,990 of accrued interest, US\$272,450 of reimbursed costs, and a repayment fee of US\$200,000 upon the fund’s decision to exit.

Areia Branca’s project was in CTF’s portfolio only nine (9) months. Since 2006, before the CTF investment, the project was running into construction cost overruns stemming from geological problems and court proceedings.

A total of US\$30,500 of the GEF grant funds was utilized to perform an Environmental Review (US\$12,500) and the project structuring (US\$18,000) of Areia Branca.

2. Roncador



Legal and trading Name:	Maja Energia S.A.C. (Roncador)		
Location of head office or management	Lima, Peru		
Description of the business	Small hydropower plant with a generation capacity of 3.9 MW		
Date of CTF Investment	Mar-17-2008	Supplemental Investments	TOTAL
CTF Investment (USD)	\$660,000	\$11,347	\$671,347
Percentage ownership	30.0%		
Deal Structure	Equity		
Current Exit Strategy	Selling to existing partners in order to continue developing new projects Build a project portfolio, including Langui, to sell it to a strategic investor or to an utility company		

Roncador was a 3.8MW hydroelectric generation project plant located on the Pativilca River south of Lima, Peru. In March 2008, the CTF invested US\$671,347 (\$694,625 including legal and due diligence costs) for a 30% interest in Maja Energia SAC, a Peruvian SPC that owned the 100% of the rights to the Roncador Hydro Project (3.8 MW). The project was still under construction when the CTF invested on it. By then, the project had concluded the construction of Phase I (1.9MW) and it was expected to complete Phase II (1.9MW) and begin operations by mid 2010. The project had an estimated capacity factor of 94.2% sourcing its water from an irrigation canal. The project also had a 20,000 CER/yr potential (Carbon Credit). CTF's exit strategy consisted of selling its stake in Roncador and Langui in a joint sale to larger hydro players or infrastructure funds.

The company was awarded with a 25 year PPA under the OSINERGMIN tender for renewable energy to deliver power at a 40% higher price than the "Comité de Operación Económica del Sistema Interconectado Nacional" (COES) spot price initially forecasted. By signing this contract the company expected a profitable future. The CTF also helped to secure new financing for the second stage of the project.

In 2011 Roncador, experienced a dispute with a local farming organization over the use of the canal water that both the project and the local farmers used for irrigation. In 2012, the national water authority issued a resolution curtailing the hydrology for the plant by 16%. In 2015, the dispute had been settled and a new filing for a hydrology license was expected to revert the volume awarded to the plant's original award. The management of the plant agreed to buy back the participation of the Fund at cost. Sale was expected by early 2017 but it didn't occur then.

In 2013, Maja Energia entered into an agreement with Acqua Energia to be acquired for US\$8.8 million. The transaction was structured by making an initial capital contribution of US\$6 million in exchange for 80% of ownership in Maja Energia.

By the end of the fund's life in 2014, the CTF still held the shares of Roncador, but in 2018, they were sold to its majority shareholder with a significant haircut.

A total of US\$22,234 of the GEF grant funds was utilized to complete a full Environmental Impact Assessment (EIA), address technical concerns regarding the plant's hydrology, and find an appropriate solution for the heavy sedimentation that comes into the agricultural canal from the Pativilca river source.

3. Langui



Legal and trading Name:	Central Hidroeléctrica Langui, S.A.	
Location of head office or management	Cuzco, Peru	
Description of the business	Small hydropower plant with a generation capacity of 3.3 MW	
Date of CTF Investment	Sep-09-2009	TOTAL
CTF Investment (USD)	\$763,500	\$763,500
Percentage ownership	30.0%	
Deal Structure	Convertible note (converted to Equity)	
Current Exit Strategy	Build a project portfolio, including Roncador, to sell it to a strategic investor or to an utility company	

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Langui was a 3.3 MW hydroelectric generation project plant located in Peru. The project consisted in two generating units, one turbine of 0.75MW and another turbine of 2.5MW.

On September 15, 2009, the CTF acquired convertible debt of Central Hidroeléctrica de Langui S.A. (CHL) for \$763,500 (US\$ 775,000 including legal and due diligence costs) later convertible to 30% of the shares. If the CTF didn't exercise its option, CHL had the obligation to pay off the Fund's debt at a rate of the sum 7% to be paid by Aluz Peru C&O SAC (CHL's parent) and approximately 5% by CHL for the debt it acquired formerly held by Banco Interamericano de Finanzas, for an all-in interest rate of 12% per annum within a period of 12 months from September 15, 2010.

On August 24, 2010, the CTF's Investment Committee approved the equity conversion of the Funds' convertible debt interest in CHL. The CTF received 30% of the outstanding shares of CHL. The equity conversion was completed during the fourth quarter of 2010.

On June 14, 2013, the sale of the CTF's interest in CHL was closed with the buyer (M Kapital) an affiliate of Minera Marsa in Peru) for US\$1,515,000. The sale resulted in a gain of US\$470,468 net of capitalized transaction costs and taxes.

A total of US\$13,750 of the GEF grant funds was utilized to complete an Expert Due-Diligence Social Review.

4. Neogas



Legal and trading Name:	NEOgás do Brasil, S.A.		
Location of head office or management	Rio Grande do Sul, Brazil		
Description of the business	Transports compressed natural gas (CNG) to retail stations in Brazil		
Date of CTF Investment	Jan-10-2006	Supplemental Investments	TOTAL
CTF Investment (USD)	\$3,000,000.0	\$690,000	\$3,690,000
Percentage ownership	Original: 24.0% / Current: 8.3% (Due to a partial exit)		
Deal Structure	Equity		
Current Exit Strategy	2014 – By selling its shares to a public gas enterprise or to a strategic buyer such as GEF.		

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Neogas was a compressed natural gas distribution project, and a pioneer in developing technologies for transporting compressed natural gas (CNG) in LAC. In 2005, the year before the CTF invested in Neogas, the company had approximately US\$2 million in annual revenues, by 2013, the company's gross revenues had increased to US\$100 million. The CTF's investment paved the way for a larger private equity fund to make a US\$40 million investment beginning in 2008, and the company was able to expand into several foreign markets. Originally, the technology was patented in the USA, but the local Brazilian partners perfected the application and now it enjoys worldwide patent protection. Neogas was CTF's most successful investment, and today, the company has operations in Peru, Mexico, Colombia, the United States, Israel and Bangladesh.

In 2006, the CTF invested US\$3.6 million for a 24% equity. At the moment of investment, the company was performing well and expanding operations in Brazil, Peru and Colombia. The company had an IRR of 25.9% based on their ability to expand to other countries in Latin America and the assumption that demand would increase 150% by 2010. Neogas had 47 contract leads for 62 million m³.

In 2008, Neogas expanded operations to 12 states in Brazil. In April 2008, Neogas issued additional ordinary shares for a total of \$25.0 million and sold 62% of the shares to a major private equity fund, resulting in a return of investment of US\$1.4 million to the CTF and the realization of a US\$1.6 million gain. In May 2008, the CTF liquidated approximately 47% of its shares in Neogas for US\$3.0 million, and continued to own approximately 8.3% of the outstanding and issued shares of Neogas.

In 2009, the CTF invested a supplemental amount of US\$580,000 along with the new majority shareholder in order to fund Neogas' further expansion in Peru, which has grown to be the company's largest market in volume and revenue. The company achieved closure of 46 contracts, one contract away from the expected amount back in 2006.

In 2010, Neogas entered successfully into the Peruvian market and started expansion into Colombia. In 2011, Neogas achieved a better financial performance by closing 53 contracts and a yearly volume of gas throughput of 49.8 million m³ (15.2% more in contracts and 79.1% more in consumption volume than in 2009). The company acquired a large industrial customer and two vehicular gas station customers. Gas volume was expected to ramp up significantly in the next years to reach levels on par with NGB's volumes. The company made new joint ventures in Mexico.

In 2013, Neogas entered into a seven (7) year loan agreement with the International Finance Corporation (IFC) for up to US\$20 million. The proceeds of the loan were used to finance an expansion program from fiscal years 2012 – 2015. As of December 31, 2014, the CTF had invested US\$2.28 million (before capitalized transaction costs) representing an interest of 7.27% in Neogas.

As of 2018, Fund I and Fund II, both had positions in Neogas (413,000 and 73,000 shares respectively), and both transferred their positions to an entity affiliated to the General Partner. In May of 2018 an agreement was made to sale Neogas' shares.

GEF grants were not spent in Neogas.

5. Energreen Cancun



Legal and trading Name:	Energreen Cancun, S.A.P.I. de C.V.		
Location of head office or management	Quintana Roo, Mexico		
Description of the business	Landfill gas capture and electricity generation		
Date of CTF Investment	Apr-14-2008	May-02-2008	TOTAL
CTF Investment (USD)	\$1,800,000	\$1,026,995	\$2,826,995
Percentage ownership	40.0%		
Deal Structure	Equity		
Current Exit Strategy	Selling future cash flows and operating assets to a client interested in carbon emissions		

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Energreen Cancun Landfill was a biogas recovery and power production facility project in Cancun, Mexico. The CleanTech Fund, L.P. (CTF) together with Arzentia Capital each committed US\$2.75mm for carrying out the project including the landfill closure and the installation of extraction systems on site. The Project's expectations of generating revenues were based on future CERS trading (of up to 150,000 CER/year) and on the possibility of generating electricity (between 4 and 5 MW). Energreen had a 14 year concession on extraction and use of biogas from the Cancun "Relleno Norte" landfill located in the municipality of Isla Mujeres. Additionally, under the same concession agreement, Energreen was also responsible for safe closure and end-of-life site remediation of the landfill site. The Project consisted in the design, construction and operation of a methane gas recovery and electricity generation plant using state-of-the-art SmartSoil technology for the landfill methane gas capture and recovery portion of the Project.

In 2008, the CTF invested US\$2,8 million (US\$ 3,074,500 including legal and due diligence costs) for a 40% of the equity in Energreen. In March 2008, the CTF made the first tranche of US\$1.8 million of its investment commitment in Energreen Cancun, and in May 2008, the Fund made the second tranche of US\$1.06 million.

In 2010, the Project faced a series of unforeseen problems that adversely affected cash flows. Originally, an innovative extraction technique in commercial operation pioneered by the Canada-based SmartSoil was to be implemented on site. However, in 2009 the firm filed for bankruptcy and the Project was forced to revert back to traditional technologies. As a result, it was determined the project would instead utilize a conventional technology capable of generating 1 MW of electricity, provided by an experienced developer in the sector. The change in generation technology resulted in an other-than-temporary impairment of the investment's fair value, and a loss of \$1,471,817 was recognized. In addition, the Project ran into further problems as it turned out the concession granted by the Quintana Roo government to GEA (and thus Energreen) did not grant proper land-use rights and land use had to be negotiated with a third party. Ultimately, this diluted project returns as it entailed a one year project delay.

Since January 2011, Energreen's operations have been directly supported by shareholder loans. During 2011, the CTF made four separate loans to Energreen totaling approximately US\$90,000. Each loan bears interest at a rate of 15% per annum, with interest accrued and payable quarterly. As of December 31, 2012, the CTF received payments of interest and principal totaling approximately US\$47,000.

As of December, 2012, due to additional project delays, the attendant loss of value as a result of methane loss, and the softening of demand for carbon credits or Emissions Allowances in the European Union, it was determined that additional impairments of the investments fair value had occurred. After careful review, it was further determined that the project had a minimal salvage value because the facilities were constructed on leased property. As a result, losses of US\$84,698 and US\$1,128,401 were recognized for the years 2012 and 2011, respectively. The Energreen Cancun Landfill was closed and today it's not in operation anymore.

A total of US\$45,755 of the GEF grant funds was utilized to complete an Expert Due-Diligence Environmental Study (US\$30,755) and a Technical Due Diligence Review (US\$15,000).

6. Mexstarch



Legal and trading Name:	Industrias Mexstarch S.A.P.I. de C.V.		
Location of head office or management	Monterrey, Mexico		
Description of the business	Efficient production of food-grade corn starch and byproducts		
Date of CTF Investment	Dec-18-2007	Supplemental Investments	TOTAL
CTF Investment (USD)	\$3,750,000	\$287,200	\$4,037,200
Percentage ownership	12.73%		
Deal Structure	Equity		
Current Exit Strategy	CTF intends to sell to a strategic market player.		

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Mexstarch was a start-up facility project, with a proprietary technology, to process corn to produce corn-based bioethanol, starch and byproducts in Los Mochis, Sinaloa, Mexico. The Company implemented an innovative and proprietary milling technology capable of fractioning corn grain more precisely and effectively as compared to traditional wet-milling technology. Initially, the plant was expected to produce 28.9 million liters of Ethanol and 12.4 million liters of Ethyl Alcohol per year, however, in 2008 the Mexican Government issued a decree stating that biofuel projects using corn as a feedstock could only be implemented with a renewable one-year term permit from the Ministry of Agriculture, making it difficult to obtain long-term financing. As such, the Company decided to redefine its business plan and convert to a corn starch and corn byproducts manufacturing facility. The area was expected to generate per year 4 million tons, but only 1 million ton was consumed.

On December 18, 2007, the CTF invested US\$4.0 million (initially US\$3.75 mm in 2007 then two small supplemental investments in 2009, for a total of US\$4,064,166 including legal and due diligence costs) to acquire 12.73% ownership into the project. This investment included a put option for exiting the investment with a 15% IRR up to the end of 2013.

On July 13, 2009, Mexstarch signed the long-term off-take agreement with FEMSA, one of the largest publicly-listed holding companies on the Bolsa Mexicana de Valores (BMV), for an investment by FEMSA of US\$2.1 million, for 4% of the outstanding shares in Mexstarch, and a US\$8.1 million subordinated and partially convertible debt financing, with a long-term (seven year) off-take agreement for approximately 50,000 tons per year of starch produced by the Company at a predetermined tolling pricing formula.

In December 2011, FEMSA became a shareholder with an initial investment of US\$10 million (29% ownership at that time). The plant initiated commercial operations in August 2011 on a trial basis. The plant gradually increased production, and reached full capacity by 2015.

In June 2013, Mexstarch secured a US\$16 million loan from BBVA Bancomer. The proceeds from this loan were used to restructure Mexstarch's debt, pay down outstanding liabilities to Cervecería Cuahatemoc Moctezuma and Banco Santander, and fund working capital requirements to bring up production levels and begin the distribution of corn by-products to clients. The loan from BBVA Bancomer had more favorable terms than the retired obligations to Banco Santander.

In September 2013, certain shareholders in Mexstarch converted certain outstanding shareholder loans to equity. As a result, the CTF's ownership interest was diluted to 5.64%. Separately, in October 2013, the CTF officially notified Mexstarch of their desire to exercise the Put Option agreed to with Mexstarch's founding partners. The founding partners replied stating their inability to honor the Put Option and their lack of capacity to pay. Due to continued working capital concerns and the distressed nature of the investment, it was determined that another-than-temporary impairment of the investments fair value had occurred, and a loss of \$3,420,628 was recognized as of December 31, 2013.

Mexstarch went into bankruptcy in 2016/17 and the bank (BBVA Bancomer in Mexico) holding the debt auctioned off the assets among the new owners of the industrial plant, and restarted it with a new technology. The converted plant (www.vixim.com.mx) produces now different products for sale in high grade food products.

A total of US\$81,750 of the GEF grant funds was utilized to complete an Expert Due-Diligence Environmental Review (US\$11,250), a Scale-up Assessment (US\$10,000), Legal Assistance for Financial Structuring (US\$23,000), and a Risk Evaluation (US\$37,500).

7. Vehizero



Legal and trading Name:	Vehizero, S.A.P.I. de C.V.		
Location of head office or management	Aguascalientes, Mexico		
Description of the business	Hybrid vehicle manufacturing company		
Date of CTF Investment	Mar-07-2008	Supplemental Investments	TOTAL
CTF Investment (USD)	\$1,250,000	\$2,490,000	\$3,740,000
Percentage ownership	41.1%		
Deal Structure	Convertible note (converted to Equity) and Equity		
Exit Plans	<p>Once the industrial production is started and more purchase orders arrive, the company will be positioned to attract more capital in order to increase production and to expand through franchising</p> <p>They are looking for potential buyers in China and India. Ford also has shown a preliminary interest</p>		

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Vehizero Vehicles was a manufacturer of light hybrid trucks for the Mexican market. Vehizero was a start-up company with a unique energy exchange system and planned for the installation of a hybrid vehicle facility in Aguascalientes, México. The state of Aguascalientes provided Vehizero with nearly \$1 million in funding and benefits to locate the plant there. The plant had an expected output of 8,000 vehicles per year once it was at full assembly and operation capacities. The main market for these vehicles were large fleet operators in México that distribute goods and services in urban areas.

The CTF committed US\$3.74 million, of which US\$2.5 million was in equity and US\$1 million in convertible debt, in two investment stages (US\$3,740,000 including legal and due diligence costs). The first stage was for US\$600,000 to fund the 6 months of prototype development, testing and permitting. Upon successful completion of Phase I milestones, the Fund agreed to disburse additional resources to invest in Phases II (pilot production) and Phase III (the launching of full scale assembly). The CTF investment had a projected IRR of 29% using cash-on-cash analysis, and over 40% with a terminal value exit.

In February 2009, after Vehizero had assembled 25 prototype hybrid electric delivery vehicles, the Fund invested the second and final tranche of U.S. \$1,250,000. With this tranche, the CTF owned 35% of the outstanding shares of Vehizero, and had a convertible note with Vehizero in the amount of U.S. \$1,000,000, giving it rights to approximately 7% of the outstanding shares. As of July 2009, it had disbursed all of the equity as well as the convertible loan for \$1 million. Vehizero finished the production of its first 25 prototypes and sold them all to a client, Grupo Bimbo, in Mexico, and the company moved into a new plant outside Mexico DF. The idea was to produce 1,000 units by the end of 2010. Additional grant funds supported the company in its search for a new round (Series B) of venture capital financing in 2009.

In January 2011, Michael Kenwood Energy + Infrastructure, LLC (MK Energy), a minority 6.5% shareholder of Vehizero discontinued its investment program after assets of its affiliated group company, Michael Kenwood Capital Management, LLC, were frozen by the U.S. Securities and Exchange Commission. Prior to this action, MK Energy contributed only \$650,000 of the \$1.5 million committed to Vehizero. The resulting capital deficit caused Vehizero to seek additional investors. In July 2011, after more than six months of negotiations, a potential new investor declined to complete its first funding commitment in the form of a \$600,000 convertible loan, which was intended to help make up the deficit caused by MK Energy.

Since then, Vehizero was forced to substantially stop operations due to a lack of capital, with all employees suspended from their activities on July 15, 2011. Through efforts to recover VAT from the Mexican government, Vehizero was able to maintain its inventory and meet its fiscal and creditor obligations for the remainder of 2011 and all of 2012. But in 2014, Vehizero had no cash to cover its minimal operating expenses. As a result of these events, it was determined that an other-than-temporary impairment of the investment's fair value had occurred and a loss of \$221,284 was recognized for the year ended December 31, 2013.

A total of US\$262,500 of the GEF grant funds was utilized to complete technical pre-investment studies and financial structuring support.

d. Evaluation of Budget Execution

According to the GEF Grant Project Proposal, the costs relating to the incremental activities as well as the total project investment costs were broken down by activity relating directly to the “Activities to Remove Barriers and Achieve Outcomes” as stated in the logical framework. These fell into two specific categories “Project Development Support” and “Project Investing activities”. The GEF grant funds was to be used only for Project Development Activities that were considered incremental in nature.

The detailed breakdown of these costs is shown in Table 4 “Planned Budget from GEF Project Proposal”. These costs are broken out by contributor, namely GEF, MIF and third party investors. The overall project budget is also shown on an annual basis over the 5 years of the GEF Grant support cycle. The GEF funds were used to support both, the activities of the Fund Management Company (“FMC” or “Fund Manager”), as well as those related to third party subcontractors. The GEF funds were also matched in part by the MIF grant funds. Third party funding from project sponsors, investors and other local grant funding were matched with MIF funds.

As shown in the breakdown of uses, out of the \$995,000 total GEF Grant Budget, \$300,000 was approved for CTF’s operating and administrative expenses (performed by the FMC), \$620,000 was approved for project subcontractors, and \$75,000 for travel. Table 3. “Budget Planned vs Executed” shows how much was spent on each gross category against each approved rubric. The total amount spent on project activities was \$715,821 against a total of \$620,000 approved, while the total spent on FMC supporting activities was \$180,000 against a total of \$300,000 approved. In total terms, the amount spent was \$895,821 plus travel expenses accrued over the ten (10) years. Although, there are differences between the budget approved and the budget spent, the evaluation takes into consideration the fact that the CTF had ample discretion to make arrangements between budget rubrics, as it did spending more on project activities and less on FMC administrative activities. The following section “Evaluation of Project Activities” presents in further detail how the budget for project activities was utilized according to the pre-approved expense categories.

Table 3. Budget Planned vs Budget Executed

Budget Key Activity	Total
Total Spent on Projects	\$715,821.00
Total Approved for Projects	\$620,000.00
Total Spent on FMC support	\$180,000.00
Total Approved for FMC	\$300,000.00

Source: CTF Reporting Files

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Table 4. Planned Budget from GEF Project Proposal

5 year Project budget Key Activities	GEF (2)	MIF (3)	CT Fund (4)	Co-invest/ Debt (5)	Project Total	2005	2006	2007
A) CT Fund Management - FMC (1)	\$ -	\$ -	\$ 2,587,500	\$ -	\$ 2,587,500	\$ 517,500	\$ 517,500	\$ 517,500
B) Feasibility Study Support - FMC	\$ 125,000	\$ -	\$ -	\$ -	\$ 125,000	\$ 31,250	\$ 43,750	\$ 25,000
Subcontract	\$ 300,000	\$ 200,000	\$ -	\$ -	\$ 500,000	\$ 125,000	\$ 175,000	\$ 100,000
Travel	\$ 30,000	\$ 50,000	\$ -	\$ 20,000	\$ 100,000	\$ 25,000	\$ 35,000	\$ 20,000
C) Business Plan Support - FMC	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ 18,750	\$ 26,250	\$ 15,000
Subcontract	\$ 40,000	\$ 170,000	\$ -	\$ 130,000	\$ 340,000	\$ 85,000	\$ 119,000	\$ 68,000
Travel	\$ 15,000	\$ 25,000	\$ -	\$ 10,000	\$ 50,000	\$ 12,500	\$ 17,500	\$ 10,000
D) Expert Due Diligence - Subcontract	\$ 145,000	\$ 175,000	\$ -	\$ 30,000	\$ 350,000	\$ 87,500	\$ 122,500	\$ 70,000
Travel	\$ 15,000	\$ 25,000	\$ -	\$ 10,000	\$ 50,000	\$ 12,500	\$ 17,500	\$ 10,000
E) Financial Structuring Support - FMC	\$ 65,000	\$ -	\$ -	\$ -	\$ 65,000	\$ 16,250	\$ 22,750	\$ 13,000
Subcontract	\$ 135,000	\$ 100,000	\$ -	\$ -	\$ 235,000	\$ 58,750	\$ 82,250	\$ 47,000
Travel	\$ 15,000	\$ 5,000	\$ -	\$ -	\$ 20,000	\$ 5,000	\$ 7,000	\$ 4,000
F) Improvements to Existing projects -	\$ -	\$ 120,000	\$ -	\$ -	\$ 120,000	\$ 30,000	\$ 42,000	\$ 24,000
G) Direct Project Investment	\$ -	\$ -	\$ 17,612,500	\$ 39,800,000	\$ 57,412,500	\$ 7,176,563	\$ 14,353,125	\$ 14,353,125
H) Monitoring & Evaluation - FM	\$ 35,000	\$ -	\$ -	\$ -	\$ 35,000	\$ 7,000	\$ 7,000	\$ 7,000
Subcontract	\$ -	\$ 120,000	\$ -	\$ -	\$ 120,000	\$ 24,000	\$ 24,000	\$ 24,000
I) Financial Audits - Subcontract	\$ -	\$ 10,000	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ 5,000
Totals	\$ 995,000	\$ 1,000,000	\$ 20,200,000	\$ 40,000,000	\$ 62,195,000	\$ 8,232,563	\$ 15,612,125	\$ 15,312,625
Breakdown of Uses								
Total to FMC	\$ 300,000	\$ -	\$ 2,587,500	\$ -	\$ 2,887,500	\$ 613,750	\$ 652,250	\$ 599,500
Total to Subcontractors	\$ 620,000	\$ 895,000	\$ -	\$ 160,000	\$ 1,675,000	\$ 356,250	\$ 498,750	\$ 285,000
Total Travel	\$ 75,000	\$ 105,000	\$ -	\$ 40,000	\$ 220,000	\$ 55,000	\$ 77,000	\$ 44,000
Total Project Investment	\$ -	\$ -	\$ 17,612,500	\$ 39,800,000	\$ 57,412,500	\$ 7,176,563	\$ 14,353,125	\$ 14,353,125

- (1) FMC is Fund Management Company which is Econergy
- (2) GEF grant facility will be used for these tasks managed by IDB
- (2) MIF grant facility will be used for these tasks managed by FMC through Grant Management Agreement
- (3) The CleanTech Fund will support these costs
- (4) The balance of the funding will come from coinvestors and debt facilities arranged by FMC

Source: Request for GEF Funding Proposal

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Table 5. presents the detailed breakdown of uses by investee company, and by project activity as outlined on the GEF Grant Agreement.

Table 5. Budget Execution by GEF Activity

Project Name	GEF Activity	Country	Project Type	GEF Grant
Tire Recycling Plant	Business Plan Support	Mexico	Recycling	\$39,200.00
Areia Branca	Expert Due-Diligence Support	Brazil	Hydro	\$12,500.00
Cancun LFG	Expert Due-Diligence Support	Mexico	LFGTE	\$15,000.00
Cancun LFG	Expert Due-Diligence Support	Mexico	LFGTE	\$30,755.00
Langui	Expert Due-Diligence Support	Peru	Hydro	\$13,750.00
ISPAIA	Expert Due-Diligence Support	Peru	Biodiesel	\$7,500.00
Mexstarch	Expert Due-Diligence Support	Mexico	Ethanol	\$10,000.00
Loreto Bay and Santa Catarina	Expert Due-Diligence Support	Mexico	Wind	\$12,500.00
Mexstarch	Expert Due-Diligence Support	Mexico	Ethanol	\$11,250.00
Roncador	Expert Due-Diligence Support	Peru	Hydro	\$10,234.00
Areia Branca	Financial Structuring Support	Brazil	Hydro	\$18,000.00
Mexstarch	Financial Structuring Support	Mexico	Ethanol	\$5,000.00
Mexstarch	Financial Structuring Support	Mexico	Ethanol	\$18,000.00
Vehizero	Financial Structuring Support	Mexico	Hybrid Vehicles	\$7,500.00
Vehizero	Financial Structuring Support	México	Hybrid Vehicles	\$12,500.00
Vehizero	Financial Structuring Support	México	Hybrid Vehicles	\$30,000.00
Vehizero	Financial Structuring Support	México	Hybrid Vehicles	\$87,500.00
Vehizero	Financial Structuring Support	Mexico	Hybrid Vehicles	
Chiclayo	Project Feasibility Study Support	Peru	Biomass	\$98,660.00
Grupo Jade	Project Feasibility Study Support	Mexico	Ethanol	\$63,222.00
Independent Biodiesel Producer	Project Feasibility Study Support	Colombia	Biodiesel	\$38,250.00
Mexstarch	Project Feasibility Study Support	Mexico	Ethanol	\$37,500.00
Roncador	Project Feasibility Study Support	Peru	Hydro	\$12,000.00
Vehizero	Project Feasibility Study Support	Mexico	Hybrid Vehicles	\$40,000.00
Vehizero	Project Feasibility Study Support	Mexico	Hybrid Vehicles	\$85,000.00
				\$715,821.00

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

e. Evaluation of Project Activities

This section presents how were the GEF Grant Facility resources utilized, according to the pre-approved expense categories, as outlined in the GEF Grant Project Proposal.

- Project Feasibility Study Support:** These activities include the support of project feasibility studies aimed to justify a RE project investment. Many of the SME project sponsors have limited resources for the preparation of investment grade feasibility studies. The average grant for this purpose was expected to be between US\$20,000 and US\$100,000, but shall in no case exceed US\$100,000. GEF funds approved for Project Feasibility Studies were \$455,000 out of which \$125,000 were approved for FMC (Econergy), \$300,000 were approved for consultants and \$30,000 for travel. CTF reported a total amount spent on projects for Project Feasibility Studies of \$374,632.

Table 6. Project Feasibility Studies

Project Name	Activity Supported	Country	Project Type	GEF Grant
Chiclayo	Feasibility study	Peru	Biomass	\$98,660.00
Grupo Jade	Mexico Bioethanol - Feasibility Studies	Mexico	Ethanol	\$63,222.00
Independent Biodiesel Producer	Feasibility Study	Colombia	Biodiesel	\$38,250.00
Mexstarch	Risk Evaluation	Mexico	Ethanol	\$37,500.00
Roncador	Roncador - Hydrology & Tech Analysis	Peru	Hydro	\$12,000.00
Vehizero	Financial and Market Evaluations	Mexico	Hybrid Vehicles	\$40,000.00
Vehizero	Technical Plant Layout	Mexico	Hybrid Vehicles	\$85,000.00
Total Spent				\$374,632.00
Approved				\$330,000.00

- Business Plan Support:** These activities were directed toward to enhancing the SME business plan design, justification, and presentation. This activity would support the business plan preparation process of the SMEs by providing both third party and FMC expertise in the preparation of business plans that meet the standards for investment by the Fund. The average grant for this purpose was expected to be approximately US\$15,000 and US\$40,000, but shall in no case exceed US\$60,000. GEF funds approved for Business Plan Support were \$130,000 out of which \$75,000 were approved for FMC support and \$55,000 were approved for consultants. CTF reported a total amount spent on projects for Business Plans Support of \$39,200, and for FMC services of \$75,000.

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

Table 7. Business Plans

Project Name	Activity supported	Country	Project Type	GEF Grant
Tire Recycling Plant	Business Plan	Mexico	Recycling	\$39,200.00
			Total Spent	\$39,200.00
			Approved	\$55,000.00

- **Expert Due-Diligence Support:** This activity supported the retention of RE and power sector experts to review feasibility studies and business plans and provide independent third party review of the risks associated with the projects, including any environmental or social impact related risks. The average grant for this purpose was expected to be approximately US\$50,000, but shall in no case exceed US\$75,000. GEF funds approved for Expert Due-Diligence were \$160,000 out of which \$145,000 were approved for consultants and \$15,000 for travel. CTF reported a total amount spent on projects for Expert Due-Diligence of \$123,489.00

Table 8. Expert Due-Diligence Support

Project Name	Activity supported	Country	Project Type	GEF Grant
Areia Branca	Environmental Review	Brazil	Hydro	\$12,500.00
Energreen	Environmental Studies	Mexico	LFGTE	\$30,755.00
Energreen	Technical Due Diligence	Mexico	LFGTE	\$15,000.00
ISPAIA	Review of documentation	Peru	Biodiesel	\$7,500.00
Langui	Social Review	Peru	Hydro	\$13,750.00
Loreto Bay and Santa Catarina	Tariff Studies	Mexico	Wind	\$12,500.00
Mexstarch	Scale-up assessment	Mexico	Ethanol	\$10,000.00
Mexstarch	Environmental Review	Mexico	Ethanol	\$11,250.00
Roncador	Environmental Review	Peru	Hydro	\$10,234.00
			Total Spent	\$123,489.00
			Approved	\$160,000.00

- **Financial Structuring Support:** The successful financing of RE projects typically requires unique financial structures that can adequately proportion the project risks and returns in a manner that is compatible with the respective financing entity risk/return profiles. This activity will support the FMC and consultants in their activities to identify these barriers and structure and possibly create innovative solutions to these particular financial structuring hurdles. The average grant for this purpose was expected to be approximately US\$50,000, but shall in no case exceed US\$75,000. GEF funds approved for Financial Structuring Support were \$200,000 out of which \$135,000 were approved for consultants,

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

\$65,000 for FMC support and \$15,000 for travel. CTF reported a total amount spent on projects for Expert Due-Diligence of \$130,989.00.

Table 9. Financial Structuring Support

Project Name	Activity supported	Country	Project Type	GEF Grant
Areia Branca	Project Structuring	Brazil	Hydro	\$18,000.00
Mexstarch	Legal Assistance for Financial Put Option	México	Ethanol	\$5,000.00
Mexstarch	Project Structuring	México	Ethanol	\$18,000.00
Vehizero	Financial & Strategic Analysis	México	Hybrid Vehicles	\$7,500.00
Vehizero	Technical & Engineering for producing 2 prototypes	México	Hybrid Vehicles	\$87,500.00
Vehizero	Financial & Legal Restructuring	México	Hybrid Vehicles	\$30,000.00
Vehizero	Financial & Marketing	México	Hybrid Vehicles	\$12,500.00
Total Spent				\$178,500
Approved				\$160,000

- **Administrative Support:** Total amount spent on CTF Administrative activities was \$180,000

Table 10. CTF Administrative Support

Project Name	Activity supported	Country	Project Type	GEF Grant
CTF Financial Exit Study	Third Party Independent Assessment	Regional	Administrative	\$75,000.00
CTF Financial Services Support - 2012	CTF Financial Services Support - 2012	Regional	Administrative	\$30,000.00
CTF Financial Support Services - 2013	CTF Financial Support Services - 2013	Regional	Administrative	\$37,500.00
CTF Holding Company Services - 2013	CTF Holding Company Services - 2013	Regional	Administrative	\$37,500.00
Total Spent				\$180,000.00
Approved				\$300,000.00

f. Analysis of the Use of GEF Grant Resources

a) Execution and Performance of the GEF Grant Facility

The GEF Grant Facility (\$995,000) given to the CTF, was designed to support entrepreneurs and small companies in developing clean technology projects on an early stage further with technical assistance including the preparation of business concepts and business plans, and feasibility and expert due-diligence studies, that may help bring the project forward into solid investment opportunities in clean technology. GEF resources aimed to play a critical role in allowing smaller enterprises to access capital, as these companies are typically unable to attract financing simply because of their size. The analysis of data regarding expenditure of the GEF Grant Facility, yielded the following conclusions:

- A total of US\$715,821 was spent on project activities.
- GEF Funds were provided to projects located mainly in Mexico and Brazil, representing 75% of the total amount assigned to projects (US\$535,427), as shown in Table 11.
- The CTF made a good effort to develop projects in the Andean Region, as it placed 25% of project grant resources in Peru and Colombia. As shown in Table 11.

Table 11. Grants Awarded by Country

Countries	GEF Grant	%
Mexico	\$ 374,927.00	71%
México	\$ 130,000.00	
Brazil	\$ 30,500.00	4%
Peru	\$ 142,144.00	20%
Colombia	\$ 38,250.00	5%
Total amount of GEF funds granted per country	\$ 715,821.00	100%

- Technical Assistance went mainly toward Project Feasibility Studies and Financial Structuring (77% collectively) and much less toward the development of Business Plans (5%), meaning projects were usually at a relatively mature stage when selected by the Fund. This is consistent with the industry challenges, where the high cost of feasibility studies and legal fees represent a stumble block for the development of clean technologies. Based on the information gathered, it can be concluded that the CTF did play a critical role trying to lower costs for entrepreneurs in the development of expensive technologies. As shown in Table 9.

Table 12. Grants Awarded by Activity

Activity Supported	GEF Grant	%
Project Feasibility Study Support	\$ 374,632.00	52%
Financial Structuring Support	\$ 178,500.00	25%
Expert Due Diligence	\$ 123,489.00	17%
Business Plan	\$ 39,200.00	5%
Total amount of GEF funds granted per activity	\$ 715,821.00	100%

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- GEF grant resources were spent in six (6) projects that eventually became investee companies, with a total of US\$456,489 (64%) of project grant resources. However, in terms of effectiveness of the grant resources to support the development of solid cleantech solutions, only one (1) project (Langui) became a profitable investment for the CTF. With the exception of two small hydroelectric plants, and Neogas (who didn't receive a GEF grant), the other (4) clean technologies suffered critical issues in their development causing financial impairments to the CTF. As presented in the next section.

Table 13. Grants Awarded by Technology

Investee Companies	Technology	GEF Grant	%	%
Vehizero	Hybrid Vehicles	\$ 262,500.00	37%	64%
Mexstarch	Starch and by-products	\$ 81,750.00	11%	
Areia Branca	19.8 MW Hydro	\$ 30,500.00	9%	
Roncador	3.9 MW Hydro	\$ 22,234.00		
Langui	3.3 MW Hydro	\$ 13,750.00		
Cancun LFG	5 MW LFGTE	\$ 45,755.00	6%	
Non-Investee Companies				
Chiclayo	Biomass	\$ 98,660.00	14%	36%
Grupo Jade	Ethanol	\$ 63,222.00	9%	
Tire Recycling Plant	Recycling	\$ 39,200.00	5%	
Independent Biodiesel Producer	Biodiesel	\$ 38,250.00	6%	
ISPAIA	Biodiesel	\$ 7,500.00		
Loreto Bay and Santa Catarina	Wind	\$ 12,500.00	2%	
Total		\$ 715,821.00	100%	100%

- Nonetheless, based on interviews and document reviews, five (5) of the investee companies, as shown in table 14. “Additional Funds Raised by Investee”, were able to raise additional capital funds and lending (totaling over US\$190 million) as a direct result of the initial support given by the CTF as first round investors. Some specific examples include:
 - Mexstarch was initially a pilot startup financed with seed funds from CONACYT (Mexico's Science and Technology Commission). GEF grant funds were used specifically to scale-up the company's production and support the legal and financial structuring of the investment. As a result, the company was able to sign an off-taker agreement with FEMSA and secure a US\$16 million loan from BBVA Bancomer.
 - Neogas was a small family owned company with 17 employees and a limited capacity to develop and sell equipment and no capacity for distribution. Capital resources provided by the CTF were instrumental to grow and expand the distribution capacity into Brazil and other countries. Although GEF grant resources were not provided to Neogas, the CTF did provide technical assistance to enhance the corporate governance aspects of the company and to arrange an RFP to raise

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additional funds, where GEF became the majoritarian shareholder with 78% of equity, along with extra funding from other financial institutions.

- Aluz Peru, the initial owner of Langui, was able to turn around an unfortunate situation, when the Government of Bolivia forced the sale of one of their most critical assets, into a successful clean energy developer with a whole portfolio of over seven (7) small hydropower plants operating in Peru. CTF's funds and technical assistance was critical for the survival and growth of the company, and for securing additional financing, including lines of credit with CAF, Interbank and Banco Credito de Peru. Aluz' CEO said that the CTF came at a time when the company wouldn't have had access to other sources of financing in the regular financial market.

Table 14. Additional Funds Raised by Investee (color coded green)

Portfolio Company	Type of Financing	Amount (US\$ million)	Source of Funds or Already Identified
NEOgas	Term Debt	3.9	• Interbank Peru & ScotiaBank
	Term Debt/Revolving Line	31.2	Banco do Brasil, ITAU, Santander, BCP, BBVA, Helm Bank (Colombia)
	Project Debt	34.0	GE Capital (Mexico)
	Equity Financing	6	• Existing Shareholders
	Convertible Debentures	3.5	• Existing Shareholders
	Convertible Debentures	1.1	• Existing Shareholders
	Convertible Debentures	4.7	• Existing Shareholders
	Working Capital	1.4	Arab Banking Corp (Brasil)
	Debt with Warrants	20	IFC/ALAC
Industrias Mexstarch	Debt	10	•Santander
	Sub Debt	8	• FEMSA Cerveza
	Equity	2	• FEMSA Cerveza
	Working Capital	5	FOCIR, Other
	Equity	2	Existing shareholders
		10	FEMSA Holding

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	Preferred Shares	5	FOCIR
	Equity	2	Existing shareholders
	Equity	2	Existing shareholders
	Equity	4	Existing shareholders
	Refinancing	16	BBVA Bancomer
Vehizero	Equity	8	Private equity/ New Investor
	Debt	1	Banco del Bajío
Energreen Cancun	New Equity	1.5	• TBD
	Short term working capital	0.2	Existing shareholders
Roncador	Debt	0.7	• BCP lease financing
	Debt	5	Majority shareholder
Langui	Equity	0.8	MC Kapital
	Debt	4	CAF
TOTAL	TOTAL	192.9	

Source: CTF Reporting Files.

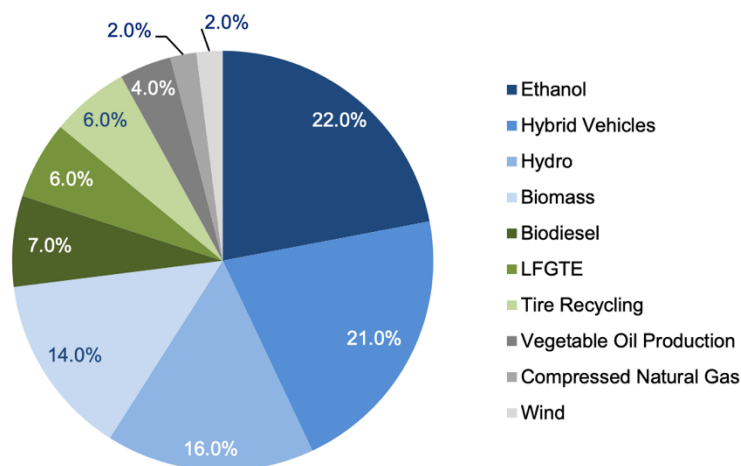
Although didn't become investee companies, the following cleantech studies, totaling an amount of US\$259,332 and representing a 36% of the GEF grant assigned to projects, were also part of the GEF Grant portfolio of CTF:

- Chiclayo's Feasibility study: a feasibility study for the installation of a rice husk cogeneration plant in Peru. The study included financial, technical and transport assessments as well as a laboratory analysis of the ashes.
- Jade's bioethanol plant feasibility study: a feasibility study for the installation of sorghum-based bioethanol plants in two suggested sites in Mexico.
- Sta. Catarina and Loreto Bay Tariff analysis: a technical analysis of electricity tariffs in Mexico with relevance to wind projects. The analysis also included a modeling exercise to forecast future tariff prices in Mexico.
- Ispaia's biodiesel project review: a technical and financial review of the project documentation and data presented to the CTF for potential investment.

In general terms, the evaluation concludes that the CTF made a good effort to diversify its portfolio across a wide spectrum of technologies, including bioethanol, hybrid vehicles, hydroelectric generation, biomass, biodiesel, landfill gas to energy, tire recycling, bioproducts, compressed natural gas, and wind. Out of ten (10) technologies analyzed, the CTF invested in five (5). Grants resources were useful for determining feasibility of projects and investments, supporting risk identification and determining whether a technology was or wasn't ready to go to market.

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Graph 2. CTF Grants (MIF+GEF) Awarded by Clean Technology



Source: Deloitte.

b) Execution and Performance of the CTF

The present evaluation intends to provide the final conclusions with regards to the use of the GEF Grant Facility provided to the CTF in parallel to the capital contributions of MIF and the other Fund Partners. Nonetheless, this analysis can't be performed in isolation from the performance of the whole fund, because of the nature of the objectives of the Grant Facility. Notwithstanding, a full evaluation of the capital contributions provided to the CTF and its effectiveness should be the subject of a separate evaluation. Therefore, a brief analysis of the Fund performance is presented here in order to understand the potential and materialized impact achieved by the GEF Grant Facility within the whole context of a VC CleanTech Fund. In other words, the Grant Facility was (or could have been) only as good as the CTF as a whole was.

The CTF didn't offer the financial return envisioned as part of its business plan. Final IDB Lab documents state that the CTF was liquidated in 2017 and a total of US\$6,431,367.90 had to be written-down. Throughout its life, the Fund invested in seven companies. While two investments were sold with some proceeds to the Fund (and therefore to the limited partners including the MIF), there were three write-offs which caused the Fund to incur significant losses. When the life of the Fund came to its end, on April 1st, 2017, the general partner and the limited partners entered into an agreement to establish the conditions under which the Fund would be liquidated (the "Liquidation Agreement"), including the appointment of a liquidator³ that was mandated to dispose of the two remaining investments (NeoGas and Roncador). By such date, the MIF had recovered US\$3,568,632.10, leaving an outstanding principal balance of US\$6,431,367.90.

Subsequently, on November 1st, 2017, the MIF made a partial write-off of US\$5,500,000.00, taking into consideration that, with the remaining assets to be disposed of, the Fund in liquidation

³ CleanTech Capital, LLC. Officer Name: John Paul Moscarella.

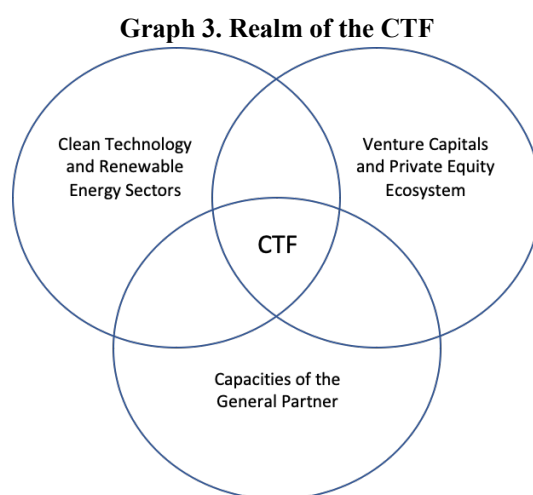
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would not generate enough resources to honor the remaining principal balance. As a result, the outstanding principal balance was written down to US\$931,367.90.

Pursuant to the Liquidation Agreement, two remaining assets were disposed during the first half of 2018. While Roncador shares were sold to its majority shareholder with a significant haircut, NeoGas shares were transferred to a company related to the general partner with a symbolic price (if the transferee company sells the shares in four-year time period, a portion of the proceeds will be shared with the limited partners of the Fund, including the MIF, following the formula introduced in the corresponding agreement). The Fund used the proceeds from the sale of Roncador to pay off Fund's outstanding liabilities, thus without leaving any distributable resources to the limited partners. Once the Fund was liquidated, the MIF didn't expect to recover any of the outstanding principal balance of US\$931,367.90. Consequently, a second and final write-off of US\$931,367.90 was requested to the IDB's Finance Department on July 16, 2018.

It's not possible to attribute the financial impairment of the CTF to a single cause, nor would it be accurate to conclude that the CTF was a failure, because there were a whole sort of positive effects, including current environmental benefits, stronger technical capacities among the CTF stakeholders and beneficiaries and a list of lessons learned that have been capitalized on subsequent cleantech funds, many in which IDBLab and GEF have co-invested.

Expected financial performance of the CTF was inserted within the realm of three co-existing influences. First, the state of development of the clean and renewable energy sectors, second, the health and conduciveness of the venture capital and private equity ecosystems, and third, the overall capacities of the General Partner and its body of technical specialists. An overview of these three factors can lead us to think that challenges in all three were among the main reasons why the CTF couldn't perform financially as initially planned.



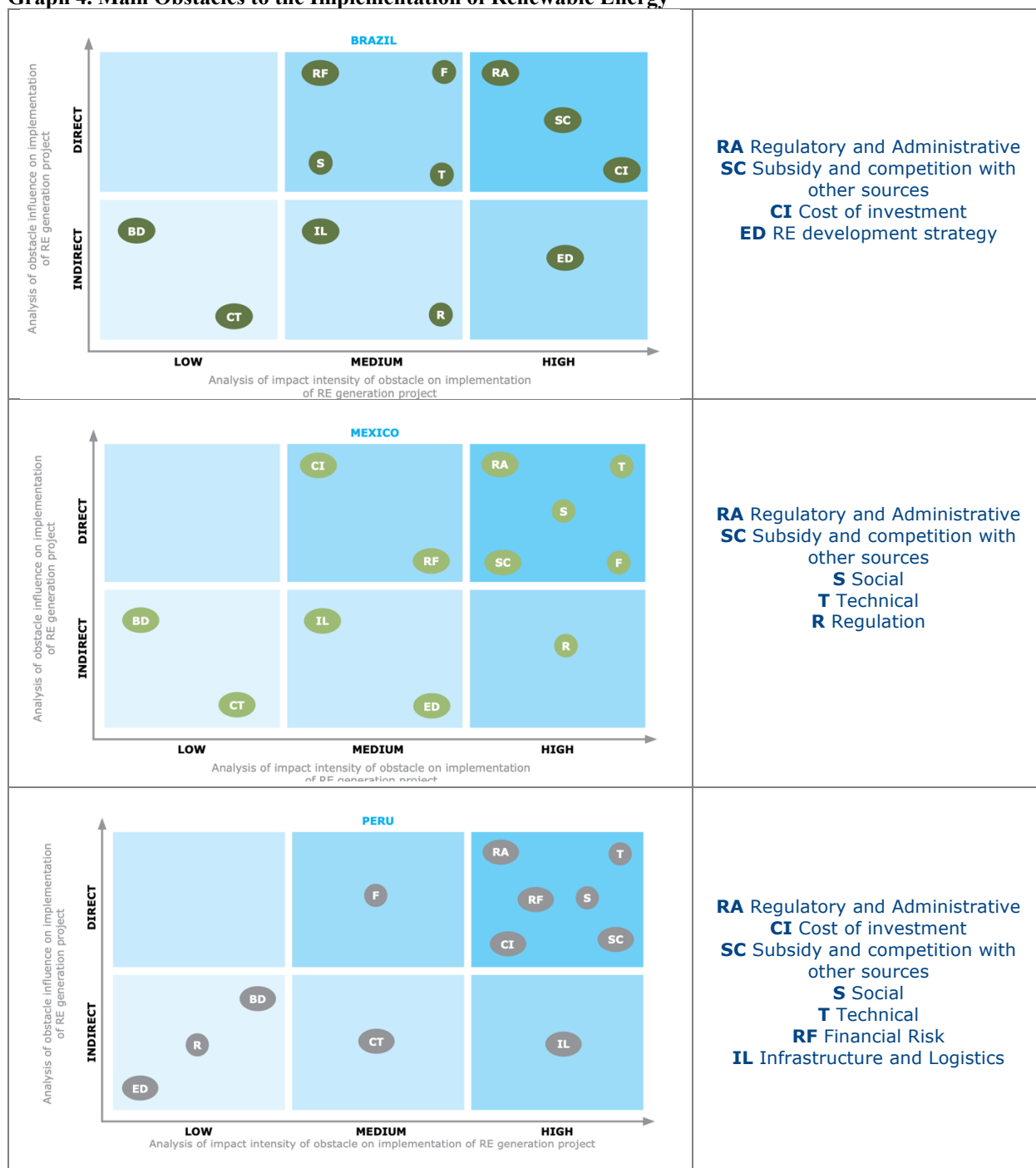
Although the Latin American region has achieved important milestones in the promotion and development of the clean and renewable energy sectors, these sectors were in an early nascent stage in Latin America between 2004 and 2014. There were several factors hindering the birth and development of new clean technologies, making it very difficult for project developers as well as for investors and financial institutions to support development of the market. The Institute “Fundación Getulio Vargas” (FGV) developed a study in 2016 summarizing some of the main obstacles experiencing in the region for the development of the sector. Among the most critical ones were:

- “Regulatory and administrative barriers”: the bureaucracy to which RE projects had to be submitted so they may obtain their due licenses and authorizations should be noted. Too often, the exact processes required for RE projects to be efficiently approved by government bodies and agencies were not clear.
- Obstacles related to “subsidies and competition with other energy sources” also constituted direct and high-intensity barriers in all countries. Subsidies, especially for conventional energy sources, made it difficult to introduce RE generation projects in all the countries analyzed.
- The “Social” obstacle was also significant in all the countries analyzed, as it interfered with or delayed the implementation of RE projects through resistance from local communities. In Colombia, Chile, Mexico, and Peru this obstacle’s influence has been high due to a combination of protected communities and protected areas which coincide with areas of potential for renewables.
- As for the “Regulation” obstacle, Mexico and Colombia shared a certain similarity, as they have had a general law on renewables with definitions and requirements, as well as an incentive plan. However, these do not cover all necessary aspects, causing doubts for entrepreneurs and financiers.

This following matrix shows a mixed classification of RE project obstacles identified by FGV in the region. Once the obstacles were classified as direct or indirect, they were then analyzed according to their respective intensity.

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Graph 4. Main Obstacles to the Implementation of Renewable Energy



Source: Fundación Getulio Vargas, 2016

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Private equity in LAC was also a relatively recent phenomenon. In 2010, private equity accounted for a percentage of GDP for any of the LAC economies that was roughly half the 1.0% to 2.0% observed in the United States. Even in Brazil, the leading destination among LAC countries, 2010's private equity made up only 0.27% of GDP. The percentage for venture capital alone was even smaller: the total for the US in 2010 was slightly under 0.20% and that for Argentina, the highest ranking LAC country, roughly 0.01% while Brazil was only slightly more than 0%.

Financing institutions in LAC had also limited experience with renewable energy projects and had not developed the technical capabilities to adequately assess the risk profiles of these projects, which can deter approval of finance, especially in the project finance modality, for renewable energy project developers. Moreover, both project developers and financing institutions lacked sufficient knowledge about the financing instruments that best fit the requirements of renewable energy projects, considering their relatively high upfront capital requirements, long amortization periods and risk profiles.

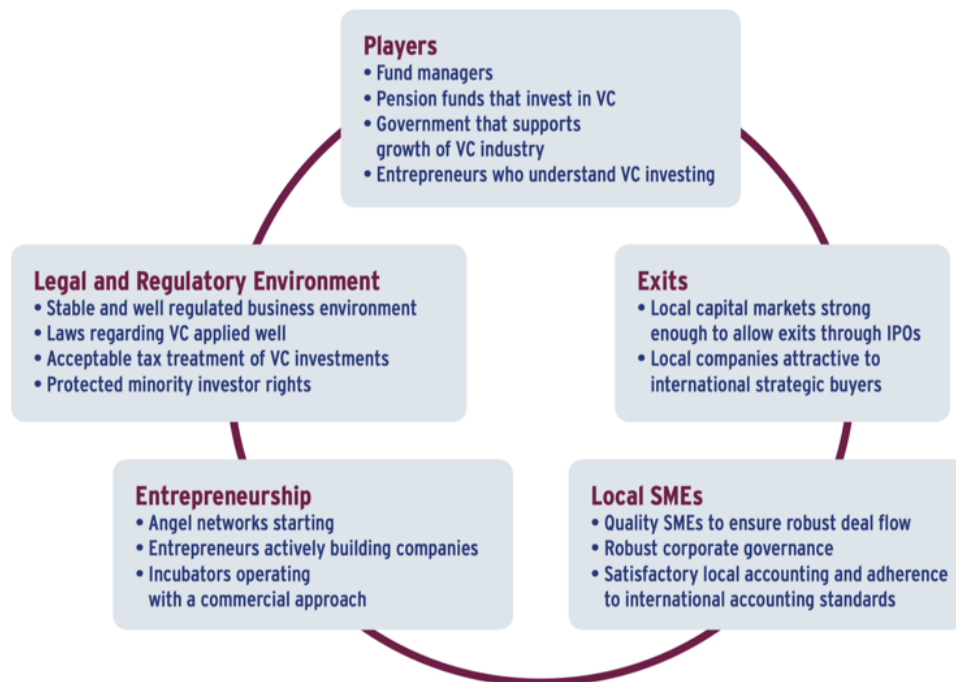
Clean energy projects tend to require significant investment. Although it is possible for VC funds to invest in smaller deals, larger PE funds tend to be better vehicles as they are able to leverage larger sums of investments with longer holding times. Whereas equity is predominantly used in developed VC/PE markets globally, a mix of investment tools, including equity, quasi-equity and debt should be considered when investing in a young VC/PE industry⁴.

As pointed out on Graph 4., Garcia-Robles, Ramos and Chkourenko describe the main elements necessary for a conducive CV Ecosystem to allow start-ups to thrive. Without a conducive ecosystem, there is no continuum in the financing chain (angels, seed, early VC, growth capital, PE) and SMEs cannot maximize their potential. In the cleantech sector, exits are a key concern in LAC. A strategic sale to another company is the most common exit option. Global networks are vital to finding strategic investors and creating exit opportunities⁵.

⁴ Garcia-Robles, Ramos and Chkourenko, Can venture capital funds be a source of investment for clean energy SMEs?, Proparco's Magazine, pg. 11.

⁵ Ibid.

Graph 4. Elements of a Conducive VC Ecosystem



Source: IDBLab, Garcia-Robles, Ramos and Chkourenko

Finally, the experience/skills of the fund manager is the most important influence on the performance of a VC fund and its deal flow. Fund managers need to envision a long term funding strategy for the investee companies and make sure it is in alignment with the management team and co-investors on potential exit strategies. Moreover, to have a broad understanding of the sector dynamics that could impact positively (or negatively) the fund's investments financial performance. Solid skills in venture finance as well as in the particular sector they are in, are at the core of a successful VC's DNA.

If the story of the CTF is analyzed under the lens of this three-axis realm, we can see that challenges present in these three areas may explain the financial performance of the fund. Without making a definitive judgment about the failure of some of the investments, documentation reveals three main factors hampering the development of the CTF:

- **Lack of VC/PE Ecosystem:** This was a critical factor that affected the financial performance of Neogas and Vehizero. The former because the CTF wasn't able to structure a reasonable exit by the end of the fund life, despite the fact that Neogas was, and continues to be, a successful company. In the case of Vehizero, the company was able to deliver the technology, proven by the delivery of 25 prototype hybrid electric vehicles, however, due to an unforeseen situation, the company run out of capital and couldn't secure the necessary capital to sustain operations in the long-run.

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- **Technical Issues:** The cases of Areia Branca and Energreen show missing technical capacities on the side of the General Partner. The former, because the team didn't identify early on that there were critical geological problems that could cause cost overruns and impair quickly the financial performance of the investment. In the last case, Energreen, the company was venturing with an unproven technology "SmartSoil" that never made up. These two cases, could have been either avoided or mitigated with more solid due diligence.
- **Regulatory and Administrative:** a weak regulatory framework and high administrative burden in the clean energy sector affected the performance of both Roncador and Mexstarch. Roncador was without hydrology license for three years affecting its overall financial performance, and Mexstarch could not fully materialize its original plans to produce ethanol due to a regulatory change.

Table 15. Grants Awarded by Technology

Portfolio Investments	Technology	Amount Invested	Status as of 2014	Gain/Loss/Push	Reason
NEOgas	CNG	\$3,690,000.00	Partial Exit - Retained 8% Interest	Loss	Lack of VC/PE Ecosystem
Areia Branca	Hydro	\$3,500,000.00	Fully Exited	Push	Technical
Roncador	Hydro	\$671,347.00	Unrealized Return	Loss	Regulatory and Administrative
Langui	Hydro	\$763,500.00	Fully Exited	Gain	ok
Energreen	LFGTE	\$2,826,995.00	Write-Off	Loss	Technical
Mexstarch	Ethanol	\$4,037,200.00	Write-down	Loss	Regulatory and Administrative
Vehizero	Hybrid Vehicles	\$3,740,000.00	Write-down	Loss	Lack of VC/PE Ecosystem
		\$19,229,042.00			

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g. The Logical Framework and Achievement of Outcomes

Project Strategy	Project Activity	Specific Indicator	End of Project Assessment	Achievement Rating	Means of Verification for Monitoring & Evaluation	Comments										
Development Objective: To reduce financing barriers to the implementation of commercial grid connected renewable energy power generation projects thereby reducing the GHG emissions of heat and electricity generation activities	Provide project sponsor development support and equity and debt financing	Indicator 1: (10) Direct investment of \$130M in alternative or additional renewable energy projects	Partially Achieved	Satisfactory (S)	Annual verification reports on project investments relative to baseline, and changes in GHG emissions	Although the target of ten (10) investments wasn't achieved, the CTF was able to invest in seven (7) cleantech projects, four (4) of which are still operating and generating environmental benefits. The CTF mobilized additional US\$190M in equity and financing.										
		Indicator 2: Construction of 85 MW of additional or alternative renewable energy power generation facilities	Achieved /	Highly Satisfactory (HS)	Utility bills of participating off-takers # installed capacity in MW.	<table><tr><td>A.Branca</td><td>19.8 MW Hydro</td></tr><tr><td>Roncador</td><td>3.9 MW Hydro</td></tr><tr><td>Langui</td><td>3.3 MW Hydro</td></tr><tr><td>Energreen</td><td>5.0 MW LFGTE</td></tr><tr><td>Total</td><td>32 MW</td></tr></table> CTF's portfolio achieved a total of 32MW of additional renewable energy generation capacity. Note: the initial target seems too high in relation to the resources committed and the objective to support small-scale generation.	A.Branca	19.8 MW Hydro	Roncador	3.9 MW Hydro	Langui	3.3 MW Hydro	Energreen	5.0 MW LFGTE	Total	32 MW
		A.Branca	19.8 MW Hydro													
Roncador	3.9 MW Hydro															
Langui	3.3 MW Hydro															
Energreen	5.0 MW LFGTE															
Total	32 MW															
Indicator 3: Direct incremental GHG impact by emissions reductions	Achieved	Satisfactory (S)	Baseline Reports on GHG emissions	CTF's total portfolio achieved emissions reductions of 2.9 tCO2 over the 10 year period of the Fund's life.												

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Project Strategy	Project Activity	Specific Indicator	End of Project Assessment	Achievement Rating	Means of Verification for Monitoring & Evaluation	Comments
		in the amount of 3 million tons CO2 over a 10 year period				
Immediate Objective 1: Remove barriers to project financial acceptance by enhancing feasibility studies, business plans, financial risk mitigation strategies and expert due diligence.	Support feasibility study preparation	Indicator 4: Preparation of 8 feasibility studies	Partially Achieved	Satisfactory (S)	Evaluation by FMGC of incrementality of proposed projects Feasibility Studies	Although the indicator was not achieved, it was highly satisfactory because the CTF prepared 7 feasibility studies.
	Support business plan preparation	Indicator 5: Presentation of 12 qualified business plans to investment committee	Not Achieved	Unsatisfactory (U)	Reporting by FMC of project reviews Business Plans	CTF only provided support for the preparation of 1 Business Plan.
	Support expert due diligence and financial risk mitigation activities	Indicator 6: Due Diligence Reports	Achieved	Highly Satisfactory (HS)	Reports Minutes of IC meetings	CTF supported the preparation of 10 Expert Due Diligence Studies.

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Project Strategy	Project Activity	Specific Indicator	End of Project Assessment	Achievement Rating	Means of Verification for Monitoring & Evaluation	Comments
	Support Financial Structuring of Projects	Indicator 7: Project Finance Models Developed	Achieved	Highly Satisfactory (HS)		CTF supported the financial and project structuring of 8 projects to be presented to the investment committee.
	Prepare GHG emission baseline reports	Indicator 8: GHG Emission Baseline Reports	Achieved	Highly Satisfactory (HS)		The CTF performed the accounting of GHG reductions per project over the ten years life and provided a GHG Emissions Report to the evaluator.
	Enhance in country capacity through project participation (learning by doing)	Indicator 9: Number of people and institutions with additional qualifications and experience in structuring project investments and RE project finance.	Partially Achieved	Satisfactory (S)		During the interviews with project beneficiaries, they confirmed that their firms gained additional qualifications and expertise in international practices related to project finance, corporate governance and environmental and social standards.

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Project Strategy	Project Activity	Specific Indicator	End of Project Assessment	Achievement Rating	Means of Verification for Monitoring & Evaluation	Comments
Immediate Objective 2: Remove financial barriers to project implementation by providing equity financing for RE projects that result in GHG emission reductions	Make equity investments in selected RE power projects	Indicator 10: Completion of 8 additional or alternative project investments	Partially Achieved	Satisfactory (S)	Reporting by FMC	CTF made 7 equity investments in Clean Technology Projects.
	Target projects that have high GHG reduction potential	Indicator 11: Total portfolio GHG reduction potential of 3 million tons CO2 by 2012	Achieved	Satisfactory (S)	Annual verification reports on project investments, changes in GHG emissions	CTF's total portfolio achieved emissions reductions of 2.9 tCO2

h. Evaluation of Project Outcomes

Development Objective:

To reduce financing barriers to the implementation of commercial grid connected renewable energy power generation projects thereby reducing the GHG emissions of heat and electricity generation activities

The IDB CleanTech Fund project objectives of reducing the financing barriers to renewable energy deployment were consistent with the OP 6: Promoting the Adoption of Renewable Energy by Removing Barriers and Reducing Implementation Costs and the strategic priorities of the Climate Change focal area. This section intends to determine if project objectives and development outcomes were achieved.

However, before evaluating the project outcomes, it's important to take stalk at the Project Strategy designed and implemented to aim for such objectives. Going back to the rationale of the CTF and the GEF Grant Component, this evaluation concludes that development assumptions were correctly interpreted and the instrument utilized was appropriate. Performance and outcomes achieved by the CTF should be analyzed through a wider lens that goes beyond the financial performance of the investments, and considers spill-over effects including strengthening of the cleantech sector, achievement of environmental and sustainability co-benefits, leverage of private sector capital, implementation of demonstrative cleantech pilots, and lessons learned for the development of the cleantech and VC industries.

The following were the two main objectives of the project, according to the Logical Framework:

Objective 1: Remove barriers to project financial acceptance by enhancing feasibility studies, business plans, financial risk mitigation strategies and expert due diligence.

This objective was set because it was clear that consumers and investors of the region had limited experience working with local financial institutions due to perceptions of risk by lenders, high transaction costs, and limited institutional infrastructure, or lack of awareness regarding technologies, their technical and financial performance, and deal structuring expertise. Therefore, supporting the early stages of deal structuring, including enhancing the capacities on legal, environmental and technical due-diligence was considered critical to promote investment in clean technologies.

The evaluator considers that this objective was achieved because in all cases the CTF was able to reduce transaction costs, increased the financial and technical viability of the projects, and scale clean technologies from a pilot stage to viable and investable solutions, regardless of their future financial performance.

Terminal Evaluation of the IDB Clean Tech Fund (CTF)

In relation to “GEF’s Expected Project Outcomes (GEF Project Proposal, pg. 9)”, the CTF performed satisfactory, achieving most of the indicators outlined in the Logical Framework. The outcomes and related indicators were satisfactorily achieved by the CTF:

Expected Result 1: “Increased access to viable and economically sustainable project financing will be created enabling project sponsors and developers access to equity and debt financing on commercial terms. New sources of debt financing will be developed, raising the awareness of the traditional financial community of the viability of renewable energy projects”.

- Indicator 1: (10) Direct investment of \$130M in alternative or additional renewable energy projects

The evaluation also concludes that these efforts produced a catalytic effect in the mobilization of private capital and debt finance toward the development of clean tech and renewable energy projects, as at least 5 of the investee companies were able to raise additional capital funds and lending instruments as a direct result of the initial support given by the CTF as first round investors. As presented in section (f.a.) “[Execution and Performance of the GEF Grant Facility](#)”, the CTF orchestrated the syndication of over US\$190 million from existing and new investors, financial institutions and the private sector, raising their participation and awareness of the financial community on the viability of the sector.

Interviewed beneficiaries also confirmed this assertion and were thankful for the existence of the CTF and of its role as their initial investment partner. The CTF also made an effort to diversify its portfolio across a wide spectrum of alternative technologies, including bioethanol, hybrid vehicles, hydroelectric generation, biomass, biodiesel, landfill gas to energy, tire recycling, bioproducts, compressed natural gas, and wind. Out of ten (10) technologies analyzed, the CTF invested in five (5).

Expected Result 2: “As many as ten to twenty renewable energy projects will be financed and constructed providing much needed first-mover positioning in the marketplace and demonstrating technical, financial and regulatory viability”.

- Indicator 1: (10) Direct investment of \$130M in alternative or additional renewable energy projects
- Indicator 2: Construction of 85 MW of additional or alternative renewable energy power generation facilities
- Indicator 3: Direct incremental GHG impact by emissions reductions in the amount of 3 million tons CO2 over a 10 year period

The CTF invested in seven (7) cleantech projects, as presented in section (c) “[Analysis of Project Investments](#)”, out of the ten (10) investments originally planned, four (4) of which are still operating and generating environmental benefits. These are: Neogas, Areia Branca, Roncador and Langui.

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This number is considered satisfactory, given the budget constraints and the challenges faced in the clean technology sector. The projects, collectively, achieved 32MW of new renewable generation capacity, 27MW of which are still in operation; and emissions reductions of 2.8 million tCO₂ over the ten year fund-life period.

Expected Result 3: “The resulting projects will build capacity in the technical and construction trade areas of renewable energy implementation resulting in increased skill levels and reduced project risks in future projects”.

- Indicator 4: Preparation of 8 feasibility studies
- Indicator 5: Presentation of 12 qualified business plans to investment committee
- Indicator 6: Due Diligence Reports
- Indicator 7: Project Finance Models Developed
- Indicator 8: GHG Emission Baseline Reports
- Indicator 9: Number of people and institutions with additional qualifications and experience in structuring project investments and RE project finance.

The CTF supported the preparation of seven (7) Project Feasibility Studies, one (1) Business Plan, nine (9) Expert Due Diligence Studies, and eight (8) Financial Structuring Products. The implementation of these outputs was satisfactory, because the CTF provided the technical assistance needed to bring the deals to an investable stage. Moreover, the information gathered indicates that the CTF produced a relevant set of technical products with a relatively small budget.

As shown in section (f.a). “[Execution and Performance of the GEF Grant Facility](#)”, and given budget restriction, the CTF prioritized the use of grant resources adequately by putting more resources on Project Feasibility Studies and Financial Structuring (77% of the whole project technical assistance budget) and less on the development of Business Plans (5%). This is considered a positive trade-off, as these components are usually the most expensive and represent the highest burdens to the developers of clean technologies. Instead, the CTF aimed to identified deals that were more matured and that needed less work on their business plans.

Interviewees confirmed that technical assistance provided by the CTF in different areas including, environmental and social assessments, project investment structuring, corporate structure, and connection with global networks, allowed their firms to gain a level of professionalism, and additional qualifications and expertise that wouldn’t have been possible otherwise.

Objective 2: Remove financial barriers to project implementation by providing equity financing for RE projects that result in GHG emission reductions

The renewable energy projects financed by the CleanTech Fund were consistent with and supportive of internationally agreed programs of action for sustainable development and the reduction of the use of fossil fuel power development. The clean technologies in which the CTF

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invested were environmentally sound and appropriate for the local conditions in the countries where they were invested, and could lead to wider application. In addition, the project leveraged other funds from governmental, bilateral and private sources and left diversified technical capacities across different clean technologies.

Expected Result 4: “The projects financed by the Fund will directly result in GHG emissions of at least 3 million tons of CO2 equivalent by 2014.”

The projects financed by the CTF obtained GHG emissions reductions of 2.8 million tCO2 over a ten year period, and as of today, four (4) of them (as listed above) continue to provide environmental benefits of around -314,883 tCO2 per year.

The Carbon benefits from the projects, as well as the power generation from renewable energy projects is presented in the table below:

Table 12. CO2 Reductions and

Company	Sector	Country	Holding (%)	Holding Period Years	Annual Emissions Reductions (tCO2e)	Total (tCO2e)	% of CO2 per Holding
Neogas	Gas transport	Brazil	8%	10	276,000	2,760,000	220,800
Mexstarch	Wet Milling	Mexico	13%		N/A		
Vehizero	Hybrid vehicles	Mexico	41%		N/A		
Areia Branca	Small hydro	Brazil	25%	1	19,426	19,426	4,857
Langui	Small hydro	Peru	30%	4	7,800	31,200	9,360
Maja Energia	Small hydro	Peru	30%	8	5,657	45,256	13,577
Energreen	Biogas	Mexico	40%	7	6,000	42,000	16,800
Total annualized and cumulative:					314,883	2,897,882	265,393

Table 13. Total Power Generation from RE Projects

	2009	2010	2011	2012	2013	2014	Total
Power Generation from RE Projects (MWhr/yr)	97,130	112,198	128,432	141,762	148,511	148,511	776,546

VI. Risks to Sustainability of Project Outcomes

This section refers to the “likelihood of sustainability of outcomes at project termination”

Sustainability is understood as the likelihood of continued benefits after the GEF project ends. Given the uncertainties involved, it may be difficult to have a realistic assessment of sustainability of outcomes. Therefore, assessment of sustainability of outcomes give special attention to analysis of the risks that are likely to affect the persistence of project outcomes. The following four dimensions or aspects of risks to sustainability were analyzed:

- Financial risks. The CTF was subject to a currency risk because a majority of the debt financings for the projects was denominated in US dollars while most of the project revenues were denominated in local currencies. The CTF experienced a risk of limited resources available to fully develop the projects, as was the case with Vehizero. The CTF also experienced financial risks associated to the failure of the CDM and impediment to sale project related CERs. All financial risks continued over time, affecting the project operations over time, even after the CTF was closed.
- Social and environmental risks. CTF projects were subject to social and environmental risks a number of times, and GEF resources were instrumental in their assessment and mitigation. Some of the project that required social and environmental due diligence include the hydro-power projects (Langui, Roncador, and Areia Branca). The CTF followed the application of MIF and FMO’s Environmental and Social Guidelines in the due diligence process of project selection.
- Regulatory risks. Clean tech projects are usually highly vulnerable to regulatory risks, and the CTF projects weren’t the exception. Regulatory risks are not only risks present during project development but also tend to persist over time and threaten sustainability of outcomes in the long-run. For instance, Mexstarch was affected by a regulation that restricted the production of corn-based ethanol and curtailed its capacity to achieve the initial environmental objectives.

Despite the identified risks, the evaluation concludes that likelihood of sustainability of outcomes at project termination was high because the four Expected Project Outcomes, as presented in the previous section, were satisfactorily achieved. In summary: **(i)** the CTF increased access to viable and economically sustainable project financing, enabling project sponsors and developers’ access to equity and debt financing and by mobilizing over US\$190 million in additional finance. **(ii)** the CTF enabled the development of seven (7) cleantech projects, (4) of which are renewable energy plants producing environmental benefits. **(iii)** the CTF built new technical capacities in cleantech resulting in new industry skills at the country and regional levels. And **(iv)** the CTF obtained GHG emissions reductions of 2.8 million tCO₂ over a ten-year period. In all fours cases, the generated

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results continue to be present and valid today, and there is a very high probability that they will continue generating long-term benefits.

VII. Assessment of M&E Systems

Given the nature of the project “Technical Assistance to a VC Fund”, this section describes the level of involvement from IDB Lab (MIF) in the monitoring of the operations and governance of the Fund, and the fiduciary controls implemented by the Limited Partnership Agreement.

IDB Lab was actively involved in the following committees, whose activities and responsibilities are described below:

- **The limited partners:** The limited partners of the CTF provided the equity to the fund. The LPs established certain conditions in the Limited Partnership Agreement, in which the functions and roles of the LPs and the General Partner were thoroughly defined. The Limited Partners, as the name define them, were not actively involved in the management of the fund. The LPs were represented in both, the Advisory Committee and Investment Committee. For this matter, the LPs interests were taken into consideration for important decisions regarding the fund’s management, and the fund’s investment decision-taking process.
- **The Investment Committee:** The Investment Committee was responsible for delivering the investment and liquidation decisions recommendations of the Fund. These decisions included Follow-On Investments or the incurrence of debt under a Credit Facility. MIF was an voiced observer with no voting rights.
- **The Advisory Committee:** The Advisory Committee was composed by members appointed by each Limited Partner (each LP assigns a member), and two members appointed by the General Partner. Although the General Partner appointed two members of the Committee, one of them had to be approved by the rest of the Advisory Committee. Additionally, the General Partner may appoint additional members if any Limited Partner had a Capital Commitment greater than USD \$3 million. The Advisory Committee had to approve the Fund’s semi-annual valuation of the investment portfolio. The Advisory Committee met twice a year, performing with the industry’s best practices.

The CTF had the following monitoring and evaluation systems and fiduciary controls in place:

- **The Vice President of the CTF:** The Vice President had the following functions:
 - Engages in deal origination
 - Takes the roll as the deal lead
 - Assists with financing strategies, planning and evaluation
 - Assists with operations

- **Monitors portfolio companies**
- **Financial Controls of the CTF:** According to a process review made by Deloitte, the CTF developed an operational procedure manual (Standard Operating Procedures Guidelines) in order to have an institutionalized work environment. The procedure guidelines implemented by CTF focused on a wide variety of contents such as investment procedures, reporting, financial controls, risk management, human resources and IT among others. The manual was continuously reviewed and improved for the better performance of the Fund. Overall, CleanTech outsourced those administrative tasks it feels it cannot do at a qualified level. The manuals recommended for all accountants to be US certified CPAs. The office had to supply invoices and receipts for all disbursements and before sending expense reports to the accountant, a Senior Managing Director would approve them. The CTF followed these main recommendations, besides adhering to the limitations set forth in the LPA. The company followed the generally accepted practices in the industry. It required tight control of disbursements, and had the upper administration informed of expenses which were incurred.

VIII. Assessment of Processes That Affected Attainment of Project Results

This section presents the main issues that affected project implementation and attainment of project results.

- **Preparation and readiness.** One of the most critical challenges that faced the CTF was the lack of previous industry experience of VC Funds, in general, and in particular in the clean technology and renewable energy sectors in LAC. Although the project strategy and rationale were properly designed, critical elements, such as a conducive VC/PE and sound regulatory and policy framework in the clean and renewable energy sector were absent. Also, there were not enough General Partner candidates with a large VC and clean technology trajectory and good understanding of the dynamics of the LAC region. Due to the premature stage of the ecosystem, the General Partner experienced critical technical and financial difficulties to fully develop and realize project returns.

IX. Lessons Learned

The CTF left important lessons learned for the development of future VC Funds as potential vehicles to support the development of the clean technology sector. The most important lessons learned refer to funding, the conduciveness of the VC/PE sector, the technical skills of the General Partner, and the need to perform thorough due-diligence in the technical, regulatory, environmental and social areas of the project, before committing capital to a clean tech project. The following bullets explain these lessons in more detail:

- **Lack of funding or too modest forecasts.** The lack of funding, or of potential funding, is an important matter to consider for upcoming funds. In the case of the CTF, the funding estimations were lower than actually needed. On one hand follow-on investments were much larger than originally expected. This condition limited the potential success of Neogas and Vehizero. The problem with these limitations is that either the Fund's participation dilutes due to its lack of funding in additional rounds of financing, or the project stagnates as in Vehizero, where they were virtually left without funding. On the other, rapid expansion of clean technologies needs for equity injections, but lack of capital can become an issue if the Fund has a limited capital, is unable to support the inflow of more capital, or unable to secure a strategic exit with a larger private equity fund. In any case, funds should try to look for additional sources of equity before the burn rate dries a company up. Funds should realize that high and clean tech start-ups tend to have greater than anticipated needs.
- **VC funds are an appropriate instrument only if the VC/PE and the financial ecosystem is conducive to support the following investment series and/or the long-term debt needed to fully develop cleantech projects.** Clean energy projects tend to require significant and long-term investment to fully materialize its financial gains. Although it is possible for VC funds to invest in smaller deals, larger PE funds tend to be better vehicles as they are able to leverage larger sums of investments with longer holding times. Whereas equity is predominantly used in developed VC/PE markets globally, the availability of a mix of investment tools, including equity, quasi-equity and debt should be considered when investing in a young clean technology.
- **The technical capacities of the General Partner are of outmost importance to identify and move deals forward successfully.** The experience and skills of the fund manager have a material influence on the performance of a VC fund and its deal flow. Fund managers must have both financial (including both VC/PE and project finance) and clean energy expertise and be fully committed to becoming established in the VC industry. These capacities would ensure a more efficient identification of deals, and a timely identification of technical, environmental and social risks.
- **The management team of the investees is a critical factor in performance.** The CTF learned that the management of an investment should be fully analyzed during the due

diligence. The diversity of having collaborated with 7 managements has given the CTF the ability to interact and evaluate their performance and the opportunity to realize how important management is in order to obtain targeted results. Management of investments like NEOgas and Mexstarch has proven its professionalism and ability throughout CTF's presence in the investments. In the case of Vehizero and Energreen mainly, the management's limitations were proved costly to the projects.

- **Social issues need to be resolved early on in a sustainable way.** Social issues do arise and can escalate quickly causing significant losses to the project, therefore they should be considered a top priority in order to mitigate any risk that this may cause. Langui and Roncador presented important lessons to the CTF in this regard.
- **Exhaustive due-diligence regarding the regulatory and legal situation of a potential project is paramount.** Funds must analyze the regulatory and the legal situation of potential projects very carefully before committing capital. Funds need to consider the political risk when investing in Latin America. Political implications and regulations, not only current but future, must be considered at a local and national level. Not only is the political risk important, but also changes in governments, as new teams who arrive to key positions may pose a threat to the Investees.
- **Exhaustive due-diligence regarding the soundness and viability of a technology is also extremely important.** New technologies should be studied very carefully and funds need to ensure that they are sound and viable. Also, if there are working prototypes or early implementations somewhere else, before accepting its implementation on a project. The CTF should have tested the SmartSoil technology before depending on its supposed efficiency to obtain interesting results.

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Annex I. A) Project's Logical Framework

Project Strategy	Project Activity	Specific Indicators	Monitoring and Evaluation
Development Objectives:			
To reduce financing barriers to the implementation of commercial grid connected renewable energy power generation projects thereby reducing the GHG emissions of heat and electricity generation activities	Provide project sponsor development support and equity and debt financing	Direct investment of \$130M in alternative or additional renewable energy projects Construction of 85 MW of additional or alternative renewable energy power generation facilities Direct incremental GHG impact by emissions reductions in the amount of 3 million tons CO ₂ over a 10 year period	Baseline Reports on GHG emissions Annual verification reports on project investments relative to baseline, and changes in GHG emissions Utility bills of participating off-takers
Immediate Objective 1:			
Remove barriers to project financial acceptance by enhancing feasibility studies, business plans, financial risk mitigation strategies and expert due diligence.	Support feasibility study preparation Support business plan preparation Support expert due diligence and financial risk mitigation activities Prepare GHG emission baseline reports Enhance in country capacity through project participation (learning by doing)	Preparation of 8 feasibility studies Presentation of 12 qualified business plans to investment committee Number of people and institutions with additional qualifications and experience in such activities	Evaluation by FMGC of incrementality of proposed projects Reporting by FMC of project reviews Minutes of IC meetings
Immediate Objective 2:			
Remove financial barriers to project implementation by providing equity financing for RE projects that result in GHG emission reductions	Make equity investments in selected RE power projects Target projects that have high GHG reduction potential	Completion of 8 additional or alternative project investments Total portfolio GHG reduction potential of 3 million tons CO ₂ by 2012	Reporting by FMC Annual verification reports on project investments, changes in GHG emissions

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B) Incremental Cost Matrix

	Baseline	Alternative	Increment
Domestic Benefits	<p>Continued investment in conventional fossil fuel power generation in Latin America and the Caribbean</p> <p>Equity funds favor low risk conventional power projects</p> <p>RE project sponsors continue to struggle to get the attention of commercial financing sources</p> <p>Limited experience with grid connected renewable power generation projects</p>	<p>Shifting of commercial equity investments into alternative or additional renewable energy projects</p> <p>Development of debt and equity financial sources experienced with renewable energy financing</p> <p>Training through participation of project sponsors in the successful presentation of project economics to attract commercial and institutional investment</p> <p>Successful RE project implementation to demonstrate commercial operation</p>	<p>Overcome current lack of funding sources for renewable energy projects</p> <p>Provide expertise in feasibility study preparation, business plan development and financial risk mitigation.</p> <p>Training of project sponsors in successful project documentation and presentation</p> <p>Documentation of GHG emissions reductions to enhance project economics and provide verification</p>
Global Benefits	<p>Sector utility power development and generation relies mostly on gas, oil, coal and large scale hydro power generation</p>	<p>Preparation of 8 feasibility studies</p> <p>Presentation of 12 qualified business plans to investment committee</p>	<p>3 million tons of CO2 emissions avoided by 2012</p> <p>Replicable model for further on grid RE investment, especially in SME context</p>
Total Costs GEF Share	\$60,000,000	\$62,195,000	\$2,195,000 \$995,000 *

* The GEF share will be used only for the incremental costs related to removing the barriers of successful renewable energy project financing and will be contracted and accounted separately from other project funds. The balance of the incremental costs will be funded by the MIF and other third-party donor organizations or project sponsors.

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Annex II. Project Category Annex

Biodiversity		Climate Change	International Waters	Land Degradation	
<ul style="list-style-type: none">• Conservation• Sustainable Use• Benefit Sharing• PA• Outside PA• Both PA/Outside• Rehab deg habit• Control biotech risk• Control alien species• Indigenous knowledge• Legislation threatened species• In-country• Outside• Integration National Decision• Minimize adverse impact• Protects customary uses• Rem action degrade areas• Gov Pvt sector Coop• Agrobiodiversity	<ul style="list-style-type: none">• Trust funds• Ecotourism• Capacity building• Policy reform• Legislation reform• Private sector participation• Indigenous peoples comp• Income generation• Inventory bline data• M&E indices• Buffer zone development• Clearing house mechanism• Cojoint management• Incentive measures• Public awareness• Migratory species• International conventions• Research• Science tech group	Efficient equipment Solar X Biomass X Wind X Hydro X Geothermal X Fuel cells	<ul style="list-style-type: none">• Transboundary analysis• Strategic Action Program Dev• Freshwater basin• Large marine ecosystems• Small Islands• Wetland habitat• Ship-based• Toxic contaminant• Global program action demo• Fisheries protection• Global support		
		Ozone Depletion			Multiple Focal Area (OP12)
		Monitoring ODS phase-out Production			
				Persistent Organic Pollutants	

Sectoral Scope		NGO Involvement
Targeted Research	NGO execution	Input to national strategy
Mid-size X	Community Based Management	Participation in consultation
Investment X	X	Technical input
Technical Assistance	Private Sector Investment	Awareness/Education input
.... X X	Project implementation
Training/Info/Awareness	Financial Risk Management	
Technology Transfer X	

Check all the appropriate “keywords” that would describe the various elements of the project proposal.

Annex III. List of MIF Eligible Countries and Associated Execution Date of UNFCCC

Country	Date signed UNFCCC	National Communications
Argentina	06/12/1992	07/25/1997
Bahamas	06/12/1992	11/05/2001
Barbados	06/12/1992	10/30/2001
Belize	06/13/1992	09/16/2002
Bolivia	06/10/1992	11/16/2000
Brazil	06/04/1992	10/12/2004
Chile	06/13/1992	02/08/2000
Colombia	06/13/1992	12/18/2001
Costa Rica	06/13/1992	11/18/2000
Dominican Republic	06/12/1992	06/04/2003
Ecuador	06/09/1992	11/15/2000
El Salvador	06/13/1992	04/10/2000
Guatemala	06/13/1992	02/01/2002
Guyana	06/13/1992	05/16/2002
Haiti	06/13/1992	01/03/2002
Honduras	06/13/1992	11/15/2000
Jamaica	06/12/1992	11/21/2000
Mexico	06/13/1992	Second communication 7/23/2001
Nicaragua	06/13/1992	07/25/2001
Panama	03/18/1993	07/20/2001
Paraguay	06/12/1992	04/10/2002
Peru	06/12/1992	08/21/2001
Suriname	06/13/1992	--
Trinidad and Tobago	06/11/1992	11/30/2001
Uruguay	06/04/1992	10/15/1997
Venezuela	06/12/1992	--

Annex II. List of Documents Reviewed

- GEF Guidelines for Conducting Terminal Evaluations as a model for preparing the Terminal Evaluation
- Evaluation & Performance Reports:
 - Clean Tech Fund Evaluation Report by Deloitte, Mar 31, 2011
 - The Clean Tech Fund Program Semi-Annual Report, Aug, 2007
 - Q2 2007 Report, Aug 14, 2007
 - Q4 2008 Report, Jan 23, 2009
 - Project Implementation Report (PIR), 2009
 - Q4 2009, Report & Annual Closing, Dec 31, 2009
 - Project Implementation Report (PIR), 2010
 - Project Implementation Report (PIR), 2011
 - Project Implementation Report (PIR), 2012
 - Project Implementation Report (PIR), 2013
 - Project Implementation Report (PIR), 2014
 - Project Implementation Report (PIR), 2015
- CTF Audited Financial Statements from 2004-2014
- GEF Semi-Annual and Annual Reports from 2007, 2008 and 2009
- Project Proposal. Request for GEF Funding, May 24, 2005
- Donors Memorandum, Nov 14, 2000
- Legal Documents:
 - Limited Partnership Agreement (LPA) executed between IDB Land and the Fund Manager.
 - Limited Partnership Agreement (LPA), Clean Tech II Fund.
- Project Presentations to the Investment Committee Meetings (Power Points)
- Material describing how the funds from GEF (\$995k) were used (Projects Follow-up Master 2015/01/30).
- MIF Environmental Policies and Guidelines
- Eligibility and Due Diligence Process or Checklists.

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Annex III. Co-Financing and Leverage Financing Table

Co-financing (Type/ Source)	IA own Financing (mill US\$)		Government (mill US\$)		Other Sources ¹¹ (mill US\$)		Total Financing (mill US\$)		Total Disbursement (mill US\$)	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant	1.0	1.0					1	0.9	-	0.9
Credits									-	
Loans					30	120	30	90	-	90
Equity	10	10	1.5	1.5	18.7	118	30.2	125.5	-	125.2
In-kind										
Non-grant Instruments					0	1	0	1		1
Other Types										
TOTAL	11	11.25	1.5	1.5	48.7	238	61.2	250	-	250

Source: Project Implementation Report, 2013

Annex IV. Signed Code of Conduct

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source.
4. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
5. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
6. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
7. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
8. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

MTR Consultant Agreement Form


Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Consultant: Victoria Galeano

Name of Consultancy Organization (where relevant):

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at __ Washington D.C. _____ (Place) on __ November 18, 2019 (Date)

Signature: __  _____