

Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2017

1. Project Data

Summary project data			
GEF project ID		3599	
GEF Agency project ID		CH-X1002	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		Inter-American Development Bank	
Project name		Promoting and Strengthening an Energy Efficiency Market in the Industry Sector	
Country/Countries		Chile	
Region		LAC	
Focal area		Climate Change	
Operational Program or Strategic Priorities/Objectives		CC-2-Promoting Energy Efficiency in the Industrial Sector	
Executing agencies involved		Chilean Energy Efficiency Agency AChEE	
NGOs/CBOs involvement		As EE (gov connected NGO)	
Private sector involvement		As project beneficiaries	
CEO Endorsement (FSP) /Approval date (MSP)		March 23, 2010	
Effectiveness date / project start		March 22, 2011	
Expected date of project completion (at start)		September 22, 2015	
Actual date of project completion		October 3, 2015	
Project Financing			
		At Endorsement (US \$M)	At Completion (US \$M)
Project Preparation Grant	GEF funding	0	0
	Co-financing	0	0
GEF Project Grant			
Co-financing	IA own	.98	
	Government	35.58	50.10
	Other multi- /bi-laterals		
	Private sector	3.14	1.52
	NGOs/CSOs		
Total GEF funding		2.64	2.58
Total Co-financing		39.69	52.55
Total project funding (GEF grant(s) + co-financing)		42.33	55.13
Terminal evaluation/review information			
TE completion date		June 20, 2017	
Author of TE		Victoria Galeano	
TER completion date		3/30/2018	
TER prepared by		Molly Sohn	
TER peer review by (if GEF IEO review)		Neeraj Negi	

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	S	NR	-	MS
Sustainability of Outcomes		NR	-	ML
M&E Design		NR	-	S
M&E Implementation		NR	-	MS
Quality of Implementation		NR	-	UA
Quality of Execution		NR	-	MS
Quality of the Terminal Evaluation Report		-	-	MU

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The project's global environmental objective was to generate "carbon emission reductions as well as overall energy consumption reduction" in the industrial sector in Chile. Project Document P.13

3.2 Development Objectives of the project:

The project's development objective was "to promote and strengthen energy efficiency in the industry sector in Chile through establishment of the basis for the development of an energy efficiency market." Request for CEO Endorsement (p.1) The project had three components:

1. Institutional strengthening and capacity building in energy efficiency, including set up of a one-stop shop for information and technical assistance to the market, the design monitoring and evaluation of energy efficiency programs and improvement in performance indicators, and adapting energy efficiency contract models to Chile
2. Implementation of four energy efficiency pilot Projects in Priority Industries and Technologies
3. Creation of financial mechanisms for Energy Efficiency Projects, including standardized procedure/platform for project financial and technical assessment, and creating agreements with 6 commercial banks for an energy efficiency credit line

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 Relevance	Rating: Satisfactory
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The project is relevant to the GEF Climate Change focal area strategy Strategic Program 2 (CC-SP2) Promoting Energy Efficiency in the industrial sector. The project focused on the removal of market barriers for energy efficient technologies through capacity building, dissemination of pilot experiences, and promotion of differentiated financial mechanisms for end-user EE projects.

The project was also relevant to country priorities. At the time of project endorsement, the Government of Chile was carrying out an institutional reform for the energy sector. Guidelines for the establishment of a new energy policy published in February 2009 included four lines of action related to energy efficiency- 1) establishing the institutional basis for energy efficiency, 2) developing the necessary know-how and expertise for decision making, 3) promote energy efficiency in all sectors of the economy, and 4) work on the energy sector's regulatory framework to encourage energy efficiency.

4.2 Effectiveness	Rating: Moderately Satisfactory
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The TE notes that the project "has been instrumental in advancing the technical and the institutional capacities of AChEE [Chilean Energy Efficiency Agency] and the Government of Chile, positioning the agency as the industry reference for Latin America." However, not all project targets were met, with the project's first component, of strengthening the Chilean Energy Efficiency Agency capacity, making the strongest contribution, with some success in the second and third components as well. This TER thus rates effectiveness as moderately satisfactory.

The project's first component was focused on institutional strengthening and capacity building in Energy Efficiency, including set up of a one-stop shop for information and technical assistance on energy efficiency to the market, the design monitoring and evaluation of energy efficiency programs and improvement in performance indicators, and adapting energy efficiency contract models to Chile. The outcome targets related to this component were achieved, the Chilean Energy Efficiency Agency was transformed into a one-stop shop that provides high-quality information and technical assistance on energy efficiency to the market. The agency now has capacity to design, monitor and evaluation energy efficiency programs following standards, and adapting to market change. The agency created an online platform with energy efficiency sector-specific information and technical assistance, and supports the implementation of audits, evaluation of energy efficiency measures, and management of energy in companies. It also created a registry of energy efficiency consultants and a course and certification on measurement and verification protocol. Additionally, benchmarks and baseline figures were established for subsectors of the industrial and commercial sector, and five energy surveys were conducted. Of the

15 targets established for this component (primarily related to capacity building) 13 were fully or partially completed, and two were not completed.

The project's second component focused on the implementation of four pilot demonstrations on energy efficiency in priority industries and technologies. Three of four targets under this component were fully met. The project implemented six pilots, with verified results and lessons published and disseminated. The terminal evaluation does not provide details on the energy savings achieved from these pilots, but notes that the energy saving measurements provided inconsistent results as measured by the measurement and verification protocol, but did provide positive results when measured through alternative models. The project also created two brochures on energy efficient equipment and display counters, meeting its target. The project did not meet its target for co-financing grants provided to purchase 9,000 energy efficient motors, as only a course on energy efficient motors was co-financed by Procobre.

The project's third component, which entailed creation of financial mechanisms for energy efficiency projects, including standardized procedure/platform for project financial and technical assessment, and creating agreements with 6 commercial banks for an energy efficiency credit line. Of the three targets under this component, one was met, one was partially met, and the other was not met. The project was able to standardize the procedure/platform for project financial and technical assessment. There was no evidence that bank professionals attended information sessions on energy efficiency financing, and although an energy efficiency credit line and a partial credit guarantee were opened with CORFO, the TE notes that the market did not demand them.

4.3 Efficiency	Rating: UA
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Although the terminal evaluation does not assess efficiency in delivery of outcomes, it provides some information on the topic. It notes that the project was delayed when the original executing agency, the National Energy Efficiency Program (PPEE,) was dissolved, and the newly established Chilean Energy Efficiency Agency took its place as executing agency. A note from the project auditor finds that there weren't any discrepancies in the financial statements submitted. As no other information on project efficiency is provided, the terminal evaluation is unable to assess this parameter.

4.4 Sustainability	Rating: Moderately Likely
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The TE rates sustainability as satisfactory, noting that the capacity of the Chilean Energy Efficiency Agency has been strengthened, and that pilot projects have shown the viability and sustainability of energy efficiency measures, as well as demonstrated potential for energy savings in the food industry. Although the terminal evaluation does not discuss financial and environmental risks to sustainability directly, there is sufficient evidence to rate sustainability as moderately likely.

Financial: There is a risk to continuation of benefits from the project based on the fact that the International Performance Measurement and Verification Protocol introduced by the project was difficult to implement consistently, meaning that the benefits of the project haven't been accurately

captured, making it harder for energy efficiency projects to demonstrate their viability and become bankable.

Sociopolitical: Based on the TE's field visits there is appetite for Energy Efficiency projects in the food industry. The Chilean Energy Efficiency has also demonstrated a strong capacity in the working with private sector companies on capacity building activities in energy efficiency. The government has demonstrated their investment in Energy Efficiency by putting it in the government agenda, and through their creation of the Chilean Energy Efficiency Agency as a separate institutional body. The TE notes that the project has been successful in creating industry awareness among different groups of beneficiaries, including private sector companies, the banking sector, engineering firms, and public officials.

Institutional framework and governance: The institutional strengthening of the Chilean Energy Efficiency Agency has been strengthened, to the point that at project completion it continues to promote energy efficiency within the industry, and is noted as the industry reference for Latin America. The Chilean Energy Efficiency (ACHEE) has been consolidated into a one stop shop and information platform for the industry. It has implemented seven energy efficiency projects, and taken the necessary steps to overcome obstacles in these projects.

5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

Actual co-financing was 52.55 million USD, exceeding the expected 39.69 million USD. The TE does not explain how funding in excess of the expected amounts were used.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The project was delayed and ultimately extended by three years. This delay was due to the dissolution by the Chilean government of the project's originally intended execution agency, and the creation of the Chilean Energy Efficiency Agency, which became the new executing agency, in 2010.

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

Government ownership was crucial to project results. The Government created the Chilean Energy Efficiency Agency in 2010, and has advanced and put Energy Efficiency in the government agenda, "achieving international standard recognition and high leveled commitments."

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 M&E Design at entry	Rating: Satisfactory
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The TE does not provide an assessment of M&E Design. The M&E plan presented in the project documents includes provisions for all M&E activities, included mid-term and final evaluations, and an estimated total budget of 200,000\$, which is adequate (though a dedicated M&E budget is not presented in the financial plan.) Indicators presented for monitoring project progress are relevant and appropriate for the project.

6.2 M&E Implementation	Rating: Moderately Satisfactory
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The terminal evaluation does not provide an assessment of M&E implementation. Annual performance implementation reports were submitted, and a mid-term evaluation was carried out. Though the mid-term evaluation reports against relevant indicators, the PIRs do not, and instead provide updates on budgets and activates. This TER rates M&E implementation as satisfactory because the project did collect data against targets, though it did not report it regularly in project implementation reports.

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 Quality of Project Implementation	Rating: Unable to Assess
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The TE notes that coordination and management with IDB was satisfactory. The project design, including the M&E design was sound. As no further information is provided, this TER is unable to assess quality of implementation.

7.2 Quality of Project Execution	Rating: Moderately Satisfactory
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Project implementation was delayed when the project's original executing agency, PPEE, was dissolved. The Chilean Energy Efficiency Agency was created and became the project's executing agency, and the TE notes that it performed satisfactorily in that function, and has been strengthened and continues to promote energy efficiency within the industry. The implementation of pilot projects by the agency was considered satisfactory, although the TE notes that there is room for improvement in their selection and implementation. Factoring in the initial delays, this TER rates quality of project execution as moderately satisfactory.

8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

Of the seven companies participating in pilot projects, three reported energy savings due to the adopted energy efficiency measures:

- INVERTEC saved 172 MWh per year, which represents an energy saving of 46% over the reference period.
- FRIOFORT saved 127 MWh for the months of April and May, representing a saving of 12% over the reference period.
- ALIFRUT had savings of 22,652 liters of diesel oil in 126 days, which is equivalent to energy savings of 242 MWh, representing a saving of 7.4% over the reference period. (TE p.25)

The TE notes that because of the project, AChEE was able to design and implement important government interventions in energy efficiency, altogether contributed to over 43,239 MWh in energy savings, and 14,562 tCO₂e avoided emissions. (TE p.20)

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

No socioeconomic changes are reported.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. “Capacities” include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. “Governance” refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities

The project trained 5 Energy Efficiency consultants in EE auditing and management, 147 company representatives, and 400 professionals. (TE p.27) The capacity of the Chilean Energy Efficiency Agency was also strengthened through the experience of executing this project.

b) Governance

The project did directly not result in changes in governance. From 2005 to 2014 the government implemented a series of regulatory reforms and initiatives to help develop Chile’s Energy Efficiency market. These, however, were not as a result of the project, rather they complementary to it.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

No unintended impacts are described.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

The strengthening of the Chilean Energy Efficiency Agency in itself constitutes a mainstreaming of the GEF initiatives introduced in this project.

9. Lessons and recommendations

The terminal evaluation does not provide lessons learned and recommendations.

10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF IEO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The report provides a detailed assessment of achievement of relevant outcomes and impacts.	S
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is not internally consistent, with the report incorrectly referred to as the mid-term rather than final evaluation at times. Some parameters, such as efficiency, are not included.	U
To what extent does the report properly assess project sustainability and/or project exit strategy?	The terminal evaluation's description of sustainability is very brief and vague, and information is not provided on risks to sustainability from different areas.	MU
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Lessons learned and recommendations are not provided.	U
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report provides detailed project costs, both total and per activity, as well as actual co-financing.	S
Assess the quality of the report's evaluation of project M&E systems:	The report does not provide an assessment of the project's M&E system.	U
Overall TE Rating		MU

11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).