GEF IEO Terminal Evaluation Review form (retrofitting of APR2004 cohort)

This form is for retrofitting of the TERs prepared for APR2004. While several topics covered in this form had already been covered in the earlier form, this revised form adds several other performance and impact related concerns.

1. Project Data

Summary project data			
GEF project ID		569	
GEF Agency project ID		502226 [listed in PMIS – does not come up on WB portal]	
GEF Replenishment Phase		GEF-2	
Lead GEF Agency (include all for joint projects)		World Bank	
Project name		Argentina Efficient Street-lighting Program	
Country/Countries		Argentina	
Region		LAC	
Focal area		Climate Change	
Operational Program or Strategic Priorities/Objectives		OP5 – Energy Efficiency and Energy Conservation	
Executing agencies involved		IFC & International Institute of Energy Conservation (IIEC)	
NGOs/CBOs involvement		Lead Executing Agency	
Private sector involvement		Through consultations	
CEO Endorsement (FSP) /Approval date (MSP)		November 1998	
Effectiveness date / project start		January 1999	
Expected date of project completion (at start)		April 2002	
Actual date of project completion		April 2002	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding		
	Co-financing		
GEF Project Grant		0.74	0.74
Co-financing	IA/EA own		
	Government		
	Other*		
Total GEF funding		0.74	0.74
Total Co-financing		0	0
Total project funding (GEF grant(s) + co-financing)		0.74	0.74
Terminal evaluation/review information			
TE completion date		April 2002	
TE submission date			
Author of TE			
Original GEF IEO TER (2004) preparer		Robert Varley	
Original GEF IEO TER (2004) reviewer		Siv Tokle	
Revised TER (2014) completion date			
Revised TER (2014) prepared by		Joshua Schneck	
TER GEF IEO peer review (2014)		Neeraj Negi	

*Includes contributions mobilized for the project from other multilateral agencies, bilateral development, cooperation agencies, NGOs, the private sector, and beneficiaries.

2. Summary of Project Ratings

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

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The GEO, as indicated in the Project Brief (PB), is to reduce emissions of GHGs that contribute to climate change. The project aims to do that by focusing on improving the efficiency of street lighting in Argentina, and thereby reducing the consumption of fossil fuels that are used to power these lighting systems, with attendant emissions of GHGs.

3.2 Development Objectives of the project:

The Development Objectives of the project, as stated in the PB, were as follows:

- To promote innovative commercial financing and delivery mechanisms for energy efficient street-lighting projects; and
- To prepare project transactions for implementation and financing on commercial terms by local financial intermediaries (FIs), including ones with capital available for IFC.

The corresponding project outcomes were as follows:

1. Development, structuring, and financial closure of model transactions that demonstrate innovative financial and contracting mechanisms and overcome existing market barriers;
2. Development of a series of new municipal street-lighting projects for implementation by commercial parties; and
3. Increase in the capacity of private sector energy efficiency businesses and development of an expanded commercial market in this field.

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

No changes in the GEO or DO or other activities were noted in the terminal evaluation.

4. GEF EO 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**

The project was well-aligned with both GEF and national priorities. For the GEF, the project is consistent with then GEF Operational Program 5, Removal of barriers to energy efficiency and conservation. The project proposed to develop and promote innovative commercial financing and delivery mechanisms for energy efficient street lighting projects. As stated in the project brief, Argentina has significant potential for electrical energy savings through the use of proven efficient street lighting technologies. Estimated potential carbon emission reductions from a switch to EE street lamps would amount to around 150,000 tons CO2eq per year (PB). Moreover, the project brief states that "the key to opening this market is demonstrating and replicating viable project finance and contract structures and security mechanisms." For Argentina, project brief states that the project is linked to national priorities, action plans and programs. National objectives that are expected to be furthered by this project include (1) GHG reductions benefits related to implementation of efficiency projects (Argentina is a signatory of the UNFCCC); (2) promote the development and commercialization of the EE industry; (3) development of viable mechanisms to provide needed and currently unmet public lighting services; and (4) helping to solve the municipal non-payment problems experienced by Argentine utilities.

4.2 **Effectiveness**	Rating: **Moderately Unsatisfactory**

To date, no proposals for energy efficient street lighting projects have been closed and there is no environmental impact thus far (i.e., no emissions reductions to date). At the same time, the project managed to set the foundation for development of EE street lighting projects in Argentina, with reasonable prospects for environmental impact following improvement in the economic environment in Argentina. Achievements along the project's three primary development objectives are as follows:

1. *Development, structuring, and financial closure of model transactions that demonstrate innovative financial and contracting mechanisms and overcome existing market* – While no projects were seen through to closure, key legislation to open up the EE street lighting market was catalyzed by the project, according to the TE. These include: the SAPE (Sistema de Alumbrado Publico Eficiente) program established in the Province of Buenos Aires by provincial decree in Oct 2000, that allowed cities in the province to outsource retrofitting without the usual lengthy public procurement process; changes in Mercedes that enabled the distribution

utility to collect city street lighting taxes, and a hybrid security with loans secured by joint assignment of central government block grants and a street lighting tax was also developed and proposed (TE, pg 9).

2. *Development of a series of new municipal street-lighting projects for implementation by commercial parties* – Progress under this component is difficult to measure. On the one hand, the TE describes quite a lot of progress made by the project's team (TE, pg 7). These include identification of EE street-lighting project opportunities and financing sources and marketing of projects to developers and banks. Eight national and international commercial banks, and four multilaterals that could finance utility-sponsored street lighting projects or credit to commercial banks for on-lending were involved in project negotiations at one time or another. The program advised cities, utilities, and engineering firms on how to develop EE street-lighting projects, and required that city officials took concrete steps of commitment thorough a letter of intent. Following the letter of intent were feasibility studies and inventory audits. These were completed for eight municipalities, providing the information for decision-making by the cities. At the same time, judging by the fact that none of these proposals have advanced to closure, it's unclear how likely these proposals to be financed and implemented.
3. *Increase in the capacity of private sector energy efficiency businesses and development of an expanded commercial market in this field* – While the project lacked a set of clear indicators for this development goal, it appears, based on evidence presented in the TE, that the project's greatest success lies along this outcome. The project was successful in creating and disseminating a methodology and tools for developing EE street-lighting projects to a wide cross-section of key players in the Argentine economy. According to the TE, the project created a guidebook that was marketed directly to professional contacts, associations, and made accessible through the Ministry of Interior and ELI/IFC/GEF websites. The guidebook contains samples of key documents, and ways to reduce transaction costs. Presentations on municipal EE street-lighting were made at 6 major energy efficiency seminars and conferences. Meetings were publicized with press conferences in cities in 4 major provinces, and collaboration initiated with 6 engineering firms, 8 equipment manufacturer, 4 professional associations. MoUs with the Pan-American Engineering Association and 4 utilities were signed.

Factors that limited the effectiveness of the project were the Argentine financial crisis, which made project financing extremely difficult to obtain (TE, pg 11). Moreover, the project had originally been designed with the expectation that IFC credit would be available to finance projects. However, by the time the Program had project to present, IFC credit lines were no longer available because IFC's credit exposure limits in Argentina had been reached (TE, pg 3). Additionally, a few months after the Program was launched, the Argentine office on energy conservation, that was intended to be a key partner providing office space and contacts/access/political support, was dissolved due to political changes in the Argentine government (TE,. Pg 5).

4.3 **Efficiency**	Rating: **Moderately Satisfactory**

On balance, it appears that the project was able to accomplish quite a lot in a short amount of time, adapting to challenges as they came. The project's promotional campaign appears well targeted. The project was able to save costs by piggy-backing onto existing conferences instead of hosting conferences on their own. Despite the loss of support from the Argentine office on energy conservation (URE) (which was dissolved shortly after the project started), the project was able to rent out office space and still stay within budget, even with a 6-month extension. Factors that limited the efficiency of the project, and that were noted in the TE, were a number of management and staffing changes and contractual issues that were encountered during the project (TE, pg 5).

4.4 **Sustainability**	Rating: **Moderately Unlikely**

The project has been designed with little provisions for post-implementation sustainability. While a guidebook has been created and distributed, a leadership vacuum clearly exists absent IIEC's involvement in the project – especially since no clear involvement of any ministries were established in the project after the office on energy conservation was dissolved. It is conceivable that with improvements to the Argentine economy, private sector and municipalities will take up the work of the project and sustain the nascent progress made towards increasing EE of Argentine street lighting. Sustainability is further evaluated along the following four dimensions:

- Environmental (**L**) – no threats to the sustainability of project outcomes stem from environmental factors.
- Financial (**MU**) – continued financial uncertainty from problems plaguing the Argentine economy present a significant threat to the sustainability of project outcomes. This is the principle reason why projects have thus far failed to come to closure.
- Socio-political (**ML**) – some clear progress and demonstration of socio-political support for the project has been achieved in terms of enacted laws and further demonstrations of intent to develop EE street lighting projects. While the loss of the URE office on energy conservation left a leadership vacuum, there are signs that support for moving forward on these kind of projects is more widespread at the municipal and local levels.
- Institutional (**ML**) – no new institutions were created through the project but the legal and regulatory accomplishments have established some precedents and vehicles that should ease the way for continued advancement on EE street lighting measures.

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?

While the PD provides an estimated figure for the level of commercial financing that the GEF financing is expected to mobilize from IFC credit lines and private sources ($15-30 million), this was not a firm

pledge of co-financing, and furthermore did not materialize. An evaluation done by Fundacion Bariloche states that "the fall of the possibility of financing though the IFC and of the latter becoming a potential financial branch of the Program represented a substantial obstacle for the meeting of viable financing alternatives. As from this event, the Project's financing engineering component registered serious difficulties to identify and implement concrete financing options. The initial development of the project and the contacts with the Municipalities were carried out with the clear conviction that financing though IFC was possible and practically guaranteed. This situation built expectations that never materialized" (FB review, pg 34). It seems very likely that had the project been developed with clear co-financing commitments that materialized, projects would have advanced to financial closure and the project would have had an environmental impact to date.

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 requested and received a six-month extension in order to achieve its goals. The extension was facilitated through reallocation of project funds and did not require any additional funding. The extension appears to have been important in allowing achievement of project outcomes to the degree possible.

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:

As noted above, the project was designed with the expectation of receiving in-country support from Uso Racional de Energia (URE), the energy efficiency program development and implementation arm of the Energy Sub secretariat of the Government of Argentina. However, soon after the project began, political changes led to the dissolution of the URE, and the project never found a suitable governmental partner. This is cited as a key impediment in advancing the project's objectives (FB review, pg 34-35). The lack of official backing meant that the project was seen as separate from the sectoral policies and perhaps less likely to engender support and follow-through from municipalities.

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: **Moderately Unsatisfactory**

The PD provides six indicators – three under the project rationale and objectives section, and three under the project outcomes. The six indicators overlap somewhat, and they lack targets or timetables, or any detailed exposition on who is responsible for M&E components (PB states program will be monitored on an ongoing basis by IIEC and URE and periodically by independent experts hired by IFC). The budget for M&E is only 25,000. Moreover, there is little discussion of how M&E findings are expected to feed into adaptive management. The PB simply states that all monitoring and evaluation activities will conform to guidelines established by the WB for GEF-funded climate change mitigation projects.

6.2 **M&E Implementation**	Rating: **Moderately Satisfactory**

Despite an insufficiently detailed M&E plan (see above), according to the TE, project monitoring appears to have been adequately performed throughout project implementation. Indicators for monthly pipeline reports went beyond those established at appraisal, and included location, utility involved, engineering firm potentially doing retrofit, financing sources, costs, and next steps. The project submitted regular PIRs, and there was a separate (albeit poorly done) evaluation by FB that was commissioned at the end of the project.

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: **Moderately Satisfactory**

While the TE does not provide any ratings for implementation or execution, information presented in the TE indicates that the project received satisfactory supervision. Short-comings are as follows: (1) the project's inadequately designed M&E system, as discussed above; (2) the failure of the project's design to anticipate the potential lack of direct governmental support following elections – an eventuality that occurred; and (3) the failure of the project's design to anticipate (and respond to) how a worsening

economic environment in Argentina would affect prospects for financing of EE street lighting projects. TE notes that IIEC and IFC made two trips to Argentina each year to oversee program implementation and help achieve identified goals. IFC was kept up to date and participated in important project activities where appropriate (TE, pg 5).

7.2 **Quality of Project Execution**	Rating: **Satisfactory**

Based on information presented in the TE, project execution was satisfactory. The project was able to adjust to many difficulties including the loss of URE support and logistical base; declining economic environment; and loss of IFC financing potential. The research, marketing and project development components appear to have been very well conceived. The project stayed on budget, and was able to realize savings by piggy-backing onto existing conferences in disseminating project findings and information. The TE does not that the project had to accommodate a number of management and staffing changes and contractual issues throughout implementation. Execution is therefore rated as satisfactory on balance.

8. Assessment of Project Impacts

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.

No changes in environmental stress or status occurred by the end of the project as no contracts were brought to closure and no energy efficient streetlights were installed as a result of the project. The poor financial environment in Argentina is the principle reason for the lack of achievement in this regard.

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 described as having occurred anywhere in the TE.

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.

According to the TE, the project did achieve some real success in increasing awareness and increased potential for developing EE street lighting projects in the future, provided economic conditions improve in Argentina. These improvements are detailed below.

a) Capacities - The project was successful in creating and disseminating a methodology and tools for developing EE street-lighting projects to a wide cross-section of key players in the Argentine economy. According to the TE, the project created a guidebook that was marketed directly to professional contacts, associations, and made accessible through the Ministry of Interior and ELI/IFC/GEF websites. The guidebook contains samples of key documents, and ways to reduce transaction costs. Presentations on municipal EE street-lighting were made at 6 major energy efficiency seminars and conferences. Meetings were publicized with press conferences in cities in 4 major provinces, and collaboration initiated with 6 engineering firms, 8 equipment manufacturer, 4 professional associations. MoUs with the Pan-American Engineering Association and 4 utilities were signed. The program advised cities, utilities, and engineering firms on how to develop EE street-lighting projects, and required that city officials took concrete steps of commitment thorough a letter of intent. Following the letter of intent were feasibility studies and inventory audits. These were completed for eight municipalities, providing the information for decision-making by the cities.

b) Governance - Key legislation to open up the EE street lighting market was catalyzed by the project, according to the TE. These include: the SAPE (Sistema de Alumbrado Publico Eficiente) program established in the Province of Buenos Aires by provincial decree in Oct 2000, that allowed cities in the province to outsource retrofitting without the usual lengthy public procurement process; changes in Mercedes that enabled the distribution utility to collect city street lighting taxes, and a hybrid security with loans secured by joint assignment of central government block grants and a street lighting tax was also developed and proposed (TE, pg 9).

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 were reported to have occurred as a result of the project.

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.

As mentioned above, no broader adoption has occurred to date – indeed, not a single project has been brought to financial closure as a result of the project. At the same time, the project did set the stage for widespread adoption of EE street lighting in Argentina, provided that economic conditions improve. Again, the poor economic environment in Argentina is the principle reason project developments (local, and more widespread) did not occur to date.

9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The TE provides the following lessons:

- Programs of this nature need to benefit from local involvement in managing the program, supervising contractors, financial accounting, reports and evaluation. A local official or private institution with ample knowledge of the local reality and of the issues has to be part of the project management.
- The lack of financing from IFC, anticipated at the beginning of the project, was a key blow to the project from which it never fully recovered.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE provides the following recommendation:

- Future programs should have as an essential condition for their implementation the participation even at supervision level of an official government organization to guarantee the public nature of the project, establish the necessary links at the official level with provincial and municipal authorities, and guarantee that the project is part of the existing sector policy objectives.

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 EO 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?	Report provides an overall narrative of key project activities and outcomes. TE does not clearly report along PB indicators however.	**MS**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	No ratings were given in the report, however the report does appear to be consistent and convincing. Narrative should have been more detailed on loss of IFC financing – what was promised (formally and/or informally) at outset, and whether adequate steps were taken to ensure this financing would be available during implementation.	**MU**
To what extent does the report properly assess project sustainability and/or project exit strategy?	Report does not fully explore the post-project environment or provide assessment on the likelihood that project proposals identified and developed by the project will be taken up going forward.	**MU**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Lessons learned are brief. Key lessons identified in accompanying Foundation Bariloche evaluation are not discussed adequately in TE (such as impact of loss of Argentine office on energy conservation (URE) and loss of IFC financing).	**MU**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	Yes, TE includes actual project costs and co-financing (zero)	**S**
Assess the quality of the report's evaluation of project M&E systems:	Report does not fully access M&E design nor report on degree to which M&E system and implementation fed into adaptive management.	**MU**
Overall TE Rating		**MS**

Overall TE rating: (0.3*(4+3)) + (0.1*(3+3+5+3)) = 2.1 + 1.4 = 3.5 = MS

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