

### GEFM&E Terminal Evaluation Review Form

#### 1. PROJECT DATA

				Review date:	10/30/2004
GEF ID:			<u>at endorsement</u> (Million US\$)		<u>at completion</u> (Million US\$)
Project Name:	Argentine Efficient Streetlighting Program	GEF financing:	.74		.74
Country:	Argentina	Co-financing:			
Operational Program:	Energy Efficiency and Energy Conservation OP5 Climate	Total Project Cost:	\$.74		.74
IA	IFC	<u>Dates</u>			
Partners involved:	IFC, IIEC (International Institute for Energy Conservation)	Work Program date	June 1998		
		CEO Endorsement	Nov1998		
		Effectiveness/ Prodoc Signature	Jan 1999		
		Closing Date	June 2001		
Prepared by:	Reviewed by:	Team Leader:	Team:		
Robert C. G. Varley	<b>Siv Tokle</b>				

#### 2. SUMMARY OF PROJECT RATINGS

GEFME Ratings for M&E and the quality of the evaluation report: Highly Satisfactory, Satisfactory, Marginally Unsatisfactory, Unsatisfactory, not applicable (N/A), and no information (N/I).

Please refer to Section B of the GEF Office of M&E Guidelines for Terminal Evaluation Reviews FY2005 for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. OED)	GEFME
2.1 Project impacts	<b>N/A</b>	(N/I).	<b>N/A</b>	<b>N/A</b>
2.2 Project outcomes		(N/I).	<b>N/A</b>	<b>N/A</b>
2.3 Project sustainability	<b>N/A</b>	(N/I).	<b>N/A</b>	<b>N/A</b>
2.4. Monitoring and evaluation		(N/I).	<b>N/A</b>	<b>S</b>
2.5. Quality of the evaluation report	<b>N/A</b>	(N/I).	<b>N/A</b>	<b>S</b>

Based on which program indicators can this project be considered a good practice?

#### 3. SUMMARY OF TERMINAL EVALUATION FINDINGS

##### 3.1. Project Objectives as proposed, changes during implementation, and project design and implementation issues.

3.1.1 Global Environmental Objectives / Changes during implementation:  
To reduce the emission of greenhouse gases, save energy and costs by removing barriers to implementation of

climate-friendly, commercially viable technologies.	
<p>3.1.2 Development Objectives / changes during implementation: According to the project brief, the objectives were:</p> <ol style="list-style-type: none"> <li>1 Promotion of innovative commercial financing and delivery mechanisms for energy-efficient street-lighting projects; and</li> <li>2 preparation of project transactions for implementation and financing on commercial terms by local financial intermediaries (FIs), including ones with capital available from IFC.</li> </ol> <p>The corresponding outcomes were :</p> <ul style="list-style-type: none"> <li>• development, structuring and financial closure of model transactions that demonstrate innovative financial and contracting mechanisms and overcome existing market barriers;</li> <li>• development of a series of new municipal street-lighting projects for implementation by commercial parties; and</li> <li>• increase in the capacity of private sector energy efficiency businesses and development of an expanded commercial market in this field.</li> </ul>	
<p>3.1.3 Summary of preparation, design and implementation issues discussed in the TE if any Nine countries are included in a GEF-supported global Electric Lighting Initiative (ELI) and the project was complementary to the Argentina components, which did not include any activities in the SL sector. IFC was the implementing agency for the project through the World Bank, with GEF grant-financing for the project which comprised administration, financial and technical advisory services. The physical investments that were to be facilitated were to retro-fit municipal publicSL with more efficient and established technologies, and would be financed from a number of sources including commercial banks using eligible IFC credit lines, savings in energy costs, SL taxes and supplier/contractor/local government equity. The investments were financially viable when appraised in terms of cost savings exceeding the cost of retrofitting by a sufficient amount to generate an acceptable return, but there were other barriers to energy conservation in the SL sector due to the lack of market organization and experience in municipal and energy efficiency finance. There were no first generation projects, standardized documents, credit appraisal criteria, or legal ways to capture SL and/or other tax revenue cash flows to secure loan repayments. Innovative project development strategies and new financing structures were also needed to overcome the principal barrier of weak municipal credit risk (ability and willingness to pay). It was envisaged the project TA would help to remove these barriers, and would operate under the direction and sponsorship of a government program USO (Racional de Energia.) At appraisal it was envisaged that USO would have followed through to sustain the promotion components, municipal services and use experience from program participants, to promote energy efficient municipal SL projects in the future.</p>	

**3.2 Summary of impacts and outcomes presented in the TE.** Include a description of the factors that contributed or prevented the achievements. Leave blank if no information is presented in the TE.

<p>3.2.1 How and what environmental impacts were achieved or are likely to be achieved? Since no proposals were seen through to closure, there has not yet been any impact, although there could be in the future from deals that are still in the pipeline. The project brief cited a potential annual carbon reduction of 200,000 tons per annum from a market potential of \$200 million in municipal investments. During the project the market for investments in energy saving SL in Buenos Aires alone was estimated at \$500 million, suggesting potential savings could be much higher than initially envisaged.</p>	<p>What were the shortcomings?</p>
<p>3.2.2 Based on program indicators and the project objectives, how and what major outcomes were achieved or are likely to be achieved?  <ul style="list-style-type: none"> <li>• <b>Development and structuring of model transactions that demonstrate innovative financial and contracting mechanisms and overcome existing market barriers;</b></li> </ul>           Key legislation to open SL market was catalyzed – for         </p>	<p>What were the shortcomings? An incontrovertible indicator of success was the bringing to closure of a financial transaction and this was not achieved within the 2 ½ year time span of the program.  There was no exit strategy for the project in the sense of who would play the evident leadership role of IIEC or</p>

<p>instance SAPE permitted Buenos Aires Province to permit cities to outsource retrofitting without unnecessarily lengthy public procurement process. Legislative changes in Mercedes enabled the distribution utility to collect city SL taxes, and a hybrid security with loans secured by joint assignment of central government block grants and SL tax streams was also developed and proposed. One city derived \$350K extra revenue simply from transferring collections to the utility company. Outsourcing of installation and maintenance services to engineering companies, collection of SL tax by utilities, and city ownership were the three main features of project designs.</p> <p><b>•Development of a series of new municipal street-lighting projects for implementation by commercial parties:</b></p> <p>There are increased number of projects under development and a number of commercial and municipal parties forming partnerships to seek project finance. Many third parties are joint ventures between utilities and engineering companies who can raise capital to develop the projects. SL project opportunities and financing sources were identified and the projects have been marketed to developers, and banks. Eight national and international commercial banks, and four multilaterals that could finance utility sponsored SL (IFC) or credit to commercial banks for onlending, were involved in project negotiations at one time or another. The program advised cities, utilities and engineering firms how to develop SL projects, and required that city officials took concrete steps of commitment through a Letter of Intent, leading to inventory audits and technical feasibility studies for the SL projects. These were completed for eight municipalities, providing the threshold information basis for decision-taking by the cities.</p> <p>The new system's technical and economic feasibility were based on using the program guidebook to generate business plans for submission to banks. Improved procurement documents combined retrofit, long-term maintenance and financing in one tender document, and can be adapted to other cities.</p> <p><b>• Increase in the capacity of private sector energy efficiency businesses and development of an expanded commercial market in this field.</b></p> <p>By creating and disseminating a methodology and tools the program substantially increased local knowledge about how to develop SL projects. The Program's SL project development know-how has been disseminated throughout Argentina, and the guidebook marketed directly to professional contacts, associations and made accessible through Ministry of Interior and ELI/IFC/GEF websites. It contains samples of key documents, reducing transactions costs. Presentations on municipal SL 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 manufacturers, 4 professional</p>	<p>indeed whether they were still going to be present in Argentina. Similarly the sustainability would be adversely affected by the likelihood of exceeding international financial exposure by GEF or other multilateral loan funding for more generic but related energy efficiency, municipal finance and capital market projects and programs.</p>
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associations. MoUs with Pan-American Engineering Association. And four utilities were signed.	
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**3.3 Likelihood of sustainability.** Include the accomplishments and shortcomings of the approaches that can contribute or limit sustainability of project benefits as presented in the TE for each of the following components. Leave blank if no information is presented in the TE.

Sustainability accomplishments	Sustainability shortcomings
3.3.1 Ecological (if relevant):	3.3.1 Ecological (if relevant):
3.3.2 Financial The links established between the SL financing transactions and lines of credit provided through IFC to local banks would help jumpstart the market if the present moratorium on the international lending for Argentina eased. The strong interest from municipalities and engineering and equipment suppliers has been maintained.	3.3.2 Financial: Continued tight credit conditions, fiscal austerity and few municipalities with good credit ratings from the banks.
3.3.3 Socio-political: The project has already facilitated the development of negotiation channels through sponsoring meetings between Argentine municipalities, distribution utilities, ESCOs, professional associations, government agencies, and university departments.	3.3.3 Socio-political: The disbandment of the URE office on energy conservation left a leadership and sponsoring vacuum that was filled by the project.
3.3.4 Institutional: No new institutions were created but some legal and regulatory accomplishments establish a precedent for more widespread enactment.	3.3.4 Institutional:
3.3.5 Technical: Much of the formal technical program legacy has been summarized in a guidebook distributed and available on websites – the technology of the EE SLs are fairly simple, it is the financial and project design aspects that were innovations. The guidebook is practically oriented and has been used in actual negotiations. The experience of energy audits, SL project feasibility studies, and procurement are embedded in the documents.	3.3.5 Technical:
Lessons regarding sustainability mentioned in the TE	
Recommendations regarding sustainability mentioned in the TE time	

### 3.4 Additional lessons, recommendations and post completion evaluation

#### 3.4.1 Other lessons mentioned in the TE

The was not an expensive TA project, given its potential for facilitating commercial transactions that could provide significant leveraging of GEF and IFC resources. Program activities generated a pipeline of new transactions and these will be referred to the investment banker and linked to commercial energy efficiency businesses for development, transaction structuring and financing.

Costs for knowledge management and dissemination of lessons learned can be minimized by iggybacking onto other related EE conferences and seminars sponsored by other organizations.

The benefits include not only improved lighting, but better public safety and significantly lower emissions of greenhouse gases.

A major lesson was the utilities are able to exploit their ability to collect the SL tax as part of the normal billing process, and align their interests with those of the municipalities to facilitate new financial structures for project finance. The engineering consulting and installation companies were easily able to replicate retrofit processes developed for other cities, and communicate demand to manufacturers. The pledging of co-participation revenues as well as SL tax may ease the introduction of similar mechanisms to address chronic problems with water supply collections. Commercial banks have remained interested enough in financing municipal investments to consider

pooling of risks among themselves, while international banks are only interested in the large established utilities as partners.

The slow pace of decision making at municipality, itself related to the electoral political cycle, remains a major obstacle to efficient and timely closure of transactions. This has been aggravated by Argentina's severe financial crisis that has affected the domestic capital markets and pushed most multilaterals and international lenders beyond desired levels of exposure to Argentine debt.

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### 3.4.2 Other recommendations mentioned in the TE

By the time SL projects were ready to present to eligible commercial banks, the IFC line of credit was cancelled. Making plans to assess the project impact after a longer period, of say 5 years, should be considered.

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## 4. GEF OFFICE OF M&E ASSESSMENT

### 4.1 Assessment of the project's monitoring and evaluation system:

4.1.1 What were the accomplishments and shortcomings of the project's M&E system in terms of the tools used such as: indicators, baselines, benchmarks, data collection and analysis systems, special studies and reports, etc.?

Description of accomplishments	Shortcomings
<p>The project brief defined outcomes and indicators more formally, and in the event they could be measured from data in the TE, despite there being no formal M&amp;E system beyond conventional business management for a financial consultancy. Thus the M&amp;E system did not have to be developed and was not described as such. The routine business procedures of the IIEC, which are commercial in orientation, were an adequate basis for monitoring and in purely commercial terms the outcomes were unambiguous. IIEC used quarterly reporting cycles, and utilized simple baseline indicators and data collection analysis systems to support effective project management.</p>	<p>No effort was made to translate the categories into terminology more familiar to GEFME.</p>

4.1.2 What were the accomplishments and shortcomings in the project's use of the information collected for adaptive management?

Description of accomplishments	Shortcomings:
<p>Clear objectives, outcomes and indicators were defined at baseline and monitoring through the project's routine business procedures and internal management reports, were adequate for what was a straightforward project in many respects. The range of indicators of outcome supplied in the TE actually went beyond those mandated at appraisal. The indicators for the monthly pipeline reports were location, utility involved, engineering firm doing retrofit, financing source(s), cost and next steps. This was the core of the monitoring of results, serving an operational need and not a response to the contractual commitments to monitor the indicators identified at appraisal.</p>	<p>.</p>

**4.1.3 Lessons:**  
 Projects that operate within a commercial financial environment and whose outcomes are measured by financial indicators and objective intermediate outcomes, are unlikely to need or benefit from grafting on multilateral agency conceptual frameworks for “monitoring and evaluation” that are unfamiliar to project participants, and less coherent than routine measures already in use.

**4.1.4 Recommendations:**

**4.2 Is a technical assessment of the project impacts described in the TE recommended?** Please place an "X" in the appropriate box and explain below.

<b>Yes:</b>	<b>No: X</b>
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Explain: this will only be appropriate if enough time is allowed for the anticipated municipal SL projects to materialize.

**4.3 Quality of the evaluation report** (Answers to the questions below: yes, no, unable to assess. Provide overall rating for analysis, management of funds and overall quality of the FE). Please refer to Section B of the GEF Office of M&E Guidelines for Terminal Evaluation Reviews FY2005 for further definitions of the ratings.

	Ratings
<b>4.3.1 Analysis</b>	<b>S</b>
4.3.1.1 Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	<b>Yes</b>
4.3.1.2 Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated? No ratings were given but the evidence was complete and convincing enough to rate a satisfactory outcome and likely sustainability since the constraints are not likely to be long-term, and there are financial incentives to improve efficiency and hence contribute to the global objective.	<b>N/I</b>
4.3.1.3 Does the report properly assess project sustainability and /or a project exit strategy? There is no explicit exit strategy and the future of the IFC loans, assumption of coordination and accountability roles and maintenance of the promotion network, appears to being left entirely to the market.	<b>Yes</b>
4.3.1.4 Are the lessons learned supported by the evidence presented and are they comprehensive?	<b>Yes</b>
<b>4.3.2 Management of funds</b>	<b>S</b>
Does the report include the actual project costs (total and per activity) and actual co-financing used?	<b>Yes</b>
<b>4.3.3 Overall quality of the FE</b> Please summarize with a few bullets the issues above to support the overall rating This is a professional document and unusually articulate by the benchmark of the typical implementing agency TE. Although the TE does not follow GEF guidelines or use conventional M&E terminology it is well written, clear, concise and describes the outcomes convincingly. The TE is an adequate basis for GEF to evaluate the performance and outcome as satisfactory by the GEF yardstick, given the abnormal politico-economic circumstances.	<b>S</b>

**4.4 Comments on the summary of project ratings and terminal evaluation findings**

In some cases the GEF Office of M&E may have independent information collected for example, through a field visit or independent evaluators working for the Office of M&E. If substantial independent information has been collected, then complete this section with any comments about the project.