1. Project Data

Summary project data			
GEF project ID	6980		
GEF Agency project ID	P149925		
GEF Replenishment Phase	GEF-6		
Lead GEF Agency (include all for joint project	s) World Bank		
Project name	The International Lighting Efficiency Facility (ILEF)		
Country/Countries			
Region	Global		
Focal area	Climate Change		
Operational Program or Strategic	CCM-1: Promote the timely development, demonstration, and		
Priorities/Objectives	financing of low-carbon technologies and mitigation options		
Stand alone or under a programmatic frame	vork Programmatic		
If applicable, parent program name and GEF			
Executing agencies involved	Energy Efficiency Services Ltd (EESL), Ministry of Power in India (acted as local aggregator bundling street lighting programs of municipal governments)		
NGOs/CBOs involvement			
Private sector involvement (including micro, and medium enterprises) ¹	small		
CEO Endorsement (FSP) /Approval (MSP) dat	e 5/10/2015		
Effectiveness date / project start date	5/10/2015		
Expected date of project completion (at star) 12/31/2016		
Actual date of project completion	6/15/2017		
	Project Financing		
	At Endorsement (US \$M) At Completion (US \$M)		
Project Preparation GEF funding			
Grant Co-financing			
GEF Project Grant			
IA own	50.25		
Government			
Other multi- /bi-latera	S		
Co-financing Private sector			
NGOs/CBOs			
Other			
Total GEF funding	1.2 0.35		
Total Co-financing	50.25 _		
Total project funding (GEF grant(s) + co-finar	cing) 51.45 _		
Termina	l evaluation validation information		
TE completion date	Click or tap to enter a date.		

¹ Defined as all micro, small, and medium-scale profit-oriented entities, including individuals and informal entities, that earn income through the sale of goods and services rather than a salary. (<u>GEF IEO 2022</u>)

TER prepared by	Nabil Haque
TER peer review by (if GEF IEO review)	Neeraj Negi

Access the form to summarize key project features here: <u>https://www.research.net/r/APR2023</u>.

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	_	_	_	MU
Sustainability of Outcomes		_	_	MU
M&E Design		_	_	NA
M&E Implementation		_	_	UA
Quality of Implementation		_	_	UA
Quality of Execution		_	_	UA
Quality of the Terminal Evaluation Report			_	U

3. Project Objectives and theory of change

3.1 Global Environmental Objectives of the project:

The Global Environmental Objectives of the project was to accrue GHG mitigation contribution from deployment of LED street lighting under the facility over its years of operation.

3.2 Development Objectives of the project:

The development objective of the project was to launch a single-purpose facility financing the conversion of traditional urban street lighting technologies to more efficient LEDs which would reduce greenhouse gas emission and provide budgetary savings for municipalities globally.

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or project activities during implementation? What are the reasons given for the change(s)?

No changes were reported in the environmental and development objective.

3.4 Briefly summarize project's theory of change – describe the inputs and causal relationships through which the project will achieve its long-term impacts, key links, and key assumptions.

The objective of this project was to create a unique financing facility to accelerate investments in energy efficient lighting for cities. The focus was to bridge the gap between institutional investors seeking exposure to real asset classes and the idiosyncratic investment needs related to increasing efficiency and bringing down carbon emissions in cities around the world. Aggregating financing of energy efficiency investments of multiple cities and activities will enable the facility to issue large-scale, liquid, investment-grade bonds. The assumption associated with bond issuing is that structural elements such as equity capital and adequate reserves are consistent with achieving an investment grade rating. The project proposal included an indicative timeline that estimated legal establishment of the facility at COP-21 in Paris, at which time the facility will have received participation commitments from sponsors, investors and borrowers.

4. GEF IEO assessment of Outcomes and Sustainability

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

The outcome ratings (relevance, effectiveness, efficiency, and overall outcome rating) are on a sixpoint scale: Highly Satisfactory to Highly Unsatisfactory. The sustainability rating is on a four-point scale: Likely to Unlikely.

Please justify the ratings in the space below each box.

4.1 Relevance and Coherence	UA
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The objective of the project was to launch a facility to provide financing at scale for participating cities to apply energy-efficiency and retrofits in the lighting, building, heating/cooling and transport sectors. However, early in the project it was confronted with the reality that many cities in the client countries are not creditworthy, lacks international credit rating, and are not able to borrow even from the local market. There were complex issues identified such as capital requirements, operation of loan services by a private company and fiduciary and safeguard due diligence on the projects financed means that there will be high transaction costs. Non-grant based GEF funding was approved based on the assumption that development costs will be paid back once the facility is functional. With the changing nature of the facility, and inability of GEF to convert the approved funds to grants, it was mutually decided to close the project and return the balance of funds to GEF.

4.2 Effectiveness

UA

The terminal evaluation did not rate effectiveness of the project, as it closed due to unavailability of GEF funding (p.5 of Implementation Completion Report) arising from difficulties in converting loaned amount into a grant.

4.3 Efficiency	UA
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The review was unable to assess the efficiency of the project due to its premature closing.

4.4 Outcome	MU
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The project closed prematurely without launching the financing facility it envisaged due to complex issues such as capital requirements, operation of loan services and fiduciary and safeguard due diligence on the sub-projects. The World Bank (implementing agency) Treasury also expressed doubt on whether it would be able issue bonds if the financing facility is managed by a private company. The project strategy was changed and a pilot approach in India was planned for a local aggregator to issue investment grade local currency green asset-backed security (ABS) bonds. The issuance of bonds took longer than expected due to various reasons and administrative issues. It was proposed to integrate these activities under another World Bank project leveraging access to commercial financing for EE

projects (P162849 - India Energy Efficiency Scale-up Program). Under this GEF project, only a knowledge product on the modality of aggregating small energy efficiency loans was produced to facilitate the understanding of innovative financial products.

4.5 Sustainability	MU
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The project design did not assess the risks and complexity that comes with launching of a financing facility. With no legal authority to issue bonds, there were also uncertainties involving pool of participating cities and the high transaction costs associated with borrowing in foreign currency. Although the project changed its strategy during implementation, these risks remained for the new pilot approach launched in India. Only financial risks were discussed in the completion report, which significantly affected the prospects of launching asset backed security bonds in India. This ultimately led to the proposal of integrating activities with World Bank project on scaling up energy efficiency in India.

5. Processes and factors affecting attainment of project outcomes

Before describing the factors, you may choose to summarize reported outcomes and sustainability here: <u>https://www.research.net/r/APR2023</u>.

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, 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?

As the GEF loan for the proposed financing facility could not be converted to a grant, the balance of \$850,000 was returned to GEF when it was decided that project will be closed early. There was no information presented on materialized co-financing at the end of the project.

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 closed ahead of time due to procedural and legal issues associated with the proposed facility, and inability of converting project loan into a grant.

5.3 Stakeholder ownership. Assess the extent to which stakeholder ownership has affected project outcomes and sustainability. Describe the ways in which it affected outcomes and sustainability, highlighting the causal links.

The project completion report did not discuss stakeholder ownership of the project.

5.4 Other factors: In case the terminal evaluation discusses other key factors that affected project outcomes, discuss those factors and outline how they affected outcomes, whether positively or negatively. Include factors that may have led to unintended outcomes.

There was insufficient commitment on project design from the executing agency. A number of risk factors such as hedging currency risk only came into consideration during project implementation.

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory to Highly Unsatisfactory.

Please justify ratings in the space below each box.

6.1 M&E Design at entry	NA
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Given the narrow focus of project activities on launching a financing facility, an elaborate M&E plan is not essential to keep track of activities. Therefore, assessment of M&E design is less useful in this case.

6.2 M&E Implementation	UA
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In the absence of a results framework, it was difficult to track progress against expected outputs listed in CEO Endorsement Request. Although activities related to expected outputs were discussed in the completion report, the timing of the activities were not clear. The completion report did not discuss or rate M&E implementation, and this review is unable to assess M&E implementation for the project.

7. Assessment of project implementation and execution

Quality of Implementation rating is based on the assessment of the performance of GEF Agency(s). Quality of Execution rating is based on performance of the executing agency(s). 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	UA
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The project completion report had no rating or information to assess the quality of project implementation.

7.2 Quality of Project Execution	UA
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The project completion report had no rating or information to assess the quality of project execution.

8. Lessons and recommendations

8.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report, including how they could have application for other GEF projects. Lessons must be based on project experience.

Despite the closing of the project, there were valuable lessons identified in the completion report –

- i) The design of the project conceptualized "pool" financing for cities which will balance risks and help cities reach the capital market. However, there were practical challenges of organizing the pool and managing good asset quality of the cities. If a city in the pool drops out, the overall rating of the facility could be downgraded, as the rating of the facility relies on configured pool of cities.
- ii) It is not enough to simply support specific bond transaction for cities. Systematic technical assistance will also be required to enhance municipal governments' creditworthiness.
- iii) Collaborating with IFC, World Bank's risk control team and the Treasury opened the possibility of piloting new ways of leveraging private capital for supporting energy efficiency programs.

8.2 Briefly describe the recommendations given in the terminal evaluation.

No recommendations were given in the project completion report.

9. Quality of the Terminal Evaluation Report

Before rating the quality of the terminal evaluation, click here to summarize your observations on the sub-criteria: <u>https://www.research.net/r/APR2023</u>.

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

	ria/indicators of terminal uation quality	GEF IEO COMMENTS	Rating
1.	Timeliness: terminal evaluation report was carried out and submitted on time?	For a project that closed early, the completion report was submitted timely.	S
2.	General information: Provides general information on the project and evaluation as per the requirement?	Despite the early closing of the project, the information presented was not sufficient to grasp the challenges the project faced during implementation.	MU
3.	Stakeholder involvement: the report was prepared in consultation with – and with feedback from - key stakeholders?	It was not clear who made the decision regarding change of project strategy as well as the decision to close early.	UA

4. Theory of change: provides solid account of the project's theory of change?	A theory of change for the project was not presented.	UA
5. Methodology: Provides an informative and transparent account of the methodology?	The project completion was not a typical terminal evaluation report since the project closed prematurely.	NA
 Outcome: Provides a clear and candid account of the achievement of project outcomes? 	Despite the challenges, the completion report could have outlined the yearly progress and outcomes in a clear way.	MS
 Sustainability: Presents realistic assessment of sustainability? 	Only financing risks were discussed, but not under a section dedicated for assessing sustainability.	MU
 M&E: Presents sound assessment of the quality of the M&E system? 	For a project with the objective of setting up a financing facility, a rigorous M&E would not have applied anyway.	NA
9. Finance: Reports on utilization of GEF funding and materialization of co-financing?	No information of co-financing was provided.	UA
10. Implementation: Presents a candid account of project implementation and Agency performance?	The implementation challenges were discussed which ultimately resulted in closing the project earlier than planned and returning GEF financing.	MS
11. Safeguards: Provides information on application of environmental and social safeguards, and conduct and use of gender analysis?	For a project with the objective of setting up a financing facility, safeguards would not have applied anyway.	NA
12. Lessons and recommendations are supported by the project experience and are relevant to future programming?	The lessons learned were appropriately presented highlighting the difficulties of project implementation.	S
 Ratings: Ratings are well- substantiated by evidence, realistic and convincing? 	No ratings were provided as the completion report was not a typical terminal evaluation.	UA
14. Report presentation: The report was well-written, logically organized, and consistent?	The project was not sufficiently detailed on all aspects.	MS
Overall quality of the report		U

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

ANNEX 1. GEF IEO THEORY OF CHANGE FRAMEWORK



Figure 1. The GEF IEO's updated Theory of Change Framework on how the GEF achieves impact

The general framework for the GEF's theory of change (figure 1) draws on the large amount of evaluative evidence on outcomes and impact gathered over the years by the GEF Independent Evaluation Office. The framework diagram has been updated to reflect the IEO's learning since OPS5 (GEF IEO 2014, p. 47-50) about how the GEF achieves impact, as well as the evolution of the GEF's programming toward more integrated systems-focused and scaled-up initiatives.

The framework outlines the three main areas that the IEO assesses in its evaluations: a) the GEF's contributions in establishing and strengthening both the interventions that directly generate global environmental benefits, and the enabling conditions that allow these interventions to be implemented and adopted by stakeholders, b) the GEF's catalytic role or additionality in the way that the GEF provides support within the context of other funding sources and partners, and c) the environmental, social and economic outcomes that the GEF has contributed to, and the behavior and system changes that generate these outcomes during and beyond the period of GEF support.

The circular arrow between impact and progress toward impact, as before, indicates how bringing about positive environmental change is an iterative process that involves behavior change (in the form of a broader group of stakeholders adopting interventions) and/or systems change (which is a key characteristic of transformational change). These three areas of change can take place in any sequence or simultaneously in a positively reinforcing cycle, and are therefore assessed by the GEF IEO as indicators of impact.

Assessing the GEF's progress toward achieving impact allows the IEO to determine the extent to which GEF support contributes to a trajectory of large-scale, systemic change, especially in areas where changes in the environment can only be measured over longer time horizons. The updated diagram in particular expands the assessment of progress towards impact to include transformational change, which specifically takes place at the system level, and not necessarily over a long time period.

The updated diagram also more explicitly identifies the link between the GEF's mandate of generating global environmental benefits, and the GEF's safeguards to ensure that positive environmental outcomes also enhance or at the very least do not take away from the social and economic well-being of the people who depend on the environment. Thus the IEO assesses impact not only in terms of environmental outcomes, but also in terms of the synergies and trade-offs with the social and economic contexts in which these outcomes are achieved.

Intervention	Any programmatic approach, full-sized project, medium-sized project, or enabling activity financed from any GEF-managed trust fund, as well as regional and national outreach activities. In the context of post-completion evaluation, an intervention may consist of a single project, or multiple projects (i.e. phased or parallel) with explicitly linked objectives contributing to the same specific impacts within the same specific geographical area and sector. https://www.gefieo.org/evaluations/gef-evaluation-policy-2019
Activity (of an intervention)	An action undertaken over the duration of an intervention that contributes to the achievement of the intervention's objectives, i.e. an intervention is implemented through a set of activities. E.g. training, (support to) policy development, (implementation of) management approach.
Outcome	An intended or achieved short- or medium-term effect of a project or program's outputs. <u>https://www.gefieo.org/evaluations/gef-evaluation-policy-2019</u>
Impact	The positive and negative, primary and secondary long-term effects produced by a project or program, directly or indirectly, intended or unintended. <u>https://www.gefieo.org/evaluations/gef-evaluation-policy-2019</u>
Environmental outcomes	 Changes in environmental indicators that could take the following forms: Stress reduction: reduction or prevention of threats to the environment, especially those caused by human behavior (local communities, societies, economies) Environmental state: biological, physical changes in the state of the environment http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Social and economic outcomes	Changes in indicators affecting human well-being at the individual or higher scales, e.g. income or access to capital, food security, health, safety, education, cooperation/ conflict resolution, and equity in distribution/ access to benefits, especially among marginalized groups.
Synergies	Multiple benefits achieved in more than one focal area as a result of a <i>single intervention</i> , or benefits achieved from the interaction of outcomes from at least two separate interventions in addition to those achieved, had the interventions been done independently.

ANNEX 2. DEFINITION OF TERMS

	http://www.gefieo.org/evaluations/evaluation-multiple-benefits-gef-support-through-its- multifocal-area-portfolio-map-2016
Trade-offs	A reduction in one benefit in the process of maximizing or increasing another benefit.
	http://www.gefieo.org/evaluations/evaluation-multiple-benefits-gef-support-through-its- multifocal-area-portfolio-map-2016
Broader adoption	The adoption of GEF-supported interventions by governments and other stakeholders beyond the original scope and funding of a GEF-supported intervention. This may take place through sustaining, replication, mainstreaming, and scaling-up of an intervention and/or its enabling conditions (see definitions below).
	http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Sustainability	The continuation/ likely continuation of positive effects from the intervention after it has come to an end, and its potential for scale-up and/or replication; interventions need to be environmentally as well as institutionally, financially, politically, culturally and socially sustainable. <u>https://www.gefieo.org/evaluations/gef-evaluation-policy-2019</u>
Replication	When a GEF intervention is reproduced at a comparable administrative or ecological scale, often in different geographical areas or regions.
	http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Mainstreaming	When information, lessons, or specific aspects of a GEF initiative are incorporated into a broader stakeholder initiative. This may occur not only through governments but also in development organizations and other sectors.
	http://www.gefieo.org/sites/default/files/ieo/evaluations/ops5-final-report-eng.pdf
Scaling-up	Increasing the magnitude of global environment benefits (GEBs), and/or expanding the geographical and sectoral areas where they are generated to cover a defined ecological, economic, or governance unit. May occur through replication, mainstreaming, and linking.
	http://www.gefieo.org/evaluations/evaluation-gef-support-scaling-impact-2019
Transformational change	Deep, systemic, and sustainable change with large-scale impact in an area of major environmental concern. Defined by four criteria: relevance, depth of change, scale of change, and sustainability.
	http://www.gefieo.org/evaluations/evaluation-gef-support-transformational-change-2017
Additionality	a) Changes in the attainment of direct project outcomes at project completion that can be attributed to GEF's interventions; these can be reflected in an acceleration of the adoption of reforms, the enhancement of outcomes, or the reduction of risks and greater viability of project interventions.
	b) Spill-over effects beyond project outcomes that may result from systemic reforms, capacity development, and socio-economic changes.
	c) Clearly articulated pathways to achieve broadening of the impact beyond project completion that can be associated with GEF interventions.
	https://www.gefieo.org/sites/default/files/ieo/council-documents/files/c-55-me-inf-01.pdf