1. Project Data

	Si	ımmary project data		
GEF project ID		3976		
GEF Agency project II)	GF/CMB/11/001		
GEF Replenishment Phase		GEF-4		
•	lude all for joint projects)	UNIDO		
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Project name		Improved Energy Efficiency in t		
Country/Countries		Cambodia		
Region Asia				
Focal area		Climate Change		
Operational Program	or Strategic	CC-Strategic Program 2: To promote energy efficient technologies		
Priorities/Objectives			uction and manufacturing processes	
Executing agencies involved			Cambodia Cleaner Production Office (NCPO-C) (which was hosted by the Ministry of Industry, Mines and Energy/ Ministry of Mines and Energy)	
NGOs/CBOs involven	nent	N/A		
Private sector involvement		Various industrial enterprises -	Various industrial enterprises - beneficiaries	
CEO Endorsement (FSP) /Approval date (MSP)		March 10 th , 2011	·	
Effectiveness date / project start		April 2011		
Expected date of pro	ect completion (at start)	November 2014		
Actual date of projec	t completion	November 2015		
		Project Financing		
		At Endorsement (US \$M)	At Completion (US \$M)	
Project Preparation	GEF funding	0.0	0.06	
Grant	Co-financing	0.06	0.06	
GEF Project Grant		1.24		
	IA own	0.10		
	Carramana			
Co-financing	Government	0.29		
Co-financing	Other multi- /bi-laterals	0.29 N/A	NA	
Co-financing			NA NA	
Co-financing	Other multi- /bi-laterals	N/A	NA NA	
Co-financing Total GEF funding	Other multi- /bi-laterals Private sector	N/A	1.24	
-	Other multi- /bi-laterals Private sector	N/A 2.92		
Total GEF funding	Other multi- /bi-laterals Private sector NGOs/CSOs	N/A 2.92 1.3	1.24	
Total GEF funding Total Co-financing Total project funding	Other multi- /bi-laterals Private sector NGOs/CSOs	N/A 2.92 1.3 3.31	1.24 9.89 11.19	
Total GEF funding Total Co-financing Total project funding	Other multi- /bi-laterals Private sector NGOs/CSOs	N/A 2.92 1.3 3.31 4.61	1.24 9.89 11.19	
Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin	Other multi- /bi-laterals Private sector NGOs/CSOs	N/A 2.92 1.3 3.31 4.61 valuation/review informatio	1.24 9.89 11.19	
Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin TE completion date	Other multi- /bi-laterals Private sector NGOs/CSOs	N/A 2.92 1.3 3.31 4.61 valuation/review informatio February 2016	1.24 9.89 11.19	
Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin TE completion date Author of TE	Other multi- /bi-laterals Private sector NGOs/CSOs	N/A 2.92 1.3 3.31 4.61 valuation/review informatio February 2016 UNIDO Office for Independent	1.24 9.89 11.19	

2. Summary of Project Ratings

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

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The project's global environmental objective, as stated in the request for CEO-endorsement, was to improve the energy efficiency of Cambodia's industrial sector, leading to reduced global environmental impact from GHG emissions and enhanced competitiveness for the industrial sector in a country with an energy deficit. (CEO Endorsement, p.1)

3.2 Development Objectives of the project:

A primary objective of the project was to demonstrate Industrial Energy Efficiency (IEE) benefits, build local technical capacity, strengthen supporting institutions and institutional framework, and support up-scaling of implementation for IEE and climate change mitigation in the Cambodian manufacturing sector. (TE, p.17)

The project's planned outcomes are listed below: (Project Document, p.12)

- 1. Demonstrable energy savings in participating companies through IEE pilot projects
- 2. Supply of national service providers in IEE available (to match demand in component 4)
- 3. Stronger institutional framework in place to ensure long-term support for energy reduction efforts in enterprises
- 4. Increased adoption by Cambodian enterprises of energy efficient practices and technologies as an integral part of their business practices.
- 5. Establishment of policy, legal and regulatory frameworks that sustainably promote and support industrial energy efficiency
- 3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

No changes were noted.

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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Relevance to country: The project is aligned with Cambodia's national development and environmental priorities and strategies. Energy efficiency in the industrial sector has long been a priority for the country. The Ministry of Mines and Energy have been promoting energy efficiency since 1994 through various policies, action plans and initiatives. Specific Cambodian plans that address IEE include: the Energy Sector Development Plan; the National Policy, Strategy and Action Plan on Energy Efficiency in Cambodia (which includes national activities to promote energy management practices with industrial enterprises); and the Strategic Framework of the General Department of Industry (which aims to reduce poverty by developing a dynamic industrial sector). (TE, p.28)

Relevance to project beneficiaries: The project was also relevant to the target beneficiaries which were industrial enterprises. The main activities of the project were aimed at developing site specific pilots that demonstrated the cost and energy savings from clean technologies. It also trained many enterprises, energy experts that work with those enterprises, and on the regulatory end, worked to develop policies that would support enterprises in their search for clean technologies.

Relevance to GEF-4 Strategic Objective: The project is relevant and complements the GEF-4 Strategic Objective 2 'To promote energy efficient technologies and practices in industrial production and manufacturing processes'. The design of the project and the achieved outcomes were strongly aligned with the GEF Objective 2's intended outcomes - that appropriate policy, legal and regulatory frameworks are adopted and enforced; sustainable financing and delivery mechanisms are established and operational; and GHG emissions are avoided. (TE, p.29)

4.2 Effectiveness Rating: Satis	sfactory
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The TER rates the effectiveness as *satisfactory*. The discussion below is an assessment of effectiveness of the various Outcomes:

Outcome 1: Demonstrable energy savings in participating companies through IEE pilot projects

The TE found that the achievement of this Outcome was highly satisfactory, this TER agrees with the rating. Outcome 1 included 3 outputs with defined output targets. All of these targets have been met, and many of them have been exceeded. One example includes Output 1.1. which was 'Energy

efficiency projects for a cumulative of 45,000 TOEs** and related potential economic savings are identified by 40 enterprises participating in the Quick Scan process and appraised by project experts.' The original target to measure the achievement of the output was '40 IEE project quick scans' and 'cumulative savings of 45,000 TOEs of energy savings over the technology lifetime'. The project reached 40 quick scans and also demonstrated a lifetime GHG reduction of 436,870 tonnes CO2, over ten times the original project target. This was the project's largest achievement.

- Outcome 2: Supply of national service providers in IEE available (to match demand in component 4)

The outcome and supporting outputs were mostly achieved. The TE and this TER rate it as satisfactory. The original target for the Outcome was that '40 National energy efficiency experts capable of delivering quality services are available' and that a 'National IEE network is established'. The project trained 40 experts and the IEE network was also established, however it was difficult for the evaluators to discern the quality of the experts/services (TE, p.35).

Outcome 2 was supported by 4 different outputs with associated targets. The project achieved many of these outputs and again exceeded the original targets. For example, Output 2.1 was 'a cadre of 40 national experts from relevant support institutions and consulting engineers that have technical capacity and tools required to develop and implement IEE measures' the target was to train 40 experts, and to have 20-25 seminars/trainings. The project had 24 trainings and each session had about 28 attendees (a total of ~1,120 experts, well over the target). The project also set up a registry/database of industrial energy experts and a network for them (the target of Output 2.2).

 Outcome 3: Stronger institutional framework in place to ensure long-term support for energy reduction efforts in enterprises

The TE notes that this effectiveness of this outcome was only moderately satisfactory because the project could not meet all of the expected outputs. Many of the outputs focused on training government officials on energy software, energy audits and on IEE which were for the most part achieved. However, the project failed to work with financial institutions on IEE investments (Output 3.3.) which was one of the biggest failures of the project. For example, Output 3.3. 'Capacity building of financial institutions to assess investment proposals in IEE' did not result in financial institutions with strengthened capacities to assess and consider investment proposals. Very few personnel from finance institutions actually attended the capacity building trainings and workshops. This lack of full integration of the financial community greatly affects the long-term support for enterprises, and the overall sustainability of the project (discussed in the sustainability section) (TE, p.36).

- Outcome 4: Increased adoption by Cambodian enterprises of energy efficient practices and technologies as an integral part of their business practices.

The TE finds that the effectiveness of this outcome was highly satisfactory even though there were some minor drawbacks. This is because the adoption and interest of Small Medium Enterprises for

Industrial Energy Efficiency was very high. For example, Output 4.2 ('Industry decision-makers understand their potential for energy efficiency gains and undertake energy efficiency activities') met the target of 500 CEOs attending the 24 clinics. Over 600 CEOs attended these events. 400 companies also attended IEE workshops/events, which was another target for this output. The pilot sites were also very successful in promoting IEE among enterprises, and the TE notes that "almost all private sector industrial decision makers have demonstrated an understanding for the need to become energy efficient" (TE, p.38). Adoption was evident in many industries, including the brickmaking industry which adopted energy efficient methods in new EE kilns because of pilot projects in neighboring communities.

Some outputs, however, were partially met, such as Output 4.3., 'Other stakeholders including technology/equipment suppliers will understand their role to promote industrial energy efficiency'. One of the targets was that local suppliers would become involved with IEE retrofits. The project was not able to engage them due to problems with the frequent breakdowns of local equipment (TE, p.38). This is only minor however, considering the degree to which adoption took place. (TE, p.38).

- Outcome 5: Establishment of policy, legal and regulatory frameworks that sustainably promote and support industrial energy efficiency

The TE rated this as moderately unsatisfactory, and the TER agrees with this assessment because the project did not meet many of its expected targets. The TE states "no mechanisms have been created at various administrative levels to promote and enforce policies and regulations for IEE" which was one of the key components to achieve the outcome (TE, p.39). As well, many of the policy documents and legal/regulatory frameworks have been prepared for the Government of Cambodia (including the National Energy Auditor Accreditation Program) (Outputs 5.1 and 5.3). However, the Ministry of Mines and Energy has not established any of the frameworks at the time of the TE. Thus, the project has not been able to achieve this outcome.

4.3 Efficiency	Rating: Highly satisfactory
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The project was able to achieve many of its outputs and exceed many original targets in a cost-efficient way. The TE reports that "Given the results of the pilot and quick scan IEE projects and the interest generated in IEE over the first two years, the cost-effectiveness of project expenditures was highly satisfactory" (TE, p.41). The project funds and disbursements were made on time and within the requirements of the annual work plans. The project also experienced some minor delays, but that did not significantly affect the overall achievement of outcomes (TE, p.40).

4.4 Sustainability	Rating: Moderately likely
1.1 Sustainability	nating. Woderatery interv

This TER agrees with the TE that the project rating is *moderately likely*. The sustainability dimensions are described below:

Financial sustainability: The financial sustainability of the project is critical considering that the industrial enterprises need to pay for the maintenance and upkeep of the energy efficiency measures/technologies. The project initially aimed to work with financial institutions to develop products for IEE financing, but that was not successfully achieved. This limits the likelihood that the IEE can continue since SMEs might not have the capital to maintain the equipment (although, larger enterprises might be able to finance them) or purchase new ones. Another facet is that the SMEs will find it difficult to source and pay for technical assistance for scoping new technologies. Larger companies can hire energy experts, but smaller ones will likely not have the extra funds to do so (TE, p.44).

At the time of the TE there also was not any additional funding for the project under the National Cleaner Production Office (NCPO-C) (executing partner), and without additional funding for some of the capacity building and training activities, the financial sustainability of the project is *moderately likely*.

Socio-political sustainability: The TER agrees with the TE that the socio-political sustainability of the project is *likely*. The Cambodian enterprises showed a strong willingness to continue the project beyond the timeline horizon. Specifically, the industrial sector illustrated that they were committed to the project approach since their level of co-financing was more than three times the original envisaged (totaling over USD 9 million). The enterprises that were part of pilot sites were able to also see cost-savings, so this might also be a factor that supports the longer term socio-political sustainability of the project (TE, p.45).

Institutional framework and governance sustainability: The TE finds that the institutional framework and governance sustainability can be rated as moderately likely. The TER disagrees and rates it as moderately unlikely. The project worked to develop institutional frameworks and policies that would support the long term incentive of energy efficiency in industrial enterprises. At the time of the TE, these institutional frameworks were still in development. A specific one noted was regulation to develop equipment standards. Even with those policies in place, the enforcement of the policies remain an obstacle. The TE notes that the main challenge is the "weak institutional capacity to enforce any policies or regulations related to industrial energy efficiency" (TE, p.45). This sets a severe limitation to the sustainability of the project.

Environmental sustainability – The environmental sustainability of project outcomes is *likely* as there are small or minimal environmental risks/threats.

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?

In the end, the project leveraged USD 9 million which was more than three times what was envisaged in the CEO Endorsement (USD 3,310,000). The bulk of the co-financing came from industrial enterprises that worked with the project. The additional co-financing illustrates the interest from the SMEs and might be an indication of ownership and sustainability from the sector (discussed later). The additional co-financing led to the achievement of Outcome 4, which worked to promote adoption of IEE with SMEs.

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 experienced some delay during implementation and start-up. There was a 6 month delay in the startup due to agency approvals. During implementation, the project experienced a few delays due to scheduling conflicts, and recruitment of staff. The completion of the project was ultimately delayed by 12 months to November 2015 in order to complete one project activity (certifying energy managers). These delays, however, have been minor for this project, and have not seemed to affect the achievement of outcomes or sustainability (TE, p.51).

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:

The key government ministries that were involved in this project are – the Ministry of Industry and Handicrafts, Ministry of Mines and Energy, and Ministry of Environment. It is difficult to assess the level of country ownership, and the TE does not go into depth about it. Although the project documents indicate that the government Ministries were supportive of the project and aided in achieving the results, they do not discuss the degree of government ownership that was felt.

However, the ownership of the project for enterprises was high. The project partnered with many more enterprises than it originally planned to and the level of co-financing from those enterprises is an indication that ownership was felt.

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
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The TE rated the M&E design as moderately satisfactory. This TER rates M&E Design at entry as moderately unsatisfactory as it does not have a complete set of verifiable SMART indicators. (TE, p.26) That lack of a robust set of SMART indicators and targets has made it difficult to conduct proper progress reporting of the project. Some examples of this include: Output 2.4 which has an indicator for achievement which is 'setup of a webpage', although it doesn't provide any indicator about web traffic or usage; another example of indicators not being specific enough is the indicator for Output 5.1 which is "increased role for IEE in industry, energy and environmental policies at national levels". There is also a mismatch between the Outcome indicators and the targets to monitor the achievement of the indicators. For instance, the indicator for 'Outcome 1 - Demonstrable energy savings in participating companies through IEE pilot projects' is 'Number of IEE pilot and quick scan projects are selected with co-financing commitments'. The target for this indicator is 'to develop and standardize energy audit reporting format, worksheets and tools to be used by IEE projects'. The M&E design also included targets/indicators for each Outcome which has led to a lack of clarity about the project results framework. The TE notes that "Outcomes are to be achieved through delivery of the outputs which also have their separate indicators and targets" (TE, p.28). Ultimately, this confusion could have made it difficult to properly assess/monitor the achievements and progress of the project.

The project provided a budget of US \$28,000 for M&E activities (CEO, p. 6).

6.2 M&E Implementation	Rating: Moderately Unsatisfactory
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The TE rates the M&E plan implementation has been rated *satisfactory*, however, the TER disagrees with the rating and gives it a *moderately unsatisfactory* rating. The positive elements of the implementation are that the M&E plans were implemented on schedule and reports on time (PIR reports, executing agency annual reports, etc.).

There were also several shortcomings. One flaw in the implementation was that the Project Steering Committee meetings were not held as frequently as they should have been in order to accommodate adaptive management decisions. The project originally wanted to establish the committee to review implementation progress, and meet twice a year (Project Document, p.10). The TE notes that the "PSC could not function as designed to advise on the preparation of annual work plans" (TE, p.48). As well, although the PIRs were completed on time, there was not consistent reporting on results. For example, the last PIR evaluated the achievement of the development objectives using at times the Outcome indicators, and at other times looking at just the achievement of the Outputs. This leads to confusion along the project, and there is a lack of clarity about what to measure and what results to report. The PIR also provided vague information for 'progress to date', which made it difficult to monitor progress.

One example is for the target "50 suppliers/vendors participating in the project seminars and workshops". The PIR states "Good number of local suppliers and vendors participated".

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 Quanty of Project implementation Rating: Moderately Satisfactory	7.1 Quality of Project Implementation	Rating: Moderately satisfactory
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This TE finds that the quality of project implementation was moderately satisfactory. This TER gives it that same rating. This is due to the fact that the project management unit at UNIDO managed the logistical components of the project well, but was not able to maintain a good working relationship with some government counterparts, which could have ultimately affected the achievement of some outputs and outcomes.

UNIDO administratively provided timely inputs and project management oversight (recruitment of staff, efficient project fund disbursements, etc.) in line with its expected contributions during the project design and start up (TE, p.42). However, there was a lack of a collaborative relationship between the UNDIO management team and government agencies, including the Ministry of Mines and Energy. At one point the TE notes that the relationship was so poor that the UNIDO Chief in Cambodia was alienated from all NCPO-C projects.

7.2 Quality of Project Execution	Rating: Satisfactory
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The TE notes that the "capacity of National Cleaner Production Office of Cambodia (NCPO) as an executing partner was appropriate for this project" and the agency had a strong technical foundation and qualification to execute the project" (TE, p.49). The NCPO was able to perform its responsibilities well and the project documents do not reference any specific flaws.

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.

The project directly resulted in the reduction of 436,870 tonnes CO2 (over the course of the 10-year period of the technologies) (TE, p.89). The project activities concerning the adoption of IEE technologies with industrial enterprises in Cambodia contributed to this environmental change.

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.

All of the pilot projects were able to showcase annual cost savings for enterprises because of the project interventions. The income savings were across all sectors, including: brick kiln, food processing, ice making, garment, rice milling and rubber sectors. These annual cost savings were significant, ranging from \$126,500 to \$410,000 per enterprise (TE, p.32). The estimated total saving due to the project is estimated to be about ~USD 6,600,000 (TE, p.85-89). Direct project activities that worked on pilot sites and demonstration/adoption of technologies contributed to these cost savings.

- 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 One of the successes of the project was the awareness raising it created with SMEs, energy efficiency technicians and government officials. Some of these capacity changes were specifically that there were over 40 national energy experts trained in ISO50001 certification, 600 CEOs trained in cleaner production clinics, over 200 participants attended intensive training and on the job training through demo/quick scan projects, and 68 national experts trained in energy management (PIR 2015, p.3-6).
 - b) Governance The project developed policy and regulation for the Government of Cambodia to enact concerning the encouragement of IEE. These included policy documents to calculate

GHG reduction, template for IEE monitoring and benchmarks for 5 sectors, and it established a National Energy Auditor Accreditation program (TE, p.39).

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.

There were no unintended impacts mentioned in the project documents.

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 TE finds that the "The replication effect of the project amongst industrial entrepreneurs was also very strong" (TE, p.47). It lists several examples of where replication and adoption has taken place due to project activities that worked on demonstration and pilots:

- The replication of IEE in the brickmaking sector where clusters of brick kilns have adopted rotary kilns. The rate for some clusters has been as high as 90%;
- The rubber processing sector where the number of energy efficient boilers increased after the pilot projects;
- The ice making sector where an extra 10 businesses have installed gasifiers for captive power generation; and
- The food processing sector that saw an increase in the number of energy-efficient boilers and captive power generation equipment after pilot projects were completed in 2011 and 2012. (TE, p.47)

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 offers the following learned lessons (TE, p.x)

 Having strong pilot projects is essential to achieving market transformation success and broader adoption. This project showed that it had qualified strong personnel and good management in all the technical aspects of the project. Without this, the project could not have achieved the scale up of knowledge transfers and development of more IEE projects;

- A local EE champion could have made the project even more successful, so finding a champion within sectors would also be a critical way to increase adoption;
- The business environment of a country and enterprises should be integrated into future project designs, and into the PPG. The business environment of Cambodian industrial SMEs played a significant role in the project outcomes.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE offered many recommendations for future projects of similar nature in Cambodia.

Recommendations to UNIDO and GEF:

- For future projects concerning industrial energy efficiency, project designers should allow more time to assess the assumptions and profiles of the enterprises it wants to engage with; the adoption of technologies for these enterprises is critical and a full assessment about business-related risks is essential

Recommendations to the Government of Cambodia:

- To guarantee the sustainability of the project the government (specifically the Ministry of Industry and Handicrafts (MoIH) and Ministry of Mines and Energy (MoME)) should: establish IEE standards and develop regulations for standards and labelling for IEE equipment and facilities, develop policies on energy consumption for various sectors, and create effective enforcement mechanisms (TE, p.64)
- Establish a post-project organization that promotes IEE and scales the project
- To promote IEE in Cambodia, the government should foster partnerships between technology provides and local manufactures; this would promote new business ventures
- Encourage enterprises that want to scale to adopt low-carbon technologies, illustrate to them
 the cost savings that are possible; also set up revolving funds, loans or buy-downs that could
 financially aid SMEs that are interested in adopting these technologies

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 TE assessed effectiveness based on the achievement of the outputs of the project, although the project included outcome targets. Even though the original project design might have been incorrect to include outcome targets and output targets, the TE should have reviewed the achievement of the originally stated outcome indicators, which it failed to do. When it did provide an overview of the effectiveness, it did not give information on every output and outcome, thus, there are some pieces of evidence that are missing from the TE narrative. The review was completed by the UNIDO Evaluation Office and did not have an independent author.	MS
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report provides a good amounts of evidence to support the ratings, and was consistent with the information that has been provided in previous PIRs and the MTE.	S
To what extent does the report properly assess project sustainability and/or project exit strategy?	The report described project sustainability well and accurately supports the findings and rating through evidence.	S
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The report presents the lessons learned accurately and comprehensively. Although, the TE could have provided more learned lessons concerning the implementing and executing agencies since one challenge the project had was the lack of coordination between the two.	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The TE gives a budget breakdown according to component/outcome, not down to the activity level.	MS
Assess the quality of the report's evaluation of project M&E systems:	The evaluation of the M&E design and implementation were good. The TE even looks at the original results framework and references all the flaws in the design.	S
Overall TE Rating		S

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

Mid-term evaluation