1. Project Data

Summary project data			
GEF project ID		3881	
GEF Agency project ID		4003	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		UNDP	
Project name		Promoting Appliance Energy Efficiency and Transformation of the Refrigerating Appliances Market in Ghana project	
Country/Countries		Ghana	
Region		Africa	
Focal area		Climate Change Mitigation (CCM)	
Operational Program or Strategic Priorities/Objectives		Strategic Objective 1 "To promote energy efficient technologies and practices in appliances and buildings".	
Executing agencies involved		Energy Commission	
NGOs/CBOs involvement		None involved	
Private sector involvement		None involved	
CEO Endorsement (FSP) /Approval date (MSP)		May 6, 2011	
Effectiveness date / project start		June 23, 2011	
Expected date of project completion (at start)		June 30, 2014	
Actual date of project completion		December 31, 2014	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	0.05	0.043
	Co-financing	0.08	-
GEF Project Grant		1.7	1.7
Co-financing	IA own	0.2	0.43

	Government	3.0	0.78
	Other multi- /bi-laterals	1.2	0.15
	Private sector		
	NGOs/CSOs		
Total GEF funding		1.75	1.74
Total Co-financing		4.3	1.4
Total project funding (GEF grant(s) + co-financing)		6.05	3.14
Terminal evaluation/review information			
TE completion date		February 2016	
Authors of TE		Frank Klinckenberg (team leader) and Laure McAndrew Meerssen	
TER completion date		December 30, 2016	
TER prepared by		Spandana Battula	
TER peer review by (if GEF IEO review)		Molly Watts	

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	HS	MS	-	MS
Sustainability of Outcomes		ML	-	ML
M&E Design		U	-	U
M&E Implementation		S	-	MS
Quality of Implementation		MU	-	MU
Quality of Execution		S	-	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 is to "reduce Ghana's energy-related CO2 and ozone depleting substance (ODS) emissions by mitigating the demand for energy in the country's refrigeration and air conditioning sector and by encouraging recovery, recycling and/or destruction of environmentally damaging refrigerants" (PD pg 9).

3.2 Development Objectives of the project:

The project's Development Objective is "to improve the energy efficiency of appliances marketed and used in Ghana through the introduction of a combination of regulatory tools such as Minimum Energy Performance Standards and Information Labels (S&L), and innovative economic tools". (PD pg 2). The project also aims to erase "barriers that currently inhibit the adoption of efficient refrigeration appliances" through eight outcomes that address one particular category of barriers (PD 9, 10, &12-25). The outcomes are:

Outcome 1: Structures and mechanisms for implementation of appliance energy efficiency standards and labels (S&L) strengthened;
Outcome 2: National testing, certification, labelling and enforcement mechanisms adopted;
Outcome 3: Increased consumer's and retailer's awareness and improved marketing of appliance energy efficiency standards and labels;
Outcome 4: Establishment of refrigerating appliance test facilities;

Outcome 5: Establishment of used appliance and ozone depleting substance (ODS) collection and disposal facilities
Outcome 6: Development of efficiency program evaluation and monitoring capacity;
Outcome 7: Conduct of refrigeration appliance rebate and exchange programs throughout Ghana that distribute at least 50,000 efficient appliances; and
Outcome 8: Development of various feasible finance models for national scale follow-up of pilot rebate and exchange program.

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

There were no changes to the objectives or other activities of the project during implementation.

4. GEF IEO assessment of Outcomes and Sustainability
Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

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

Please justify ratings in the space below each box.

4.1 **Relevance**	Rating: Satisfactory

The project was consistent with GEF's Climate Change Mitigation Programme and its Strategic Objective - "to promote energy efficient technologies and practices in appliances and buildings" (PD pg 10). It was also aligned to other GEF projects on energy efficiency regulations that are ongoing at regional level. In terms of country relevance, the climate mitigation component of the project was consistent with Ghana's UNFCCC commitment. The objectives were aligned to Ghana's overall strategy to "provide climate and ozone benefits through the Integrated Plan for Energy Efficiency, Climate Mitigation and ODS (ozone depletion substances) Reductions for the Refrigeration Sector" (PD pg 10 &76). The minor component on delivering GHG emission

reductions through the removal of ODS was a "relevant side benefit of improving the quality of refrigerators, and supports the key climate change objectives" (TE pg 42).

4.2 **Effectiveness**	Rating: Moderately Satisfactory

The TE rated the effectiveness of the project as Highly Satisfactory. The project had eight components with corresponding outcomes, four of which were completely achieved. However, it is worthy to note that many of the outputs were already delivered even before the project was implemented such as the drafting of legislation and adopting national testing, certification and labeling mechanism. Other important outcomes, such as the establishment of test facility and the rebate scheme, underperformed substantially due to procurement and financial issues. Thus, the TER gives a Moderately Satisfactory rating to the effectiveness of the project.

<u>Outcome 1: Structures and mechanisms for implementation of appliance energy efficiency standards and labels (S&L) strengthened:</u>

The target for this outcome was to have a fully operational regulatory framework on energy efficient refrigeration appliances. It had three outputs and two of them were already delivered prior to project implementation. Output 1 consisted of implementing S&L regulation through stakeholder consultations. This was achieved as the Energy Commission drafted the S&L legislation and got approved by the Parliament in November 2009. Output 2 aimed to provide consultations and advise to enforcement authorities and government agencies involved in S&L. Again, prior to the project implementation, the Energy Commission provided consulting services and capacity was increased at the Inspectorate Unit of Energy Commission to enforce compliance (MTE pg 29). However, in regard to accounting for detailed database on end-use sales, as per the MTE, the data was incomplete and lacked sufficient details (MTE pg 29). The TE reports that the project had "not envisaged the paper trail for the rebates to be so high and hired a new person to focus on data entry and the development of a database. One issue encountered by retailers was the lack of stock of new efficient refrigerators as they did not anticipate the take-up – it is unclear, however, how much of that was due to the rebate programme and how much to the introduction and marketing of S&L for refrigerators" (TE pg 29).

<u>Outcome 2: National testing, certification, labeling and enforcement mechanisms and infrastructure adopted:</u>

The outcome had two outputs which planned to develop national testing, certification and verification procedures as well as train state inspectors for enforcement with a target of

training 150 inspectors. Before the project started, the National Testing Procedure for Ghana - Household Refrigerating Appliances (Characteristics and Test Methods) was adopted, however, the TE states that the certification procedures were not well described in legislation (TE pg 41). In regard to training for test laboratory, the "supplier provided some training on how to operate the equipment, however, they did not provide training in testing according to the test procedure Ghana had adopted and, to this date, test laboratory staff still rely on officials from the Energy Commission – who also lack experience in testing according to international standards – to understand Ghana's standards and interpret results" (TE pg 26). The TE notes that the staff proposed for further training to the Energy Commission, but have not received a positive reply. Thus, it can be concluded that efforts to accomplish this outcome were only partly successful.

Outcome 3: Increased consumer's and retailer's awareness and improved marketing of appliance energy efficiency standards and labels:

Under this outcome there were two outputs to train retail staff in appliance energy efficiency issues and enhance consumers' awareness. According to the TE, the outcome was "well achieved, with good levels of consumer awareness and excellent involvement of retailers. This outcome provides Ghana with a strong foundation for the future. This outcome has also received important in-kind support from national parties" (TE pg 41). The project initiated several activities that targeted non-readers through the medium of radio, television like cartoons and talk-shows, print like billboards and newspaper advertisements, project website and Facebook page. Even journalists were briefed regularly on energy efficiency of the appliances, and the Energy Commission mobilized additional communication resources (TE pg 28). According to the MTE, training workshop was delivered for 520 refrigerating technicians (MTE pg 30) and the Energy Commission provided training for staff at retails shops such as Electroland and HiSense (TE pg 59 & 60).

Outcome 4: Establishment of refrigerating appliance test facility:

This outcome planned to design and build refrigeration appliance test facility under two outputs, and as per the TE, it was only partially achieved. Although a test laboratory was set-up, the testing operations started in January 2015 after the end of the project. The TE observed that the procurement for test lab proved to be lengthy and had budget issues as the co-financing did not materialize. Also, as mentioned above, the supplier did not provide adequate training in testing and thus, the staff had to rely on the Energy Commission to interpret test results (TE pg 26). The test lab also needs to be improved to bring it to internationally accepted standard of performance (TE pg 41).

Outcome 5: Establishment of used appliance and ODS collection and disposal facilities:

Under this outcome there were four outputs that planned to create awareness on environmentally friendly technologies and procedures, and also design and implement used appliances facility and ozone depletion substances (ODS) disposal centre. The project set-up collection of used refrigerators along with the rebate scheme, however, it did not have a "strategy to extend this to the much larger pool of regularly discarded refrigerators" (TE pg 41). In addition, the old refrigerators were dismantled in open-air facilities which could have leaked ODS during the dismantling process. The TE states that there was no infrastructure for ODS disposal and refrigerant destruction and there was not "even a start of a strategy for the safe disposal of ODS-containing, bulky foams which break open when refrigerators are dismantled" (TE pg 41). Thus, the project failed to deliver the outputs for this outcome.

Outcome 6: Development of efficiency program evaluation and monitoring capacity:
This outcome partially delivered on three outputs, which planned to train professionals in energy efficiency program monitoring and evaluation, test monitoring technologies and metering equipment, and pilot a rebate and turn-in program evaluation. The MTE states that an international consultant was hired to train local professionals, but as per the TE there is no record of training of professionals (MTE pg 33; TE pg 42). However, the project organized market monitoring in a systematic manner and conducted a metering study to confirm in-house energy demand for refrigerators. The project also piloted a rebate scheme and "generated good-quality quarterly reports tracking the market, which are very helpful in assessing the progress made in transforming the market" (TE pg 42).

Outcome 7: Conduct of refrigerator rebate and exchange programme throughout Ghana that distributes at least 50,000 efficient appliances:
According to the TE report, the project his outcome failed to deliver outputs under this outcome. The original target of 50,000 refrigerators receiving rebates was revised during project implementation to 15,000 refrigerators. Although, the mid-term evaluation recommended to bring the original objective back, the project did not act on this. The rebate scheme underperformed due to limited rebate amounts and lack of appeal to the general public. The TE states that "amount of rebate originally awarded for the trade-in of a refrigerator turned out to be insufficient to convince would-be buyers" (TE pg 29). One of the outputs was to make available loan guarantee and capital financing programs to facilitate implementation of pilot rebate and exchange program. Ecobank was awarded the contract to manage this facilitation. But Ecobank failed to award any loans "which they attributed to lengthy and difficult procedures and a disconnect between the intention of some managers and operational activities in the local branches" (TE pg 30). This affected "households who could not pay upfront for a new appliance were not able to purchase a new efficient refrigerator on arranged consumer loans, as was intended" (TE pg 30).

Outcome 8: Development of various feasible finance models for national scale follow-up of pilot rebate and exchange program:
The achievement of this outcome was not successful as there was "no record of the project having developed these financial models or other forms of national scale-up of its rebate scheme" (TE pg 42).

4.3 **Efficiency**	Rating: Moderately Unsatisfactory

The TE gave a rating of Marginally Unsatisfactory to the efficiency component because the project spent "a large share of its resources on activities without a substantial contribution to its overall goal" (TE pg 43). This is especially applicable to the rebate scheme, where a lot of money was spent promoting the scheme but it found little traction and the project had no strategy for large-scale continuation. There were also delays in procuring a test laboratory because of which the testing operations started only after project had ended. There was also a delay in implementing the ban on importation of used refrigerators which "affected the speed at which the project could move towards the take-up of new energy efficient appliances with the voucher scheme" (TE pg 16). Although, the project was successful in achieving many of its planned outcomes, the pledged co-financing for some components did not materialize "largely through the decision by the Government of Ghana to provide co-financing only for rebates (and not for seven other project components and project management, as was agreed) the project decided to shift funds to those components at the expense of other components" (TE pg 33). Thus, the TER also gives a Moderately Unsatisfactory rating to the efficiency of the project.

4.4 **Sustainability**	Rating: Moderately Likely

The TE gave a Moderately Likely rating to the overall sustainability of the project because of significant financial risks that could impact the continuation of the benefits. The TER assesses the sustainability of the project on the basis of financial as well as socio-economic, institutional and governance, and environmental factors.

Financial resources: The TE gave Moderately Unlikely rating because financing for major components such as "enforcement of import requirements, for the safe disposal of ODS-containing materials and for training and quality improvements of the test laboratory" have not been secured (TE pg 44).

Sociopolitical: The TE indicates that there was a high level of ownership of the project by the government of Ghana (TE pg 44). There seems to be political will to achieve the project results and the consumers have positively reacted to appliance energy efficiency.

Institutional framework and governance: The project has a legal and policy framework as it already had a legislation in place for Standards and Labels and also a regulation to ban importation of used appliances. However, the lack of commitment by the customs agency is a concern for implementation of the project objectives (TE pg 44).

Environmental: The TE states that "there are no foreseeable environmental risks that could harm the project's results" (TE pg 44) and gave a Likely rating to environmental sustainability.

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?

The TE reports that the actual co-financing remained largely undelivered because the pledged amount by UNDP and government of Ghana was redirected to the outcome of establishing the rebate scheme because of a decision of the government of Ghana. The TE provides a detailed expenditure of the budget which also indicates that the co-financing was mostly used for the rebate scheme and development of feasible finance models (TE pg 44). As already stated in the effectiveness section, both these outcomes were not achieved and hence, the co-financing was not cost-effective.

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 MTE reports that there were delays in project activities that were meant to strengthen national capacities in order to monitor GHG emission reduction. There were also delays in the procurement process as well as testing and certification facility because of budget and scheduling issues. (MTE pg 25, 31, and 37). The TE reports that the duration of the project was extended by six months (TE pg 33).

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 TE notes that there was high ownership of the project. As the project was implemented by the national Energy Commission, it received support from the government institutions, relevant Ministries and private sector stakeholders. It also got in-kind support from the government as well as Ghanaian market parties. Additionally, as the project was aligned to Ghana's strategy of improving energy efficiency, policy makers supported the project which was "exemplified by the Parliament's adoption of energy efficiency legislation" (TE pg 43).

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: Unsatisfactory

The TE gave an Unsatisfactory rating to the project's M&E design at entry because it lacked targets and activities to measure and implement the outcomes. It states that as "no targets had been defined for the actual market transformation the project aimed to set in motion and, although market monitoring data was available towards the end of the project, no reporting on market transformation was included in these formal reports" (TE pg 34). Even though the project M&E design included a baseline as well as plans for progress reports, mid-term review and terminal evaluation, the deficiency of targets and activities is a significant shortcoming. Thus, the TER also gives an Unsatisfactory rating.

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

The TE gave a Satisfactory rating to M&E implementation. The project was well monitored as there were regular submissions of the Quarterly and Project Implementation Reviews, and the mid-term evaluation was carried out in year two. But the MTE states that the quarterly reviews did not sufficiently include the overall progress towards planned targets and outcomes (MTE pg

25). The TE notes that the project delayed conducting methodology for the measurement of appliance performance, which could have been used during project implementation. However, the Energy Commission executed quarterly market monitoring which provided relevant data on the impact of the project. The project also conducted "unscheduled consumer surveys to measure recognition of project activities, in particular its rebate scheme, which was relatively well monitored" (TE pg 34). In addition, the project tracked the number of appliances seized at the port and tried to establish the average energy demand for new refrigerators. Though the project monitored the activities, the TE reports that it did not integrate the M&E data in a coherent framework.

In terms of adaptive management, the project did not utilize feedback from the M&E activities, for example, the project "did not follow up on the inception workshop with an inception report, thus missing out on an essential opportunity to realign the project's flawed strategy to the introduced S&L legislation" (TE pg 31). Due to the limited performance of the M&E implementation, the TER gives a Moderately Satisfactory rating.

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 Unsatisfactory

The TE gave a Moderately Unsatisfactory rating to UNDP's implementation of the project and the TER gives the same rating. UNDP was tasked to manage project management but when there were changes made to project's budget, UNDP failed to ensure the budgetary changes were consistent with GEF and its own internal rules. For instance, when the Government of Ghana retracted from co-financing project management, UNDP did not properly oversee the budgetary changes, which left the costs entirely to GEF and UNDP.

The stakeholders appreciated the pro-active role taken-up by UNDP in promoting the project in Ghana, but the TE reports that it did not "steer the Ghana project towards a more active collaboration with a similar project UNDP was implementing in Nigeria, a nearby country, and to explore if more collaboration could be developed with the UNDP-managed MLF-projects also targeting the (commercial) refrigeration sector" (TE pg 35). Additionally, the project design had technical flaws such as providing poor baseline information that failed to link activities with national policy developments, listing incorrectly another project as a source of co-funding and giving wrong financial information on PPG spending to the GEF secretariat (TE pg 15).

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

The TE gave a Satisfactory rating to the quality of execution. As the executing agency was the Energy Commission, the project experienced smooth coordination with many government ministries and agencies (MTE pg 28). The project also successfully initiated and mobilized parties to contribute towards the goal of improving refrigerator energy efficiency. Moreover, the Energy Commission also "undertook several monitoring efforts (not part of the M&E framework) to track the success of its market transformation efforts" (TE pg 35). Considering the overall success of project execution, the TER gives a Satisfactory rating.

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 aimed to improve energy efficiency of refrigerators in order to reduce Ghana's energy-related CO2 and ozone depleting substance (ODS) emissions. The TE reports that the project had significant impacts on energy and GHG, for instance, through the use of energy standards and labels as well as awareness campaigns, average energy demand of refrigerators in households decreased from approx. 1,140kWh/a to approximately 740kWh/a (TE pg 45).

There was also reduction in emission of chlorofluorocarbon by capturing old refrigerators in ports and replacement of old refrigerators with new ones through rebate schemes. Based on project estimates, “0.28 kg refrigerant per unit is captured, representing 0.85tCO2e per unit. This results in a total impact of 27 kton CO2-equivalent” (TE pg 47). The project managed to get 7,257 of old refrigerators exchanged through rebate scheme and 32,257 were environmentally sound recycled (TE pg 48).

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.

There are no socioeconomic changes reported by 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.

a) Capacities: There were significant activities in consumer awareness for energy efficiency and energy labels that resulted in increasing the market share of energy efficient products (TE pg 36). The awareness also helped spread knowledge on maintenance of old appliances and getting in-kind support from national parties (TE pg 48 & 41). It is reported that the “project mainly engaged the general public through media, and through a helpdesk. A helpdesk phone number was listed on flyers, billboards and adverts in local languages, and the project could notice the effect of adverts based on the number of people calling straight after: the hotline would receive up to 50 calls a day after a successful advert, mainly about the star rating” (TE pg 38). The project also developed efficient programme monitoring and evaluation capacity through the development of systematic market monitoring, which was conducted from 2014 onwards (TE pg 42).

b) Governance: In order to implement the Standards & Labels legislation, the project established a refrigerator test facility as well as used appliance and ODS collection and disposal

facilities (TE pg 41). However, the policy framework and legislation needed to implement the project were already in place before the project start.

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

No unintended impacts are reported from 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.

The project helped in establishing energy efficiency in appliance retail sector and also created awareness amongst the public about appliance energy efficiency in order to implement the S&L legislation. Although Ghana already had S&L for light bulbs and air conditioners, the project helped to mainstream S&L and energy efficiency for refrigerators (TE pgs 41 & 43).

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 best and worst practices listed by the report are (TE pg 53):

a) The project used the S&L framework that was developed by an international NGO. This seemed to provide a good foundation for achieving impacts and other developing agencies should utilize such strategies where possible. However, these frameworks need to adapted to national contexts and for local implementation;
b) The project had regular informal consultations with stakeholders and with steering committee. This approach is a good strategy and an effective alternative to formal meetings especially where stakeholders do not operate at the same pace;

c) As the customs agency lacked commitment to implement the S&L legislation, the project opened its own inspecting office. However, a permanent solution is needed to engage agencies that are not directly part of the project for long-term success;
d) The project trained and disseminated information to retail staff which proved to be crucial in achieving good results. However, providing training at an early stage in the project could further help in implementation; and
e) The project had a good strategy of educating the public about benefits of energy efficient appliances through a various channels and languages to reach out to different segments of the market.

9.2 Briefly describe the recommendations given in the terminal evaluation.

a) Review of budgets for consultancy and consultancy rates are needed due to the many financial issues in the project;
b) Improve UNDP and GEF project review approaches for better internal and external consistency with the project;
c) Improve development of project strategies “with more attention for how a policy project will interact with existing legislation and institutions” (TE pg 51);
d) Improve supervision to ensure project adapt to changing circumstances and not just change in an ad-hoc manner;
e) Create a “solution for ODS-containing materials collected and not disposed of during this project” (TE pg 51);
f) Make it a priority for Ghana’s customs agency to enforce S&L legislations as well as ban on importing used refrigerators;
g) Create a summary overview of the impact of market transformation due to the project and make it available for policy makers and to other countries as a learning tool;
h) Develop strategies to secure the buy-in of customs early on in project implementation and find additional alternatives if needed;
i) Continue to educate consumers and public about the benefits of energy efficient appliances and also have regional collaboration to help in growth of impacts of the project; and
j) Expand Ghana’s S&L approach to different appliances and “in particular the implementation of new S&L the Energy Commission is currently developing” (TE pg 51)

10. Quality of the Terminal Evaluation Report

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

Criteria	**GEF IEO comments**	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The report contained detailed analysis of the outcomes and impacts of the project. It gave a thorough assessment of the project implementation and results achieved with photographs from the project site.	**S**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is consistent with explanations presented and the ratings are appropriate to the evidence given.	**S**
To what extent does the report properly assess project sustainability and/or project exit strategy?	The report properly assesses the project's sustainability very well but does not provide an exit strategy.	**MS**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Lessons learned are comprehensive and have substantial evidence.	**S**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report included actual project costs that were used per outcome.	**S**
Assess the quality of the report's evaluation of project M&E systems:	The report assessed and gave appropriate ratings for M&E design and implementation and a	**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).

The mid-term review was used for preparation of the TER.