Public Disclosure Authorized

Report Number: ICRR0020870

# 1. Project Data

Project ID P114119 Country Philippines	Project Name PH-GEF-Chiller Energy Efficiency Project Practice Area(Lead) Environment & Natural Resources		oject	
L/C/TF Number(s) TF-95991,TF-96093	Closing Date (Original) 01-Jan-2017		Total Project Cost (USD) 18,375,000.00	
Bank Approval Date 03-Jun-2010	Closing 01-Jan-2			
	IBRD/ID	A (USD)	Grants (USD)	
Original Commitment	3,600,000.00		3,600,000.00	
Revised Commitment	3,600,000.00		2,688,320.81	
Actual	2,694,970.19		2,688,320.81	
Prepared by	Reviewed by John R. Eriksson	ICR Review Coordina Christopher David Nelso		

# 2. Project Objectives and Components

## a. Objectives

The Project Development Objective (PDO) as stated in the Global Environment Facility (GEF) Trust Fund Agreement (Schedule I, page 5) and in the Project Appraisal Document (PAD, page 8) was:

"To reduce Green House Gas (CHG) emissions by replacing inefficient chillers, including both old Chlorofluorocarbon (CFC) chillers and non-CFC based chillers."

*Note*: A chiller is the primary component in a refrigeration or air-conditioning system.

- b. Were the project objectives/key associated outcome targets revised during implementation?
  No
- c. Will a split evaluation be undertaken?
- d. Components

There were four components.

One. Investment in Chiller Replacement (Appraisal estimate US\$43.85 million. Actual cost at closure US\$19.28 million). This component aimed at accelerate the replacement of inefficient chillers with energy efficient ones by providing financial incentives. Chiller owners could opt for either: (i) accepting an up-front grant subsidy of 15% of the cost of new, non-Chlorofluorocarbon (CFC) based energy efficient chillers to replace their stock of aging, inefficient chillers: or, (ii) carbon finance reflows option, that is owners could receive an annual subsidy of 80% of Clean Development Mechanism (CDM) under the Kyoto protocol. These revenues to be generated from actual energy savings by the new chillers and in this case payments to the chiller owners were to be made one year after installation and commissioning of new chillers and every year thereafter until 2019, upon successful issuance of certification by the Executive Board of the CDM.

**Two. Measurement, Monitoring and Verification** (Appraisal estimate US\$1.82 million. Actual cost at closure US\$0.04 million). Activities in this component were: (i) measuring energy consumption of baseline and new equipment, monitoring performance of new chillers on an online basis and analyzing the data collected during the lifetime of the project: and, (ii) establishing a database for monitoring individual chiller replacement activities for certification of emission reduction claims.

Three. Performance Standards and Technical Assistance. (Appraisal estimate US\$0.20 million. Actual cost at closure US\$0.18 million). This component aimed at capacity building of project participants (government regulators, chiller owners/suppliers/ and manufacturers). Activities included: (i) training, organizing workshops and distributing educational materials, exploring opportunities for expanding coverage to other energy conservation options in large buildings and industries and inform participants about measuring and verifying power consumption, energy savings and accounting for emission reductions: (ii) providing certification awards to chiller owners: (iii) operation of marketing tools, including computer software to raise awareness of chiller owners of energy saving opportunities from chiller replacements: and, (iv) developing performance standards for non- Chlorofluorocarbon (CFC) energy efficient chillers and developing a policy framework and incentive mechanism for promoting good practice in operating energy efficient non CFC chillers.

**Four. Project Management.** (Appraisal estimate US\$1.82 million. Actual cost at closure US\$0.52 million). This component aimed at providing project management support. Activities included: (i) support for coordination and supervision: and, (ii) managing a grievance handling mechanism to allow for feedback from chiller owners and potential stakeholders. Neither the PAD nor the ICR mention M&E as an activity under component four.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates
Project cost. Appraisal estimate (including baseline cost and costs associated with contingencies) was

US\$47.90 million. Actual cost at closure US\$20.02 million. Actual cost was lower than estimated due to the reduced scope of activities (discussed below under dates).

**Project financing**. The project was financed by a Global Environment Facility (GEF) grant of US\$2.60 million. Amount disbursed at closure US\$1.93 million. There was co-financing from:

- (i) Germany. Kreditanstalt fur Wiederaufbau (KfW). Appraisal estimate US\$7.31 million. Actual contribution at closure US\$0.00 million. Activities pertaining to Clean Development Mechanism (CDM) (see Section 3a below for further discussion of the CDM and related international agreements and mechanisms) were to be financed by KfW, as KfW was the carbon buyer. As indicated below (under "Dates") all activities pertaining to carbon finance reflows were cancelled:
- (ii) Montreal Protocol Investment Fund. Appraisal estimate US\$1.00 million. Actual contribution US\$0.78 million:
- (iii) U.S. Environmental Protection Agency. Appraisal estimate US\$0.05 million. Actual contribution US\$0.00 million: and,
- (iv) Private Commercial financing (the financing provided by chiller owners to finance their share of the conversion cost (any amount not covered by the 15% incentive payments) US\$36.62 million. Actual contribution at closure US\$10.11 million.

**Borrower contribution**. Appraisal estimate US\$0.32 million. Their actual contribution at closure was US\$0.04 million.

**Dates.** There were two level 2 restructurings. The following main changes were made through the first restructuring on June 2013:

- (i) The original target values pertaining to the installation of new energy efficient chillers were revised downwards, in view of the reduced available financing for chiller replacement activities associated with Clean Development Fund (CDM). This was mainly due to the delays and eventual termination of the Emission Reduction Purchase Agreement (ERPA) between KfW and the Department of Environment and Natural Resources (DENR). Under this agreement, KfW was expected to buy any carbon credits at an agreed price, which at that time was the current global market price for carbon. The Task Team Leader clarified that during project implementation, the global market price for carbon dropped drastically (from US\$16 to around US\$2 per ton equivalent of CO2). Due to the drastic price drop, KfW would be incurring a loss. The delay in project implementation provided a window for KfW to negotiate an exit from the ERPA. All parties agreed to cancel the ERPA and with this, the option pertaining to carbon finance reflows was removed from the project scope. This reduced the project's expected scope to Energy Efficiency activities financed by the GEF grant:
- (Ii) A new indicator was added to monitor the number of sub-grant agreements signed with beneficiaries as a legal binding means by which to document chiller owners' commitment to the proper maintenance of the new chillers subsidized by the project and,
- (Iii) Reallocation of project funds from the Multilateral Fund for the Implementation of the Montreal Protocol (MP) to activities pertaining to strengthening performance standards and technical assistance. The second restructuring on December 2014 extended the project closing date by two years from January 1, 2015 to January 1, 2017 for completion of ongoing activities.

# 3. Relevance of Objectives & Design

# a. Relevance of Objectives

The Philippines was a signatory to the Montreal Protocol on Substances that Deplete the Ozone layer (MP) since 1999. As per the MP mandate, Philippines as a developing country, was required to completely phase out production and consumption of new Ozone Depleting substances (ODS) by January 1, 2010 and develop measures for effectively using the ODS recovered from the chillers to meet the servicing needs of the Refrigeration and Air-conditioning (RAC) sector. Philippines had also ratified the Kyoto Protocol (KP) in 2003 which required developing countries to reduce emissions by an average of 5.2% between 2008 and 2012, compared to the 1990 baseline. The KP also had a flexibility mechanism, such as the Clean Development Mechanism (CDM), which enabled developed countries to reduce the costs of compliance through purchasing emissions reductions from developing countries, provided they were real and measurable. Before appraisal In 2007, the Philippines had phased out 2,847 Metric Tons (MT) of Chlorofluorocarbon (CFC) or 94% of its baseline consumption and also intended to meet the MP deadline of total CFC phase out by 2010.

The Project Development Objective (PDO) continues to be government strategy. At appraisal, the PDO was consistent with the Philippine Medium Term Development Plan's goal for the 2004-2010 period of achieving higher energy self-sufficiency and incorporating ozone friendly technologies, products and equipment for protecting the environment and thereby improve the quality of life of citizens. The PDOs were also consistent with the government's Energy Plan for the 2007-2014 period prepared by the Department of Energy, which was being regularly updated. The two objectives of the energy plan were: attaining 60% energy efficiency beyond 2010 and promoting a globally competitive energy sector. The PDOs were also closely aligned with the Philippines' existing ODS phase out program in support of the MP and addressed the government's KP objective of encouraging energy savings to support reduction in Green House Gas (CGS) emissions. The PDOs were relevant to the Energy Efficiency (EE) Action Plan for 2016-2020, which set targets for EE improvements in buildings and to the National Climate Change Action Plan (NCCAP) that targeted implementation of actions over the short, medium and long terms with respect to environmental stability, climate smart industries and services, sustainable energy and knowledge and capacity development. The PDO was consistent with the goals of the Bank's Country Assistance Strategy (CAS) for 2010-2012 which highlighted the need for achieving growth that was inclusive to reduce vulnerabilities. The PDO was well aligned with the Bank's Country Partnership Strategy (CPS) for the 2015-2018 across its Rapid, Inclusive and Sustained Economic Growth and Resilience to Climate Change, Environment and Disaster Risk Management areas of engagement. The PDO also was consistent with the GEF focus areas on climate change and ozone layer depletion and its strategic program on energy efficiency (energy efficiency in the commercial buildings and promoting energy efficiency in the industrial sector).

Rating High

## b. Relevance of Design

The statement of the PDO was clear. The causal links between outputs and outcomes were logical among the project activities, which sought to address the financial, technological and information barriers to increasing cooling efficiency. The intended outcomes were measurable in principle. While component one and

two activities entailing replacement of inefficient chillers and financial incentives for chiller owners were intended for addressing the financial and technological barriers to cooling efficiency, component three activities were intended for addressing the informational barriers to increasing cooling efficiency. The combination of these activities can be expected to contribute to the PDO of reducing Green House Gas emissions. The project activities could also be expected to contribute to the higher-level objective of meeting the government's commitments pertaining to the MP requirements of complete phase out of ODS and to the KP requirements. The design which entailed replacing older chillers in commercial buildings and in the industrial sector with newer energy efficient ones that utilized refrigerants with lower global warming potential could also be expected to contribute to the GEF focal areas on climate change and its strategic program on energy efficiency.

Rating Substantial

## 4. Achievement of Objectives (Efficacy)

# Objective 1

**Objective** 

To reduce Green House Gas (CHG) emissions by replacing inefficient chillers, including both old Chlorofluorocarbon (CFC) chillers and non-CFC based chillers.

#### Rationale

#### Outputs.

- 71 new energy efficient chillers for reducing greenhouse gas emissions were installed at project closure with subsidy grants. This exceeded the revised target of 53. The original target value was redefined based on the reduction of available financing due to the loss of potential carbon finance reflows. This restricted the project's design to payment of a fixed level subsidy tied to the available grant financing which determined the number of chiller conversions possible based on the going market price at the time. The revised target was surpassed due to the drop in the price of chillers during implementation and the savings allowed for replacement of additional chillers. (ICR, Datasheet, Intermediate Indicator Number One).
- The online Chiller Management Information System (CMIS) to track chiller replacement was installed and operational at project closure. This system automatically generated chiller performance notifications. The MIS was housed on the project's webpage so that chiller owners could supply and submit chiller replacement documents on line as well as to monitor the status of their application.
- 41 of the 71 new chillers installed were connected to the CMIS at project closure. This exceeded the revised target of 35. The remainder were set to come online upon completion of installation (ICR,

Datasheet Intermediate Indicator Number Two).

- Tool kits were developed as targeted to assess the eligibility of baseline chiller units. This included a Power-Output Function (POF) Regression Analysis tool to assess the efficiency of the baseline chiller units and Investment Analysis worksheets to assess the financial viability of each chiller replacement proposed. Access to the toolkits was given to prospective beneficiaries for enabling them to make decisions with regard to replacing old and inefficient chillers (ICR, page 44).
- 29 project recipients participated in the recognition program. This exceeded the original target of 15. (ICR, Datasheet, Intermediate Indicator Number Three).
- 26 training sessions and workshops for technical representatives from beneficiary facilities (including government staff) were conducted. This exceeded the original and revised targets of 15 and 12 respectively (ICR, Datasheet, Intermediate Indicator Number Four).
- 40 sub-grant agreements were signed as compared to the target of 20. This indicator added at the time of the 2013 restructuring introduced a legally binding document in order document chiller owners' commitment to the proper and sustainable operation and maintenance of the new chillers subsidized by the project (ICR, Datasheet, Intermediate Indicator Number Five).

#### Outcomes.

- According to the data collected by the CMIS, 45,687 Tons of Refrigeration (TR) of cooling capacity were transformed to energy efficient cooling. This exceeded the original target capacity of 30,649 (ICR, Datasheet, Key Outcome Indicator Number One).
- 6.9 Ozone Depleting Potential (ODP) were phased out at project closure, which represented a 48% increase relative to the target. The direct phase out of ozone depleting refrigerants which have Global Warming Potential and the energy savings generated by chillers with more efficient cooling capacity contributed to reduction in carbon emission. The cumulative carbon emission reduced to 151.4 kilo tons of CO2 equivalent (kTCO2) This exceeded both the original and revised targets of 560 kTCO2 and 62.4 kTCO2, respectively (ICR, Datasheet, Key Outcome Indicator Number Three).
- Energy consumption was reduced to 35 Gigawatt Hour (GW) a year at project closure. This was as originally targeted and exceeded the revised target of 124.7 GW a year (ICR, Datasheet, key Outcome Indicator Number Four).

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## 5. Efficiency

Economic Analysis. A Cost-Benefit analysis was conducted for the chiller replacement component of the

project which accounted for 92% and 96% respectively, of the total project costs at appraisal and at closure. The methodology entailed a comparison of "with" and "without" the project over a thirty-year timeframe (2011-2040). The potential benefits associated with early replacement of chillers were assumed to come from, the avoidance of power generation capacity requirements that result from reduced electricity use from early replacement of chillers; lower greenhouse gas emissions from energy savings; Ozone Depleting Substance (ODS) recovery; and reduced leakage of ODS from new chillers. The Net Present Value at closure with a 12% discount rate at project closure was estimated to be US\$19.8 million and the ex post Economic Internal Rate of Return (EIRR) was 136% as compared to the ex-ante EIRR of 59%. The significantly higher EIRR at closure was due to a combination of factors including: (1) the low efficiency of the original chillers: (2) the significantly advanced timeframe for replacement of chillers in the "with project" scenario: and, (iii) the extent of greenhouse gas reductions from the chillers.

Cost Effectiveness. The cost effectiveness of this project was US\$26 per Tons of Carbon-dioxide equivalent (tCO2e) captured was in line with the base case for the social value of carbon for this time period. Administrative and Operational Issues. There were several start-up problems including, frequent changes of personnel within the Project Management Coordinator (PMC), identifying candidate chillers for replacement due to the stringent requirements associated with the Clean Development Mechanism (CDM) of the Kyoto Protocol. These problems in conjunction with the significant downturn in the carbon market, led to the termination of the Emission Reduction Purchase Agreement (ERPA) and thereby to the restriction of the project activities. However, the project at closure was carried out at an estimated total cost (from grant and government financing) of US\$2.93 million instead of the planned US\$3.6 million (after restructuring). The project utilized this amount to subsidize installation of an additional 71 chillers as compared to the revised target of 53).

# Efficiency Rating Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	59.00	92.00 □Not Applicable
ICR Estimate	✓	136.00	96.00 □Not Applicable

<sup>\*</sup> Refers to percent of total project cost for which ERR/FRR was calculated.

### 6. Outcome

Relevance of the PDO to the government and Bank strategy for Philippines was rated as High. Relevance of design was rated as Substantial in view of the logical links between the project activities, their outputs and

outcomes. Efficacy of the single objective - to reduce greenhouse gas emissions by replacing inefficient chillers - was rated as Substantial, given that the both the project and GEF outcomes were realized in all cases. Efficiency was rated as Substantial. The project activities were economically justifiable.

a. Outcome Rating Satisfactory

# 7. Rationale for Risk to Development Outcome Rating

**Government Commitment**. Negligible. Government commitment to the PDO remained high as demonstrated by the Government's specific policy actions on ozone through the government's Montreal Protocol Commitments and the 2016-2020 Energy Efficiency (EE) Action plan. The Government's MP commitments were given operational significance through the Department of Environment and Natural Resources (DENR) Administrative order (DAO) 2013-25, the revised regulation on chemical control of Ozone Depleting Substance (ODS) and its regulations on energy conservation in buildings.

**Institutional Support**. Under the aegis of this project, targeted financial and technical assistance was provided to strengthen the management and operational capacities of the Department of Environment and Natural Resources (DENR)'s participating and other relevant government agencies. Given that DENR now has an effective management framework with well institutionalized functions, the institutional risk is rated as negligible.

a. Risk to Development Outcome Rating Negligible

#### 8. Assessment of Bank Performance

## a. Quality-at-Entry

The project was prepared based on the lessons learned from the chiller conversion demonstration projects undertaken with the support of the Bank in Mexico (CFC -Based Chillers Replacement Project), Thailand (Building Chiller Replacement Program and Turkey (Chillers Replacement Program) and the methodology of a chiller sector study prepared for a similar chiller replacement project that was under preparation at that time and that is now being implemented (Chiller Energy Efficiency Project). The design incorporated familiar financing mechanisms such as subsidy to cooler users. Several risks were identified at appraisal, including Substantial risks associated with financial management and appropriate risk mitigation measures were incorporated at design. Appropriate arrangements were made at appraisal for M&E and safeguards and fiduciary compliance (discussed in section 11).

# Quality-at-Entry Rating Satisfactory

# b. Quality of supervision

Supervision was conducted through bi-annual missions in conjunction with site-specific technical visits that provided understanding of on-ground implementation experiences. This aided in addressing the challenges during implementation. The continuity of leadership was maintained given that a core Bank team of technical specialists were maintained throughout the life of the project. Following the termination of the activities associated with replacement of chillers under the Emissions Reduction Purchase Agreement (ERPA), the supervision team adapted a management approach for using the remaining available funds that allowed for course correction without compromising the project's objective or its overall structure. The expenditure and post procurement reviews conducted by the Bank's procurement and financial management specialists and several site visits conducted by the Bank's Environmental Specialist during implementation aided in compliance with fiduciary and safeguards during implementation (discussed in section 11).

Quality of Supervision Rating Satisfactory

Overall Bank Performance Rating Satisfactory

#### 9. Assessment of Borrower Performance

#### a. Government Performance

The government commitment to promoting energy efficiency at preparation was demonstrated by the policies and legislation before appraisal. These included: The Philippine Energy Plan (2007-2014): the Presidential Administrative Order Number 110 of 2004: the institutionalization of a Government Energy Management Program: and, the Department of Energy Act of 1992. The Department of Energy collaborated with the project beneficiaries on best practices.

There were minor shortcomings. Strategic inter-ministerial collaboration was weak and although a Project Steering Committee was established to provide operational guidance and oversight to the project, the body was not convened during the implementation period.

# Government Performance Rating Satisfactory

## b. Implementing Agency Performance

The Foreign-Assisted and Special Projects Office (FASPO) in the Department of Environment and Natural Resources (DENR) was in charge of coordination and implementation, with the support of a Project Management Coordinator (PMC). The PMU had a financial management specialist and this aided in determining chiller owner's eligibility and the level of subsidy to be offered. The PMC had qualified carbon, Management and Information Systems (MIS) and Financial Management (FM) specialists to manage the

day-to day project management. The PMU conducted a diligence audit of refrigerants at closure to address the Government's compliance requirements under the Montreal Protocol on Substances that Delete the Ozone layer (MP) (discussed in section 11).

There were minor shortcomings associated with DENR's internal processes. This contributed to delay in the engagement of a FM specialist to conduct the financial analysis pertaining to realization of return on investment.

Implementing Agency Performance Rating Satisfactory

Overall Borrower Performance Rating Satisfactory

## 10. M&E Design, Implementation, & Utilization

## a. M&E Design

The four key outcome indicators - the number of inefficient chillers replaced by the project, phase out amount of new Chlorofluorocarbon (CFCs) in the Refrigeration and Air Conditioning (RAC) servicing sector, certification of quantified emissions reductions and savings in Mega Watt Hour (MWh) through replacement of chillers - were realistic and appropriate for monitoring project performance.

The M&E at design envisaged the installation of a Management Information System (MIS) to measure and analyze data at the project level. At the sub-project level, each data logger and transmitter who installed a chiller was expected to measure energy consumption of baseline and new chillers and monitor their performance parameters (such as flow rates, temperature and electricity) and their on-line energy savings. This data was to be used for determining aggregate energy savings and emission reductions.

## b. M&E Implementation

The MIS introduced a monitoring and management tool to track and report on individual chiller and aggregate energy savings and emission reductions. To facilitate access, the MIS was housed on the project's webpage so that chiller owners could supply and submit chiller replacement documents on line as well as to monitor the status of their application. An interface in the system also allowed the owner to automatically upload data through the website once a new chiller was included in the system.

## c. M&E Utilization

The M&E data was used to monitor project performance. At project closure, the Department of Environment and Natural Resources, Statistics and Information System Management Section (SISMS) assumed the ongoing management of the MIS. The SISMS is to date tasked with the overall responsibility of ensuring that all project beneficiaries come online following installation and commissioning of their chiller and that they

continue to report energy savings and emission reduction practices.

M&E Quality Rating Modest

#### 11. Other Issues

# a. Safeguards

The project was classified as a Category B project. One safeguard policy was triggered: Environmental Assessment (OP/BP 4.01). The potential environmental risks associated with installing new chillers (such as risks related to building renovations or retrofitting, disposal of old Chlorofluorocarbon (CFC)- based chillers, health and safety issues from handling non-Ozone Depleting Substances (ODS) used in new chillers and worker and building occupant safety risks), were identified at appraisal. The PAD (page 28) reports that an Environmental Management Framework (EMF) and Environmental Management Plans (EMPs) were prepared at appraisal.

The ICR (page 27) notes that safeguards compliance was satisfactory. Several site visits were conducted by the Bank's Environmental Specialist during implementation. In cases where chiller replacement required replacing hydrocarbon refrigerant (HC), occupational safety procedures were followed. A due diligence audit of refrigerants conducted by the Project Management Unit (PMU) showed compliance with the government's requirements under the Montreal Protocol on Substances that Delete the Ozone Layer (ICR, page 27).

# b. Fiduciary Compliance

**Financial Management**. A financial management review was conducted at appraisal to assess the implementing agency's ability to address financial management issues (PAD, page 75). The assessment concluded that the financial management system of the implementing agency was satisfactory (PAD, page 75). The financial management risk was rated as Substantial and several mitigating measures were incorporated at appraisal to address financial management issues.

The ICR (page 28) notes that there was compliance with financial management during implementation. Although there were moderate shortcomings (such as delays in submission of interim financial audits and audited financial statements), these were rectified by the last year of project implementation. The ICR however provides no details on the quality of audits. The task team leader clarified that with the exception of the most recent one, all audit reports were unqualified. The most recent audit had a qualified opinion which has now been corrected to date.

**Procurement.** The PAD (page 88) notes that an assessment was conducted at appraisal to assess the procurement capacity of the implementing agency. The assessment concluded that while the procurement unit of the implementing agency had qualified staff who could handle procurement issues following Bank procedures, the implementing agency had limited capacity for addressing the increasing number of projects under its responsibility. A procurement plan was prepared at appraisal and this was updated at least annually

or as required to reflect project implementation (PAD, page 87).

The ICR (page 29) notes that although there were procurement delays during implementation in view of the time it took for the project to reach out to prospective beneficiaries, these were resolved and procurement was done in accordance with the Bank's procurement policies.

c. Unintended impacts (Positive or Negative)

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d. Other

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12. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Risk to Development Outcome	Negligible	Negligible	
Bank Performance	Satisfactory	Satisfactory	
Borrower Performance	Satisfactory	Satisfactory	
Quality of ICR		Substantial	

### Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

#### 13. Lessons

The ICR draws the following main lesson from the experience of implementing this project.

(1) Under certain conditions, the use of small-scale financial subsides can be a sound investment option to catalyze interest and support broader national energy efficiency goals. This project used two types of funding - grant and market-based measures for addressing the financial and technical barriers to adopting commercially-available energy efficient alternatives at design. Given that market-based measures were not used, the project had another measure through grants and this enabled utilization of the remaining available funding without compromising the project's objective or its overall structure.

#### 14. Assessment Recommended?

No

## 15. Comments on Quality of ICR

The ICR is concise and for the most part well written. It reports both outputs and outcomes of the project and its assessment of the project is comprehensive. It is candid about the implementation problems that were encountered (termination of agreement with KfW) and how they were resolved during project execution. Although the ICR discusses the financial management issues during implementation and how they were resolved, it provides few details on the quality of financial audits.

a. Quality of ICR Rating Substantial