1. Project Data

Summary project data				
GEF project ID		611		
GEF Agency project ID		GF/2200-99-03		
GEF Replenishment Phase		GEF -2		
Lead GEF Agency (include all for joint projects)		United Nations Environment Programme		
	, , , , , , , , , , , , , , , , , , , ,		ment Decisions to Cleaner Technology	
Project name		– A Technology Transfer Clearin		
Country/Countries		· · · · · · · · · · · · · · · · · · ·	n, Argentina, Brazil, Mexico, Ghana, nd, Philippines, Nepal, Vanuatu	
Region		Global		
Focal area		Climate Change		
Operational Program	or Strategic	OP 5: Removal of barriers to en	ergy efficiency	
Priorities/Objectives		OP 6: Promoting renewable en		
Executing agencies in	volved	UNEP - Division of Technology, OzonAction Unit)	Industry and Economics (Energy and	
NGOs/CBOs involven	nent	None involved		
Private sector involvement		Either private financial institutions or private developers of energy efficient/renewable energy technologies were recipients of grants to finance feasibility studies of their technologies.		
CEO Endorsement (FSP) /Approval date (MSP)		March 1999		
Effectiveness date / p	project start	May 1999		
Expected date of pro	ject completion (at start)	July 2000		
Actual date of projec	t completion	December 2002 (TE)		
		Project Financing		
		Project Financing At Endorsement (US \$M)	At Completion (US \$M)	
Project Preparation	GEF funding		At Completion (US \$M)	
Project Preparation Grant	GEF funding Co-financing		At Completion (US \$M)	
			At Completion (US \$M) 0.75	
Grant		At Endorsement (US \$M)		
Grant	Co-financing	At Endorsement (US \$M) 0.75	0.75	
Grant GEF Project Grant	Co-financing IA own	At Endorsement (US \$M) 0.75	0.75	
Grant	Co-financing IA own Government	At Endorsement (US \$M) 0.75	0.75	
Grant GEF Project Grant	IA own Government Other multi-/bi-laterals	At Endorsement (US \$M) 0.75	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions	
Grant GEF Project Grant	IA own Government Other multi-/bi-laterals Private sector	At Endorsement (US \$M) 0.75	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions	
Grant GEF Project Grant Co-financing	IA own Government Other multi-/bi-laterals Private sector	At Endorsement (US \$M) 0.75 0.18	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not)	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	0.75 0.18	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	0.75 0.18 0.75 0.18	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl private sector) 0.98366 (or 1.23466)	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	At Endorsement (US \$M) 0.75 0.18 0.75 0.18 0.93 valuation/review information	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl private sector) 0.98366 (or 1.23466)	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	0.75 0.18 0.75 0.18	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl private sector) 0.98366 (or 1.23466)	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin TE completion date TE submission date	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	At Endorsement (US \$M) 0.75 0.18 0.75 0.18 0.93 /aluation/review information December 2002	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl private sector) 0.98366 (or 1.23466)	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin TE completion date TE submission date Author of TE	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	At Endorsement (US \$M) 0.75 0.18 0.75 0.18 0.93 /aluation/review information December 2002 Susanne Bech	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl private sector) 0.98366 (or 1.23466)	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin TE completion date TE submission date	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOs	At Endorsement (US \$M) 0.75 0.18 0.75 0.18 0.93 /aluation/review information December 2002	0.75 0.23366 (in-kind) 0.251 (in-kind, PIR 2004 mentions this but TE does not) 0.75 0.23366 (in-kind) (or 0.48466 incl private sector) 0.98366 (or 1.23466)	

TER peer review by (if GEF EO review)	Joshua Schneck

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF EO Review
Project Outcomes	S	2*	NR	S
Sustainability of Outcomes	NR	2	NR	Moderately
				Unlikely
M&E Design	NR	NR	NR	MU
M&E Implementation	NR	NR	NR	MU
Quality of Implementation	S	2	NR	MS
Quality of Execution		-	NR	S
Quality of the Terminal Evaluation Report	-	-	NR	MS

^{*}The TE uses a 5-point rating scale from 1 to 5 where 1 is "Excellent" (90%-100% achievement), 2 is "Very Good" (75%-89%), 3 is "Good" (60%-74%), 4 is "Satisfactory" (50%-59%), and 5 is "Unsatisfactory" (49% and below).

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The Global Environmental Objective of the project, as stated in the Project Brief (PB), was to prevent greenhouse gas emissions by redirecting private sector investments towards cleaner technology options. The project was to enable abatement of up to one million tons of greenhouse gas emissions. This was to be achieved by removing information barriers to the acquisition and transfer of renewable or highly energy efficient technologies (EE/RET), thus shifting pending investment decisions towards cleaner technologies. According to the PB, a large proportion of investment in developing countries is directed toward outdated energy technologies because financial institutions do not understand the advantages of EE/RET, and incorrectly assess their riskiness to be very high. Thus, these beneficial technologies are penetrating the market at a rate slower than is socially desirable.

3.2 Development Objectives of the project:

As stated in the PB (pg. 4), the main Development Objective is to enable the abatement of up to one million tons of greenhouse gas emissions by redirecting pending private sector investment decisions towards cleaner technologies. This was to be achieved through the following two objectives together:

- 1. *Increased commercial financing of EE/RET projects*. This was to be realized by redirecting up to ten private sector investment decisions to cleaner technologies by provision of contingent finance to the "borrower" (the borrower is assumed to be the financial institution making the investment decision) for alternative technical feasibility and appraisals.
- Increased awareness in lending institutions and private sector companies on EE/RET
 investments. This was to be realized by training commercial investors and lending institutions on
 the potential economic and environmental gains possible through investments in EE/RET.
 Additionally, an interactive appraisal tool was to be developed to improve partner financial
 institutions' skills for appraising alternative technology investment projects.

The desired long-term outputs of the project were: a) continued delivery of EE/RET advisory services by partner financial institutions to their private sector clients, as part of conventional lending operations; and b) increased levels of commercial financing for investment projects with an EE/RET component.

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

Yes, some changes to activities and mechanisms for Objective 1 of the Development Objective were made during implementation. The Investment Advisory Facility (IAF) was set up to provide advisory support and contingent grants for feasibility studies. However, it "directed" instead of "redirecting" private investments towards cleaner technologies as was stated originally in its objective. Thus, it began supporting energy efficient or renewable energy technology (EE/RET) project finance investments that were already being developed by the banks or those that already included an EE/RET component rather than supporting feasibility studies for new investment projects. The TE (pg. 14) reports that this change was brought about because it seemed that "directing" would be a better mechanism for reaching the type of investments that would actually benefit from the IAF. It would allow the IAF to attract a higher number of appraisal proposals and to respond to the immediate needs of the financial institutions.

The PB (pg. 6) mentions that financial institutions were expected to provide in-kind support equivalent to the USD 180,000 in-kind commitment of UNEP for the appraisals, but does not indicate the ownership details of these appraisals. The TE, however, mentions a change in the ownership of IAF appraisals. After an appraisal was carried out for a particular project, it was made available to other financiers who might want to invest in the project in the event that the original financial institution, through which the grant for the appraisal was provided, failed to pursue the project. It seems that, originally, the appraisals were conceived to be owned by the financial institution that requested it.

The most significant change was in the contingent grant mechanism which was originally designed such that it would provide a grant to the borrower¹ to conduct an alternative feasibility study on the condition that it would be repaid if the investment was viable and the bank was willing to invest in it (TE, pg. 15). But, it was difficult to ask these financial institutions to pay the cost of consultants hired by a body (the IAF) that was not involved in the actual project financing. Thus, this was changed to a regular grant that did not need to be repaid. The contingent mechanism was a sustainability measure since the grant amounts that would be repaid could be redeployed for other projects. This aspect of the mechanism was lost. It was also an accountability measure as it ensured that financial institutions used the support as intended and were serious about the investment. This aspect was maintained by giving more ownership of the appraisals to the financial institutions.

These changes were not accounted for in the revised project documents and were only conveyed through informal correspondence between UNEP and GEF.

4. GEF EO assessment of Outcomes and Sustainability

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

¹ Most likely the "borrower" is the bank but this is unclear in the PB and TE.

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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The project's objectives are relevant to the project countries' obligations under the UN Framework Convention on Climate Change (UNFCCC). All 13 project countries have ratified the UNFCCC, thus agreeing to promote the application of technologies, practices and processes that reduce or prevent emissions of greenhouse gases. Promoting private investment in energy efficient or renewable energy technologies (EE/RET) is an important component of the strategy to meet these obligations. Additionally, the private sector's crucial role in meeting UNFCCC obligations is recognized under the *Instrument for Establishment of the Restructured Global Environment Facility* (PB, pgs. 1, 3).

The project was consistent with GEF Operational Strategy 5, which focuses on removing barriers to energy conservation and energy efficiency as it helped direct investment to energy efficient technologies. It was also consistent with GEF Operational Strategy 6 on promoting the adoption of renewable energy by removing barriers and reducing implementation costs as it actively removed information barriers, provided training for future feasibility studies, and reduced the costs of current feasibility studies for renewable energy projects.

4.2 Effectiveness	Rating: Satisfactory
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The TE rates the three aspects of the project relevant to its effectiveness as follows: attainment of outputs is 1 ("Excellent"), completion of activities is 2 ("Very Good") and impact created is 3 ("Good"). The average for the three aspects is thus 2 which this TER concurs with.

The project has met the targets for some of its outcomes but has been unable to achieve the targets for others (PIR 2004, TE pgs. 17-19). The Investment Advisory Facility (IAF) was set up as a support mechanism for financial institutions to make investment decisions regarding EE/RET. It is estimated that the PDO target of avoiding one million tons of greenhouse gas emissions will be exceeded with the projects that have already been approved. PIR 2004 reports that 14 investment evaluations had been supported at the time of its writing, which also exceeded the target of 10. The TE reports (pg. 20) that only one of these (heating cogeneration in Slovak Republic) had failed to materialize at the time of its writing. The targets of 50% of these projects securing investment commitment and 30% going on to implementation were also met. However, the total financing leveraged from the financial institutions at USD 91.5 million was lower than the target of USD 100 million.

Additionally, 150 officers of financial institutions were trained which also met the target but there is no information provided about the quality of training or its impact on investment decisions. The RETScreen software was revised to include a greenhouse gas model and had 22,000 registered users worldwide. There are no targets provided for the numbers of training seminars and fact sheets for information dissemination or usage of RETScreen in any of the project documents so it is difficult to comment on how the project fared on these activities.

The project enjoyed a few small successes but also faced several challenges. The IAF successfully convinced UBS Asset Management (a private financial institution) to launch the Alternative Climate Fund to invest in EE/RET projects, but the fund failed to raise adequate external capital to start up. The revised RETScreen seems to have been successful as it attracted the attention of other multi-laterals such as the World Bank, who wanted it to be compliant with their agreements so it could be used for appraising and understanding a large variety of projects. On the other hand, challenges included allocation of inadequate funds to the training component and the hiring of consultants. Training sessions were downsized from three-day seminars to one-day sessions, and an exclusive curriculum could not be developed. The TE concludes that the training did not have a significant impact on the number of IAF proposals approved, but does not substantiate the claim with any evidence (TE pgs. 17-19).

According to the characteristics of the pre-appraisal process noted in the TE, it seems possible that it might have been fairly risk averse and rejected projects with high perceived risks. The process had very general questions that presumably did not assess the projects in-depth and provided a binary assessment. If indeed the pre-appraisal process was too risk averse, it could mean that there is a possibility that more projects could have been sent for the full appraisal and more might have received approval for investment than actually were.

The IAF did not focus entirely on developing countries. Approximately, only half the IAF support to investment projects was extended to financial institutions in developing countries. There could be both positive and negative effects of this approach. Since there are more resources available for allocation to EE/RET investments in developed countries than in developing countries (TE pg.19), including developed countries in the project led to funneling more funds into EE/RET globally. However, it is possible that projects in developing countries might seem more risky and thus there might be a tendency to evaluate fewer of those when they might need as much or possibly even more support from the IAF.

4.3 Efficiency	Rating: Moderately Satisfactory
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The TE rates project timeliness as 3 ("Good"), which roughly corresponds to the "Moderately Satisfactory" level on the rating scale used in this TER. This TER concurs with the TE's rating.

The project had moderate shortcomings in timeliness as it was extended three times from an original expected completion date of July 2000 to December 2002. The TE (pg. 9) notes that the reason for these extensions was that project activities took longer than had been anticipated, which was largely because it took a long time for the IAF to receive eligible energy efficient or renewable energy technologies (EE/RET) projects for appraisal. It also points (pg. 23) to the changes that were made to the activities and the addition of the midterm review to the project as factors contributing to the extensions. The final extension was made to ensure that the training component was fully integrated into other ongoing projects (SANet, GNESD and AREED) and to provide sufficient time for the administrative closure of the project. While some of the factors contributing to these extensions such as project changes could not have been foreseen, it does seem that the project timeline could have been planned better and the duration for project preparation and implementation could have been more realistic.

However, the actual processing time of IAF services to the borrowers was fairly quick. The TE (pg. 16) reports that the processing time ranged from eleven to fifteen days from the receipt of the project proposal to the time a consultant was contracted. The TE notes that the UNEP Collaborating Center on Energy and Environment (UCCEE) coordinated and provided technical backstopping efficiently during the appraisal process.

4.4 Sustainability

Rating: Moderately Unlikely

The TE rates overall sustainability as 'Very Good' which would correspond to the GEF rating of 'Moderately Likely'. However, this TER gives a lower rating to project sustainability, as financial sustainability of the project is quite low.

Financial sustainability (MU) – The pure grant mechanism depends on a regular supply of grant funds to continue in the future, which makes this a less financially sustainable project than one with a contingent grant mechanism or one that generates its own income. However, the PIR suggests that the project will not be needed in the future once evaluating energy efficient or renewable energy technology (EE/RET) projects has entered the mainstream and financial institutions will not need support in carrying out appraisals for them. However, it is unclear how long it will take for EE/RET appraisals to be mainstreamed; and there are no financial sustainability measures in place until then. TE mentions (pg. 15) that replenishment of funds to the project was discussed between UNEP Division of Global Environment Facility Coordination (DGEF) and GEF, but appropriate funds were not available.

Socio-political sustainability (ML) — The TE does not provide specific information on socio-political sustainability but the PIR offers some assessment of risks. It is unclear whether this is a pre-implementation assessment or project closure assessment. It assesses that the risk of low participation in the project by banks and the risk that these services are not persuasive to loan officers is moderate. It claims that there is a high risk that financial institutions may not be interested in investing the EE/RET sector, which can be a big challenge for the project. But it does note that the risk that banks do not use the information presented to them or that EE/RET will not perform as expected is small.

Institutional sustainability (L) — Although the project ended in 2002, the IAF and the training component were integrated into other UNEP projects such as Sustainable Alternatives Network (SANet), Rural Energy Enterprise Development (REED), Global Network on Energy for Sustainable Development (GNESD). Various workshops and sessions related to IAF training had already been carried out under these projects at the time of writing of the TE. As for the sustainability of the individual EE/RET projects that have already been provided appraisals, there are very different institutional environments to assess for each country project that could affect project sustainability. For instance, the wind-farm project in Argentina could not get an investment decision due to the national macro-economic conditions. The TE or the PIR do not provide this information for individual projects.

Environmental sustainability (**U/A**) – The TE does not provide any information on environmental risks and 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?

At endorsement, UNEP committed to in-kind co-financing amounting to USD 180,000, which was 19% of the total project budget. The PB (pg. 6) also mentions in-kind contribution from private financial institutions that were expected to be equivalent to UNEP's USD 180,000. The TE does not mention whether or not this private-sector funding materialized. However, UNEP's in-kind contribution increased to USD 233,660 by the end of the project in December 2002, to cover the costs of extending the project, while GEF financing remained the same. In-kind contributions consisted of project management, coordination of the energy program, project administration and administration of contracts, the evaluation committee, office rent and website support. From May 2001 to December 2002 the project manager was funded by the UNEP Environment Fund, which also amounted as in-kind contribution. Since all the operational support for the project was covered by these in-kind contributions from UNEP, it can be concluded that these were essential in the achievement of project objectives. Similarly, the increased co-financing from UNEP was important for the attainment of project objectives, especially since most of the IAF grants were disbursed in the later part of the project. PIR 2004 notes that the co-financing from the private banks being supported amounted to USD 251,000. Although the PIR does not state this explicitly, it seems that this was the result of the cost sharing arrangement that was encouraged between the IAF and the banks (TE pg. 15).

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?

As mentioned in the 'Efficiency' section, there were three extensions of the project duration from the initial expected completion date of July 2000 to December 2002. This was mainly because project activities took longer than had been anticipated as it took a long time for the IAF to receive eligible

EE/RET projects for appraisal. Changes were made to project activities and a midterm review was added to the project, which also contributed to the extensions. The extensions ensured that the project met its goals as the majority of IAF grants were disbursed in the last eighteen months of the project (TE pgs. 9, 23).

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:

As country governments were neither implementing nor executing the project, the level and importance of country ownership is not applicable here.

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 does not provide a rating for M&E design. This TER rates M&E design to be 'Unsatisfactory' as it had some major shortcomings. The PB includes a log frame matrix with indicators and targets, but it does not have provisions for collecting baseline data. It states that the intention was to continuously monitor impact and disseminate the results of the project widely. Global environment benefits were to be estimated through the appraisals conducted. The TE reports that there were provisions for documenting the impact at higher levels (tons of emissions avoided), but none for follow-up beyond project progress reports and project implementation reviews to document the impact at lower levels (effect of training on officers and decision-making). The indicators provided in the PB did not facilitate the measurement of institutional impact in the financing institutions. However, some of the indicators were SMART whereas others were vague. For instance, both, the number of tons of greenhouse gas emissions avoided and the number of loan officers trained and demonstrating improved skills as a result are specific, measurable, realistic and timely. Dissemination of "high quality and useful information" is a vague indicator. TE (pg. 34) reports that the M&E budget was USD 40,000 which provided for an indepth terminal evaluation, but the funds were instead used for a midterm review that was only added to the project at a later stage. Thus, an in-depth terminal evaluation could not be carried out.

6.2 M&E Implementation	Rating: Moderately Unsatisfactory
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M&E implementation had several shortcomings. The TE (pg. 18) reports half-yearly progress reports and project implementation reviews were completed. A midterm review was carried out in 2000-2001 that

provided guidance in improving the IAF approach. However, this midterm review had not been budgeted for in the M&E budget but was charged to it. While the mid-term review was an important addition, since it was not planned earlier, it reduced the resources available for a complete terminal evaluation. The TE was carried out only as a desk evaluation because there was no room left for it in the budget. While the RETScreen model was revised and used to monitor loan provision to determine the impact of the project on the reduction of greenhouse gas emissions, there was no monitoring or systematic data collection to evaluate the impact of the training provided to the bank officials or the institutional impact of The Investment Advisory Facility. This was partly because no indicators had been included in the project document to measure the impact of training or the change in levels of awareness about EE/RET investments. It seems that the progress in the development and use of the RETScreen model has been used as an indicator for Objective 2 of the project.

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 Satisfactory
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While the TE does not provide an assessment of the quality of implementation, this TER assesses a rating of 'Moderately Satisfactory', based on evidence throughout the TE report and the PIR. The only relevant rating for project implementation in the TE is for execution of the project within the budget, which is rated as 2 ("Very Good"). However, this does not cover all the aspects of project implementation as covered in this TER.

Project implementation faced some problems, most of which were resolved by the end of the project. The IAF received very few proposals when it was first set up and thus modified its objective to "direct" instead of "redirect" investment to EE/RET, as discussed in the 'Changes to Objectives' section. The contingent grant mechanism was also modified to a regular grant so that the grant amount did not have to be repaid. The TE (pg. 20) and PIR report that these changes were made to respond to financial institutions' needs. As the executing agencies were divisions of UNEP, it seems that UNEP provided good technical support and oversight. The PB includes a detailed plan for project costs and an implementation timeline. Additionally, the project design seems satisfactory, as it was relevant and provided a good framework for project activities. However, as mentioned in the 'Quality of M&E Design at Entry' there were problems with M&E indicators and baseline data.

7.2 Quality of Project Execution

Rating: Satisfactory

The TE does not provide a rating for the quality of project execution. This TER gives this aspect a 'Satisfactory' rating as both executing agencies provided smooth administrative support for appraisals and ensured coordination with the implementing agency.

Since the executing agencies - UNEP Division of Technology, Industry (DTIE) and Economics and the United Nations Environment Programme Collaborating Center on Energy and Environment (UCCEE) — were both divisions of the implementing agency, there seems to have been a blurring of responsibilities between them. The executing agencies were responsive to the additional requests made by clients such as that from the Government of Vanuatu (TE pg. 19). They provided in-kind support to the Government of Vanuatu for a third-party review of their appraisal as requested, and additional support to conduct negotiations with the developer. They worked closely and provided quick and smooth administrative support for appraisals, creating contracts for consultants and disbursement of funds. There was smooth communication between the UNEP focal point and the financial institutions, which resulted in low processing times for project applications (TE pg. 20). The PIR reports that the quality of IAF-sponsored consultants' work was generally satisfactory and the feedback from clients on the substantive support provided and the administrative procedures was generally highly positive.

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.

Calculations based on the RETScreen model predict that the EE/RET projects that were financed because of appraisals from the IAF will help in avoiding more than 1 million tons of carbon emissions, which exceeds the target for this project (TE and PIR 2004). However, none of the approved projects had started generating these reductions at the time the TE was written, thus the mitigation in emissions had not been realized and the actual environmental impact is not known.

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.

The TE does not provide any information on the socioeconomic impacts of the project.

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

The project trained 120 officers in financial institutions on conducting alternative appraisals of EE/RET projects and to generate awareness of the IAF's services. The TE also finds some evidence that some of these officers had engaged in new EE/RET projects after their training, indicating that there might have been a positive impact on the capacity of these officers to evaluate EE/RET proposals (TE pgs. 18, 24).

b) Governance

Although the TE concludes that it is difficult to establish the precise contribution of the IAF to investment decisions (as there are multiple factors affecting the approval and implementation of investment projects), loan officers and developers that were contacted for the TE regarded the IAF's services as critical for the projects that it evaluated (TE pgs. 24, 25). The revised RETScreen model produced as part of the project is an appraisal tool that can be used for feasibility studies, lender due diligence, market studies and policy analysis along with project management (TE pg. 12).

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 in the TE.

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 IAF and the training component of the project have been integrated into various UNEP projects such as SANet, GNESD and REED. In fact, workshops and training sessions based on the project had already been carried out at REED when the TE was written and SANet was already providing support similar to that provided by IAF to three investment projects (TE pg. 25).

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 (pgs. 21-23) and PIR 2004 list the following lessons:

- 1. Changes in the project should be reflected in the revised project documents. This would allow for setting up appropriate impact indicators and monitoring systems, and for refining the project design. A good monitoring system, timely reporting and close communication between the project manager and the various coordinating agencies involved is necessary to maintain accountability and transparency in the project. As this project did not report the changes in its revised project documents, it did not have adequate impact indicators and monitoring tools to measure impact at all levels.
- 2. Different financial institutions require different types of support and training tools need to be customized to address information barriers effectively. In the project's experience, some institutions want to start by affecting their policy, some want to start off with actually evaluating investments, and others want to create sustainable energy funds. The project had to customize its services to meet the needs of the financial institutions. It was also necessary to know the target audience (senior management, investment committee, etc.) within the institution to find the best way to support it.
- 3. Building credibility within the private sector is an important part of such support/ advisory services, which can be done by paying attention to things that matter to the private institutions involved. The IAF received few project proposals until it was able to demonstrate a portfolio of credible financial institutions using IAF for their EE/RET. Rapid and effective administrative procedures that operate within the institutions' short evaluation cycles should be set up. The IAF found that bankers have more confidence in the appraisals carried out by other bankers as investment decisions made by private financial institutions are based primarily on financial risks and returns and not on environment policy considerations. Thus, in this case, letting the financial institution define the terms of reference for the consultant was important to ensure that they trusted consultant and the report.
- 4. The ownership of project appraisals should not be restricted to one financial institution as there are often multiple prospective financiers for a good project. Sometimes one institution might consider a proposal to be interesting while another might not.

5. Success indicators need to be balanced carefully. Focusing on only one of the components can lead to limited achievement of the objectives. For instance, focusing purely on getting the highest number of positive investment decisions would lead to supporting relatively "easy" deals which might have been approved even without project support.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE (pgs. 26-27) lists the following recommendations:

- 1. The resources put into project design should be increased at UNEP to avoid too many changes during implementation and to optimize project outputs and results. Part of this design exercise should involve revisiting relevant UNEP guidelines and formalizing procedures for changes in the project document for UNEP/GEF projects. This will ensure that both the financing and implementing agency are updated. More formalized procedures will also improve project monitoring and evaluation and ensure better communication between the project manager and the Evaluation and Oversight Unit.
- 2. If there is to be a midterm review, it should be discussed with the Evaluation and Oversight Unit and the financial management officer to ensure that appropriate budget allocations are made for both the terminal evaluation and the midterm review. Midterm reviews cannot replace obligatory terminal evaluations. For this project, the costs of the midterm review were covered by the evaluation budget, which meant that there were no funds left for an in-depth terminal evaluation. Additionally, adequate indicators and tools to measure impact at both higher and lower levels should be developed during the preparation of the project document.
- 3. It would be useful to establish formalized networks within the financial sector that incorporate finance and environment policy. This would include technical expertise on renewable energy from UNEP and expertise on regional energy financing from IFC or regional development banks. Important lessons are to be learned from the establishment of equity (clean energy) investment funds in the Asian region where banking and financing networks have successfully incorporated clean energy production.
- 4. An overall strategy should be developed to strengthen the training component. Targeting internal training tools and programs at banks that have already created an enabling environment for energy efficient and renewable energy technologies will be more effective in achieving results in the short and long term. There is also a need to address developers in developing countries and their capacity to integrate environmental concerns so that they can at least prepare simple environmental feasibility studies or know where to seek information.
- 5. In the absence of a clear environment policy, rural development policy can be an effective entry point for introducing investments in EE/RET. Many financial institutions may not have an environment policy but might have a rural development policy instead. Sustainable development and environmental concerns can be attached to rural development investments, through which EE/RET can be introduced into the banks' investment portfolios.

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 EO 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 gives a good overview of the project outcomes and achievement of objectives but provides only sparse information on the various impacts of the project.	MS
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report attempts to substantiate its ratings and provide evidence but is unable to provide in-depth analysis and/or evidence possibly because it is only a desk evaluation.	MS
To what extent does the report properly assess project sustainability and/or project exit strategy?	The TE does not assess environmental sustainability at all and unclearly assesses socio-political sustainability.	MU
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned are supported by evidence from different aspects of the project and useful recommendations are provided.	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report includes total project budget and co-financing but does not give detailed project costs. The co-financing amount from the private sector has not been stated clearly.	MS
Assess the quality of the report's evaluation of project M&E systems:	The report provides a good overview of the M&E system but fails to mention some details such as indicators used, quality of reports and training for M&E.	S
Overall TE Rating		MS

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