GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	
GEF Project ID:	**264**		at endorsement (Million US$)	at completion (Million US$)
IA/EA Project ID:	**441**	**GEF financing:**	4.61	
Project Name:	Supply-Side Efficiency and Energy Conservation and Planning	IA/EA own:		
Country:	**SYRIA**	Government		
		Other*:		
		Total Cofinancing	25.79	
Operational Program:	Climate Change OP 5: Removing barriers to energy conservation and efficiency.	**Total Project Cost:**	30.40	
IA	**UNDP**	Dates		
Partners involved:	Ministry of Electricity, OPEC	Work Program date		10/01/96
		CEO Endorsement		08/25/98
		Effectiveness/ Prodoc Signature (i.e. date project began)		**11/11/1998**
		Closing Date	Proposed: **October 2003**	Actual: **October 2006**
Prepared by: Soledad	Reviewed by: Anna	Duration between effectiveness date and original closing: **48 months**	Duration between effectiveness date and actual closing: **84 months**	Difference between original and actual closing: **36 months**
Author of TE: Klinckenberg Consultants		TE completion date: **December 2006**	TE submission date to GEF OE: **July 2007**	Difference between TE completion and submission date: **7 months**

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

2. SUMMARY OF PROJECT RATINGS

Please refer to document "GEF Office of Evaluation Guidelines for the verification and review of terminal evaluations" for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. IEG)	GEF EO
2.1 Project outcomes	**S**	**MU**	N/A	**U**
2.2 Project sustainability	**N/A**	**MU**	N/A	**MU**
2.3 Monitoring and evaluation	**N/A**	**MS**	N/A	**MU**
2.4 Quality of the evaluation report	**N/A**	**N/A**	N/A	**S**

Should this terminal evaluation report be considered a good practice? Why?
Yes**.** The report covers all requested information in the GEF-EO guidelines, providing a complete analysis. Overall, it is clearly written and well organized, findings are substantiated, lessons learned are reported, and consistent recommendations are provided. The exception is the section on sustainability which does not present a sound analysis or discussion.

Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.? Yes
The project had intended, originally, to target a variety of sectors in the Syrian society, but in the end has mainly focused on the Ministry of Electricity (the executing agency) itself and related units. Some actions were taken towards other parties, but these lacked a coherent, integrated approach. Monitoring of the project was conducted, but follow-up to this was

limited, even though quite serious issues emerged in the various stages of the project. According to the TE, financial management was disastrous, and there is no record available at all for more than half of the GEF budget spending, and incomplete records for the rest of it. In this respect, the evaluator recommends that UNDP takes immediate corrective action on this.

According to the TE, the project was implemented by UNDP Syria, and executed by the Syrian Ministry of Electricity. Some initial problems were observed with recruitment of the project staff and project director by Ministry of electricity and UNDP. Contrary to standard practice, the project director was recruited via a closed procedure from within the Ministry of Electricity and not by an open call and selection procedure as is common for these positions. Although it is recognized that a project director coming from within the executing agency will be instrumental in maintaining a good interaction of the project with the usual operations of the agent, it should also be noted that it is usually considered a benefit if the project director is independent from the government.

Also, according to the TE, the selection of international consultants has been done according standard UNDP procedures. Serious problems have occurred with the performance of the consultant initially selected for the demand side work. The selected company changed the initially proposed international experts, the newly proposed experts did not perform well, but the contract has not been terminated nor were any actions taken by UNDP or the project execution body to change the contract conditions. The unsatisfactory performance of the consultant was declared as one of the main reasons for the delay in some project activities.

3. PROJECT OBJECTIVES AND ACTUAL OUTCOMES

3.1 Project Objectives

What were the Global Environmental Objectives of the project? Were there any changes during implementation?
According to the project document, the global environmental objective of this project is to assist the Syrian Arab Republic in its efforts to reduce the growth of GHG emissions that result from electric power generation and the inefficient consumption of carbon based fuels. It is expected that by the year 2008, the objectives will contribute to reduce energy consumption by a total of 1.83 percent compared to the current levels and to reduce CO2 emissions by 765.5 Ton.

According to the TE, there were no changes in the global environmental objectives during project implementation.
Although, some recommendations from the mid term evaluation were quite substantial, like redirecting one of the project objectives, according to the TE, no record exists of this decision being taken.

What were the Development Objectives of the project? Were there any changes during implementation?
According to the project document, the development objectives were :

a. To remove perceived risks associated with the installation and operation of efficiency and maintenance management systems in power generation facilities by demonstrating the effectiveness of technology and training plant staff in its operation and use.
b. To remove barriers to energy efficiency in industrial and commercial facilities providing highly skilled energy audit and engineering services, project financing, and training and information to plant managers and operators.

According to the TE, there were no changes to the development objectives during project implementation.

3.2 Outcomes and Impacts

What major project outcomes and impacts are described in the TE?
According to the TE the objectives of the project have been achieved only for smaller parts of the project, and "there is not a single objective that has delivered as planned". To a large extent, this was attributed to the poor design of the project, however, a lack of focus and prioritization in the implementation of the project, as well as substantial delays in the provision of inputs have also had a substantial impact on the low realized outcome of the project.
According to the TE, the sustainable impact of the project is likely to be limited to the following matters:

- Condition monitoring and efficiency monitoring systems will be implemented at new power stations in the country;
- Power factor corrections have been applied widely during the project, and teams have been set-up in all regional utilities to continue this work;
- The creation of the National Energy Research Centre.

4. GEF EVALUATION OFFICE ASSESSMENT

4.1.1 Outcomes (use a six point scale 6= HS to 1 = HU)

A Relevance **Rating: S**

The results achieved are relevant to both the country priorities and the GEF OP 5 and OP7, namely removal of barriers to energy efficiency and reducing GHG emissions.

B Effectiveness **Rating: U**

According to the TE, the objectives of the project have been achieved only for smaller parts of the project, and there is not a single objective that has delivered as planned. To a large part, this must be attributed to the poor design of the project, however, a lack of focus and prioritization in the implementation of the project, as well as substantial delays in the provision of inputs and the execution of the project, have also had a substantial impact on the low realized outcome of the project.

C Efficiency (cost-effectiveness) **Rating: UA**

The TE states that the cost effectiveness of the project could not be evaluated due to the non availability of information on the actual spending per objective and output.
There was a two year delay from the government to start operations in 2 units of the power station, which might affect the overall expected outcome of the project at this stage/ The delay in completion could have reduced the project cost-

effectiveness. In addition, even though most of the activities planned were carried out, the achieved outcomes were below expectations.

4.1.2 Impacts

The impact of the project is very much reduced to a "small circle" of institutions. According to the TE, "The impact of the project outside of the Ministry of Electricity and its associated agencies is quite limited". In addition, many planned outputs of the project have never been realized. Many activities on the demand side have been ineffective or have not been carried through till the end and it is expected that there will be a limited sustainable impact.

4.2 Likelihood of sustainability. Using the following sustainability criteria, include an assessment of **risks** to sustainability of project outcomes and impacts based on the information presented in the TE. Use a four point scale (4= no or negligible risk to 1= High risk)

A Financial resources	**Rating: MU**
According to the TE, the sustainability of the overall objectives of the project is questionable. Because of the complexity of the project, the poor results and multiple factors leading to that, it is difficult to assess the financial sustainability of the project. However, one of the results of the project, the National Energy Research Centre, is well staffed and according to the TE it will be provided with more resources in the near future.	
B Socio political	**Rating: MU**
According to the TE, the project has received support from the Ministry of Electricity, which has also been the sole beneficiary. In addition, according to the PIMS, there is substantial risk that people and businesses in Syria may not commit to an energy conservation program.	
C Institutional framework and governance	**Rating: ML**
The project established arrangements with relevant organizations to secure a continued impact via the National Energy Research Center. Arrangements with other organizations have not been established, however. The National Energy Research Centre was created, largely to follow-up on the work of the project. In addition, according to the PMIS, the project findings and results were incorporated into the national and Ministry of electricity development Plans.	
D Environmental	**Rating: L**
The project does not face environmental risks.	

4.3 Catalytic role

a. Production of a public good
The project created the National Energy Research Center to provide advise on energy saving and has built institutional capacities of the center.
b. Demonstration
According to the TE, during project implementation, experiences and lessons learnt have been exchanged with similar ongoing projects in the region (Jordan, Egypt). This has been beneficial to this project, and may have benefited the other projects as well. No formal exchange of experiences is foreseen after this project, although that would certainly be recommended. In addition, according to the TE, Condition monitoring and efficiency monitoring systems will be implemented at new power stations in the country. This signifies an important replication of that part of the project, at Syria's own initiative and expense.
c. Replication
d. Scaling up

4.4 Assessment of the project's monitoring and evaluation system based on the information in the TE

A. M&E design at Entry	**Rating (six point scale):**	**MU**
According to the TE, there were no indicators present in the design. Some were later introduced during the mid-term review, but only on activity level.		
B. M&E plan Implementation	**Rating (six point scale):**	**MU**
The project experienced various challenges in implementation of the M&E plan. To a large extent this stemmed from the wide scope of the project design and from successive delays. The inability to execute all activities included in the project design was clear during project implementation, and various operational measures were taken to maximize the work on these various activities. The TE mentions an M&E plan based on reports, meetings and a mid term evaluation. The latter gave extensive recommendations on project management and specific project outputs. However, not all of the recommendations were implemented afterwards and it is unclear why it was decided to implement only a part of them. Regularly reports and financial reports were presented by the project director to the UNDP, in Syrian language (and the evaluators could not review). In addition, the TE notes that there was no evidence of tracking the government's co financing in the project. The Mid term evaluation that took place provided extensive recommendations on project management and specific project outputs. The mid-term evaluation did not comment on the overall scope of the project and neither on reasons for the substantial delays that were present at that time already, because, according to the TE, of the use of an evaluation format that focused on details at the activity level, as was then required by the GEF. For example, there was no discussion on the reasons for the non-delivery of the project on approx three-quarters of its planned outputs after the planned four-year		

implementation period, however, is difficult to understand.

C.1 Was sufficient funding provided for M&E in the budget included in the project document? U/A
The project document did not present a disaggregated budget for M&E.

C.2 Was sufficient and timely funding provided for M&E during project implementation? UA The only table with reference to M&E as an item is a yearly disbursement table for the project.

C.3 Can the project M&E system be considered a good practice? No. Although the project established standard M&E mechanisms, such as reports, PIR, APR, tri partite reviews, these were not as regularly followed up, according to the TE.

4.5 Lessons and Recommendations

Project lessons and recommendations as described in the TE

What lessons mentioned in the TE that can be considered a good practice or approaches to avoid and could have application for other GEF projects?

- **The capacities built in a project can be secured for the country by providing a smooth follow-up of the project's work in a state organization**. With the implementation of project activities, important human capacities have been created within the various structures of the MoE. The project engineers had no experience with energy efficiency at the project start but gained considerable knowledge on it during their work on the different project outputs. The government kept this capacity within the Ministry of Electricity by the creation of a National Energy Research Centre (NERC), which can continue to work on project activities and make them sustainable.
- **An in depth analysis of the country, on all relevant aspects is needed for a proper design of a project**. This analysis should not only focus on the objectives that the project wants to achieve, but even more so on what is going on outside of the project's proposed activities and how this might affect the project's effectiveness. In this project, such an analysis should have included an analysis of the national electricity system, preventing that the energy efficiency management systems being put in place at a power plant might not come to fruition because the national electricity generation system doesn't allow for the optimization of a plant on energy efficiency any more, due to expected power shortages.
- **Energy price subsidies need to be taken into account into the project design and implementation**. Energy prices in Syria and many other countries are heavily subsidized or otherwise not reflecting real market prices. In this project, the artificially low end-user prices have been a barrier for investments in energy efficiency, as investments now have low energy cost savings, and the cost effectiveness for the end-user is much reduced.
- **The follow-up of a project has to be arranged well before its completion, to make sure that activities implemented during the project are properly continued once the project stops**. In this case, provisions were (and are) needed for the monitoring and evaluation of the performance of the power plant where new systems have been installed. Specifically for this project also, provisions were needed to monitor the rehabilitation of the Banias power plant, which was in the (co-financed part of the) project but was not delivered during the implementation period. Once the project is completed, there is no structure to establish such mechanisms. It is, therefore, important to prepare for the end of a project well before its end date.

List (or if detailed summarize) the recommendations given in the terminal evaluation

The TE presents recommendations in three main areas:

(1) Corrective actions for the design, implementation, monitoring and evaluation of the project
- A mechanism is put in place to monitor the progress of the rehabilitation of the Banias power plant and the installation.
- The various demand-side activities are integrated and further developed in a National energy efficiency program (targeting both supply and demand side energy efficiency).

(2) Actions to follow up or reinforce initial benefits from the project
- Activities with industrial sector on energy auditing should e continued and expanded.
- A Demand Side Management program should be developed covering on low-cost or no-cost measures for the residential and commercial sectors.

Specifically for the national energy system (outside of the project), it is advised that Syria:
- Focuses on peak power production capacity;
- Increases the hydropower capacity by installing a pumping system;
- Speeds-up the commissioning on new plants and plant rehabilitations;
- Tracks out-of-optimal generation in general dispatch reports;
- Vigorously implements simple DSM measures (good housekeeping, etc)

(3) Proposals for future directions underlining main objectives;
- Introduce 'quick savings' programs for the residential, commercial and industrial sectors, to introduce low- or no-cost energy saving measures in these sectors.
- Introduce energy standards and labels for other major appliances, standard industrial equipment and lamps, to gradually transform the market for these products towards higher energy efficiency.
- Financial mechanisms can be introduced to support investments in energy efficient equipment, especially for public industries that often lack the budgets to invest in better equipment.
- Create a national data base with information on the energy consumption by sectors, implemented energy efficiency projects and results.

A recommendation not directly linked to the follow-up of this project, but to new projects in general, is to establish multi-annual financial overview of originally planned, currently planned budgets and actual expenditure per objective and

output. Such an overview can be of great value for the management and supervision of a project, and for tracking results versus inputs.

4.6 Quality of the evaluation report Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to document "GEF Office of Evaluation Guidelines for the verification and review of terminal evaluations" for further definitions of the ratings.

4.6.1 Comments on the summary of project ratings and terminal evaluation findings from other sources such as GEF EO field visits, etc.
None

4.6.2 Quality of terminal evaluation report	**Ratings**
A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? Although the report contains assessments, they are not presented very clearly. Rather, they are in pieces all throughout the text.	4
B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated?	5
C. Does the report properly assess project sustainability and /or a project exit strategy?	5
D. Are the lessons learned supported by the evidence presented and are they comprehensive?	5
E. Does the report include the actual project costs (total and per activity) and actual co-financing used?	5
F. Does the report present an assessment of project M&E systems?	5

4.6.3 Assessment of processes affected attainment of project outcomes and sustainability.

Co-financing and Project Outcomes & Sustainability.
According to the TE, the co-financing from the Syrian government for objectives 3 and 4 (supply side) which was included in the project document was 38 m USD. In the draft PIR 2006 the amount of co-financing reported is 62 m USD. There are no financial records provided by the Ministry of Electricity or UNDP to support the reported amount of government co financing. It is evident that the co-financing delivered during the project is well below what is reported in the PIRs, even if it might add up to the reported sum in the future. Unfortunately, very limited information is available about spending per objective, and no information on spending per output, implying that it is very difficult to make cost-effectiveness assessments (during the evaluation but also during the project).
Delays and Project Outcomes & Sustainability.
According to the TE, a UNDP mid-term evaluation report (2002) recommended one year extension of the project due to the fact that during the time of the evaluation there was considerable delay in achieving the outputs for both demand and supply side components as well as at the time of the evaluation the project funds were substantially under spent. In addition, the Annual Report 2003 proposed an additional one year extension and the project end date was extended to October 2005. The overall project disbursement has been delayed. This is due to the overall delay in the project implementation. From the CDRs 2004 and 2005 it can be seen that a major share of the project cost was disbursed in the last two project years – USD 555,340 in 2004 and USD 903,230 in 2005. The cumulative actual disbursement reported in the last draft PIR 2006 is USD 4,042,118. The project has spent substantially more on equipment than planned (+50%), and substantially less on national and international consultancy (-50%). Lacking further information, no assessment of this can be made. According to the TE, also, it is evident that the co-financing delivered during the project is well below what is reported in the PIRs, even if it might add up to the reported sum in the future. In addition, by the time of the evaluation very little work has been done under the objectives related to the Banias Power Station Unit mainly due to delay in their rehabilitation. Though the systems are in operation for units 3 &4, the two years delay, from the government side, in rehabilitation of unit 1 &2 might affect the overall expected outcome of the project at this stage, on the long term when the rehabilitation is finalized the expected outcome will be achieved. Evaluators observation are that the work envisaged under these objectives is well within the capabilities of the project staff and can be highly effective but requires that a determined and well-managed program is put in place and that the necessary preconditions of rehabilitation and firing conversion are soon completed.

4.7 Is a technical assessment of the project impacts described in the TE recommended? Please place an "X" in the appropriate box and explain below.	**Yes:**	**No:** **X**
Explain:		

4.8 Sources of information for the preparation of the TE review in addition to the TE (if any)

Last PIMS (2006)
Project proposal for review: Syria, Supply-side efficiency and energy conservation and planning (from the PMIS)