

### GEFM&E Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	10/04/05
GEF ID:	934		<u>at endorsement</u> (Million US\$)	<u>at completion</u> (Million US\$)
Project Name:	Climate Change Mitigation in Ukraine Through Energy Efficiency in Municipal District Heating (Pilot Project in Rivne) Stage 1	GEF financing:	1.840000	Not provided
Country:	Ukraine	Co-financing:	0.315000	Not Provided
Operational Program:	OP 5	Total Project Cost:	\$2.155000	\$0,00
IA	UNDP	<u>Dates</u>		
Partners involved:	State Committee of Ukraine for Energy Conservation (Government).	Work Program date		02/12/2001
		CEO Endorsement		06/06/2002
		Effectiveness/ Prodoc Signature (i.e. date project began)		June 2002
		Closing Date	Proposed: February 2004	Actual: December 2004
Prepared by: Neeraj Kumar Negi	Reviewed by: Siv Tokle	Duration between effectiveness date and original closing: 21 months	Duration between effectiveness date and actual closing: 31 months	Difference between original and actual closing: 10 months
Author of TE:	L.P. Lavoie, EE Consultant and ESCO Manager with Econoler International of Canada.	TE completion date:  December 2004	TE submission date to GEF OME:  August 2005	Difference between TE completion and submission date:  Eight months

### 2. SUMMARY OF PROJECT RATINGS

GEFME Ratings for project impacts (if applicable), outcomes, project monitoring and evaluation, and quality of the terminal evaluation: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU), not applicable (N/A) and unable to assess (U/A). GEFME Ratings for the project sustainability: Highly likely (HL), likely (L), moderately likely (ML), moderately unlikely (MU), unlikely (U), highly unlikely (HU), not applicable (N/A), and unable to assess (U/A). Please refer to document "Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems" for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. OED)	GEFME
2.1 Project impacts	<b>N/A</b>	HS		Too early to assess
2.2 Project outcomes	<b>N/A</b>	HS		S
2.3 Project	<b>N/A</b>	N/A		Unable to assess

sustainability				
2.4 Monitoring and evaluation	N/A	N/A		Unable to assess
2.5 Quality of the evaluation report	N/A	N/A		MS

**Should this terminal evaluation report be considered a good practice? Why?**

No.

Although exposition on project's sustainability and the level of achievement of the project outcomes is satisfactory, the TE has not provided any information on the cost breakups of the project activities, and has not assessed the M&E systems of the project. Further, despite the report being internally consistent, not all the statements made and the ratings given have been substantiated. For example the TE gives the project a rating of MS on GHG Emission's reduction. However, nowhere in the TE the quantum of GHG reduction has been discussed. Therefore, the terminal evaluation report should not be considered a good practice.

**3. PROJECT OBJECTIVES, EXPECTED AND ACTUAL OUTCOMES**

**3.1 Project Objectives**

- **What are the Global Environmental Objectives? Any changes during implementation?**

The Log frame in the project proposal document lists the following as the overall goal of the project:

"Mitigate existing barriers to implementation of integrated approach to supply and demand side energy efficiency improvements to district heating systems in Ukraine, thereby reducing associated greenhouse gas emissions."

The TE does not specify the objectives of the project (or stage 1 of the project) and neither does it inform us on whether there have been any changes in the global environmental objectives of the project. Further, since PIR's for the project are not available in the GEF database so the information on whether there was a change in the global environmental objectives during the project implementation can not be ascertained.

- **What are the Development Objectives? Any changes during implementation?**

The project proposal document lists the following as the development objectives of the project

The Objective is removing existing barriers to implementation of integrated approach to supply and demand side energy efficiency improvements to district heating systems in Ukraine, thereby reducing associated greenhouse gas emissions. The objective is to be reached by means of achieving the following immediate objectives:

**Immediate Objective 1:** Immediate Objective 1 is to strengthen local institutional capacity in the city of Rivne for identifying, preparing and implementing supply and demand side energy efficiency projects in the district heating system.

**Immediate Objective 2:** Immediate Objective 2 is to develop viable approaches to sustainable energy saving or efficiency through demonstration schemes in the pilot city for wider replication in Ukraine.

**3.2 Outcomes and Impacts**

- **What were the major project outcomes and impacts as described in the TE?**

The TE specifically indicates that the evaluation is for the activities completed in the First Stage of

the project. For evaluation of project performance, the TE refers to the annex 9 of the project proposal document. The evaluator has provided an assessment of all the performance on each individual deliverable.

**According to the TE, the following results have been achieved:**

#### ***Enabling Environment Conditions***

- Software for Billing/Accounting: The first version of the Billing/Accounting software should be available in February 2005.
- Energy Performance Contract: Model energy performance contracts (EPC) have already been developed and mechanisms have been tested through pilot measures. Four different types of EPCs have been developed in order to manage different EE projects or activities.
- Legislation/Regulation Adjustment and Stable Energy Budget Provision: Funds allocated by the municipal authority for energy subsidies have been adjusted. The government has approved a regulatory framework in line with the project's objectives allowing municipalities and other "budgeted" organizations to obtain from the Oblast or central government the same budget provision (subsidies) for their energy even if energy consumption is significantly reduced for next three years. If municipal authorities feel a need for extension, they can request a longer waiver from the government.
- Replication of Demonstration Project in Other Municipalities in Rivne Oblast: Two municipalities requested to do business with ESCO-Rivne. Four municipalities have submitted letter of interests to ESCO-Rivne.

#### ***Financial Institutional Conditions***

- Full-Scale Feasibility Study for Stage 2: ESCO-Rivne signed 16 EPCs, 3 of them are completed and the rest are at different stages of implementation; 3 of these are already started and 10 are pending a final investment decision. The current non-completed projects portfolio total approximately \$970 559. The projects not yet started represent 94% of the total of non-completed projects.
- Documents for Equity/Loans: ESCO-Rivne has obtained a line of credit for about 200k\$.
- Investment Promotion Materials ESCO: The promotion materials the evaluator saw seem adequate to attract the bankers.
- Commitments by local stakeholders sufficient to attract external investors: The Esco staff members have indicated desire to be part of the ESCO shareholders. A few external investors have also shown interest.
- Recruitment of Investors/Financiers: Recently (September-October 2004) about 100 letters were sent to potential partners/investors.
- ESCO Financial Agreements: The ESCO is now officially registered (Nov. 2003). The partners have invested the committed money: DHCKumounEnergia (49.9%) and MskSvitto (50.1%).
- Transfer Of Funds from UNDP to ESCO-Rivne: The successful transfer of the savings from the UNDP funds to the municipal ESCO was completed in October 2004.

#### ***Other Institutional Conditions***

- Pilot Municipal Company Established: The Municipal Authority of Rivne established ESCO-Rivne in November 2003.
- Operational procedures of the ESCO finalized: ESCO-Rivne requested technical support from TPF Consulting Group of Belgium to develop a set of standard ESCO procedures.
- Terms of Partnership with the City of Rivne: A MOU was signed in June 2004 confirming the municipal authority's involvement with ESCO-Rivne on a long-term basis and its commitment to an investment of about 500 000 (100k\$) in the next year (2005) for municipal EE projects.

- **Supply-Side and Demand-Side Measures:** These measures were put in place during Stage 1. In total 16 to 25% of the sub-projects included in the project's portfolio are targeted towards the Demand Side and all the others are targeted towards the Supply Side. The corresponding investment represents 5% for Demand Side and 95% for Supply Side projects.
- **Cost performance:** The cost performance of energy efficiency measures has been demonstrated. The average payback period is about 5.29 years for all projects conducted or signed on a cost-recovery basis.
- **GHG Emission Reduction:** Energy savings and emission reductions were verified independently by an external evaluator.
- **Technical Capacity Building:** ESCO hired TPF Consulting Group (Belgium) to design the Training Plan that should be implemented up to the end of Phase 1.

#### 4. GEF OFFICE OF M&E ASSESSMENT

##### 4.1 Outcomes and impacts

**Rating: S outcomes/ too early to assess impacts**

##### A Relevance

- **In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies? Explain**

Since it is a multi Phase and multi stage project, the project was expected to accomplish only some specific outputs and activities at this stage (the end of the First Tranche), and was not expected to be held accountable to accomplishment of the outcomes and objectives of the project. Given this limitation, the project activities and outputs accomplished so far seem to be consistent with the focal areas and operational program's strategies. Access to technical know-how, appropriate economic incentives to both producers and consumers, and functional market system is required to bring about energy efficient outcomes, which in turn lead to reduction in carbon emissions. Hence, the project's accomplishments so far are consistent with the focal area/operational program strategies.

**S**

##### B Effectiveness

- **Are the project outcomes as described in the TE commensurable with the expected outcomes (as described in the project document) and the problems the project was intended to address (i.e. original or modified project objectives)?**

According to the TE, most of the deliverables (mostly in terms of outputs and activities) that were to have been expected at the end of the First Stage of the First Phase have been accomplished. These accomplishments have been listed above (in section 3.2 of this TER). In instances where expected deliverables have not been accomplished, substantial progress has been made.

**S**

##### C Efficiency (cost-effectiveness)

- **Include an assessment of outcomes and impacts in relation to inputs, costs, and implementation times based on the following questions: Was the project cost – effective? How does the cost-time Vs. outcomes compare to other similar projects? Was the project implementation delayed due to any bureaucratic, administrative or political problems?**

Regarding the activities/deliverables that the project was supposed to accomplish during the 1<sup>st</sup> phase, it can be said that the first phase has been cost-effective because as mentioned above these have been achieved. However, an issue that may have affected the cost effectiveness of the project has to do with the delay in implementation of the project. The project (Stage 1) was to be of 21 month duration, however, it was implemented for 31 months – 10 months more than planned. The TE has not explained the reasons for this delay.

The TE report expresses its inability to assess the cost effectiveness of ESCO-Rivne as it is "too

early” and the available cost figures are mere estimates. The narrative also explains nearly all the interventions taken up so far by the ESCO (95%) have been on the supply side of the market – such interventions tend to be capital intensive – while those on the demand side have been lagging. The average pay back period for the contracts signed by ESCO-Rivne is about 5.3 year. It is 5 years for the demand side projects and 5.7 years for the supply side projects. The TE opines that in both these cases this is far too long a pay back period.

**MS**

**4.2 Likelihood of sustainability.** Using the following sustainability criteria, include an assessment of project sustainability based on the information presented in the TE.

<b>A Financial resources</b>	<b>Rating: Unable to access</b>
<p>The TE verifies that the recipient government has maintained its financial commitment to the project by investing in the ESCO through KomunEnergiia (49,1%) and the Rivne Municipal Authority (50.1%) – two government owned organizations. However, according to the TE, despite being capitalized the ESCO-Rivne does not have enough money to feed the EE portfolio. Although it has made efforts to establish credit lines with the commercial banks, so far it has been able to get a credit line of only US \$ 200,000, which is way below the requirements estimated to be between one to two million dollars. Two other banks have shown interest in providing a credit line, but it is still early to assess if this will materialize and increase the likelihood of financial sustainability of the ESCOs. If these materialize it will relieve some liquidity pressure from the ESCO. According to the TE, if the ESCO is unable to get substantial credit lines, another option available is to look for a new shareholder or holders. The TE cites evidence that staff members and a few external investors may be willing to invest.</p> <p>According to the TE the cost recoveries from the investments made so far has not yet started. Once these recoveries start it will be easier to gauge whether the project will be financially sustainable in the long run or not. The estimates, however, show that the payback for the projects taken up by ESCO-Rivne could be about 5 to 6 years.</p> <p>Overall, it is still too early to know whether the project will be financially sustainable in the long run.</p>	
<b>B Socio political</b>	<b>Rating: Unable to assess</b>
<p>The TE assesses the country ownership of the project to be highly satisfactory (HS). ESCO-Rivne has been established and is functional and according to the TE a company owned by Rivne Municipal Authority has the majority stake in ESCO-Rivne. This shows the involvement of the local government in process of establishing ESCO-Rivne. According to the TE the local municipal authority has also signed a MOU to be involved with the ESCO-Rivne on a long term basis. The project is also being managed and controlled at the local level; earlier it was being managed by the State Commission for Energy Conservation. This change has improved the performance of the project governance. The TE also suggests that the local municipal decision makers are now much more aware of the EE issues than they were before the initiation of the project.</p> <p>The TE indicates that, in line with the objectives of the project, the national government has passed a regulatory framework that encourages the municipal bodies to adopt energy efficient measures. The framework allows the municipal bodies to keep receiving their allocated budget for next three years even if there is a drop in energy consumption due to adoption of energy efficient measures. This suggests that the interest of the central government in promoting EE.</p> <p>The involvement of government at both local and central level seems to suggest satisfactory political feasibility of the project at this stage. However, it is still too early to know how the new system will be received by other stakeholders, including consumers, in the longer run, and particularly the Central Government who would be committed to maintain the same energy budget allocations for the next three years (with the possibility of extensions) for to the municipalities despite energy and costs savings.</p>	
<b>C Institutional framework and governance</b>	<b>Rating: Unable to assess</b>
<p>The TE indicated that during this stage the national government, has implemented a regulatory framework to mitigate perverse incentives for the municipalities that drove higher energy consumption due to the concern that their budgets would be reduced if energy was conserved. In addition, the local government representatives have been involved in project planning and implementation. This enhances project’s institutional sustainability. However, more significant outcomes would be necessary in the coming phases to assess the true institutional sustainability</p>	
<b>D Ecological (for example, for coffee production projects, reforestation for carbon</b>	

<b>Sequestration under OP12, etc.)</b>	<b>Rating: N/A</b>
N/A	
<b>E Examples of replication and catalytic outcomes suggesting increased likelihood of sustainability</b>	<b>Rating: Unable to assess</b>
Other Municipalities are showing interest in the Energy Efficiency work of ESCO-Rivne. Two municipalities are reported to have requested ESCO-Rivne to collaborate with them. In all four municipalities have shown interest in this work by submitting letters of interest. However, the TE opines that it may be too early to confirm whether the project is fit for replication in other areas of the country. It is also not known what will be the scale of investments required to implement similar projects in other areas.	

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

<b>A. Effective M&amp;E systems in place: What were the accomplishments and shortcomings of the project's M&amp;E system in terms of the tools used such as: indicators, baselines, benchmarks, data collection and analysis systems, special studies and reports, etc.?</b>	<b>Rating: Unable to assess</b>
Most indicators given in the log frame of the project proposal are quantifiable, relevant and comprehensive. However, the TE has not provided the actual progress figures for the key indicators of the log frame.	
The TE does not give the actual emissions reduction figures – it just mentions that of the two sites emissions reductions were verified for one site. The TE does not provide any assessment of the effectiveness of the M&E system. This, however, seems to be more of a problem with the TE than with the M&E system. The information provided by the website of ESCO-Rivne does seem to indicate that some of the information not provided in the TE is being maintained by the project team.	
<b>B. Information used for adaptive management: What is the experience of the project with adaptive management?</b>	<b>Rating: Unable to assess</b>
The TE does illustrate an instance where the operational management of the project was handed over from the State Commission for Energy Conservation to the local government to improve the management. This is claimed to have been successful and it could be seen as an indication of adaptive management. However, there is not sufficient information in the TE to assess whether the M&E system was used to provide feedback to the project in the progress towards the achievement of the objectives/outcomes and used accordingly for adaptive management.	
<b>Can the project M&amp;E system be considered a good practice?</b>	
No. Based on the information in the TE it can not be concluded that the M&E system of the project is a good practice because there is insufficient information	

#### 4.4 Lessons

Project lessons as described in the TE

<b>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?</b>
The key lesson learned indicated in the project TE is that the operational control of a project, which requires interventions at the local level, should be vested in the local institutions. Earlier ESCO-Rivne project was being operationally managed by the State Committee for Energy Conservation. But soon it was felt that the program performance could improve significantly if the implementation responsibilities were vested in a local institution leading to a shift in operational responsibility to Rivne Oblast State Administration. The TE suggests that this shift has led to an improvement in the program performance.
The TE observes that lack of systematic assessment of the market has been one of the major weaknesses of the project. The TE further suggests that this weakness may be overcome instituting a major study to assess the need and market for energy efficient products for the major municipalities outside Kiev.

**4.5 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 the “Criteria for the assessment of the quality of terminal evaluation reports” in the document “Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems” for further definitions of the ratings.

<b>4.5.1 Comments on the summary of project ratings and terminal evaluation findings</b>
In some cases the GEF Office of M&E may have independent information collected for example, through a field visit or independent evaluators working for the Office of M&E. If substantial independent information has been collected, then complete this section with any comments about the project.
<p>The TE does not mention it, but creation and managing a website for the ESCO-Rivne project was one of the important outputs expected from the project. This website has been established and is functional (<a href="http://www.esco-rivne.com/index_english.html">http://www.esco-rivne.com/index_english.html</a>). The website lists some of the impacts that can be attributed to the project.</p> <p>According to it:</p> <ul style="list-style-type: none"> <li>- “energy saving made 4 000,6 tons of conditional fuel;</li> <li>- economic effect up to 145 000 UAH per month;</li> <li>- oxide of carbon diminished by 685 000,2 tons. “</li> </ul> <p>The manner in which this information has been depicted or worded is not very informative though. For example we do not know whether 4,000.6 tons of conventional fuel is being saved every month, year, or during the life time of the project. Also, we don't know whether the “oxide of carbon diminished by 685000.2 tons means that this emission reduction has already been made or whether this will be made for the completed contracts during their life time. This could be more of an issue related to translation; the Russian and Ukrainian versions of the website may be more accurate.</p>

<b>4.5.2 Quality of terminal evaluation report</b>	<b>Ratings</b>
<p><b>A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?</b></p> <p>The report does cover most of the major activities and outputs that can be attributed to the Stage 1. It has, however, not been able to provide information on the key indicators for the overall project. Although the report spells out that the evaluator was able to verify emission's reduction in one of the sites – it does not inform about the quantum of the claimed reduction for all the sites.</p>	S
<p><b>B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated?</b></p> <p>The report is internally consistent. However, not all the statements made and the ratings given have been substantiated. For example the TE gives the project a rating of MS on GHG Emission's reduction. However, no where in the TE the quantum of GHG reduction has been discussed. Other than the statement that GHG emissions reduction was verified in one of the two sites.</p>	MS
<p><b>C. Does the report properly assess project sustainability and /or a project exit strategy?</b></p> <p>The issue of project sustainability has been adequately addressed in the report.</p>	S

<p>The report highlights the problems that the ESCO-Rivne is presently facing in meeting its liquidity requirements. It also discusses the issue of adequate political support to the project by highlighting the fact that government has adopted regulatory measures that encourage the municipalities to adopt energy efficient technologies. It discusses the issue that interventions taken up so far have been mostly on the supply side of the market. Furthermore, it also addresses the issue of whether other areas are trying to replicate the intervention in their own areas. The inability to assess the rating under sustainability has more to do with the issues that remain to be addressed and that the project is still under implementation than the information presented in the TE.</p>	
<p><b>D. Are the lessons learned supported by the evidence presented and are they comprehensive?</b></p> <p>The only major lesson that has been highlighted by the TE is that the shifting of the operational management control for the project to the local governance institution from the State Committee for Energy Conservation led to improvement in project implementation. It, however, does not discuss when and how the steering committee of the project came to this understanding. The TE discusses the impact of the delay in implementation only in a peripheral manner. It does not list out the reasons for it and the lessons that can be learnt from it.</p>	MS
<p><b>E. Does the report include the actual project costs (total and per activity) and actual co-financing used?</b></p> <p>No such cost breakups have not been provided.</p>	U
<p><b>F. Does the report present an assessment of project M&amp;E systems?</b></p> <p>TE doesn't adequately address this issue, although the TE has touched upon it peripherally in some sentences.</p>	U

**4.6 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:

Most of the results listed in the TE will qualify only as project outputs. These are non technical in nature. Therefore, technical assessment of the project impacts may not be required.

Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.?

No such issues have been mentioned.

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

Project proposal document

[http://esco-rivne.com/index\\_english.html](http://esco-rivne.com/index_english.html)