**1. PROJECT DATA**

<table>
<thead>
<tr>
<th></th>
<th>Review date: 09/30/06</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GEF ID:</strong></td>
<td>107</td>
</tr>
<tr>
<td><strong>GEF financing:</strong></td>
<td>23.34 (Million US$)</td>
</tr>
<tr>
<td><strong>IA ID:</strong></td>
<td>223</td>
</tr>
<tr>
<td><strong>IA/EA own:</strong></td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Government:</strong></td>
<td>0.00</td>
</tr>
<tr>
<td>*<em>Other</em>:</td>
<td>9.50</td>
</tr>
<tr>
<td><strong>Total Co-financing</strong></td>
<td>9.50</td>
</tr>
<tr>
<td><strong>Total Project Cost:</strong></td>
<td>32.84 (Million US$)</td>
</tr>
</tbody>
</table>

| Operational Program:   | NA                    |
| **Work Program date**  | 10/01/1996            |
| **CEO Endorsement**    | 02/24/1998            |
| **Effectiveness/Prodig Signature** | 03/31/1999 |
| **Closing Date**       | Proposed: 12/31/2002  |
|                       | Actual: 12/31/2004    |

**Prepared by:** Neeraj Negi

**Reviewed by:**

**Duration between effectiveness date and original closing:** 36 months

**Duration between effectiveness date and actual closing:** 60 months

**Difference between original and actual closing:** 24 months

**Author of TE:** Richard Cooke, Alexei Slenzak, Yuriy Chornenkiy

**TE completion date:** June 2005

**TE submission date to GEF OME:** September 2005

**Difference between TE completion and submission date:** 3 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**

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.

<table>
<thead>
<tr>
<th>Last PIR</th>
<th>IA Terminal Evaluation</th>
<th>Other IA evaluations if applicable (e.g. OED)</th>
<th>GEFME</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Project outcomes</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>2.2 Project</td>
<td>N/A</td>
<td>NA</td>
<td>L</td>
</tr>
</tbody>
</table>
### 3. PROJECT OBJECTIVES, EXPECTED AND ACTUAL OUTCOMES

#### 3.1 Project Objectives

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

According to the project document the global environmental objective of the project was to:

> "Assist Ukraine with the rapid phase-out of ODS consumption in a manner consistent with international efforts, enabling the country to meet its consumption phase-out obligations under the Montreal Protocol within a realistic time frame. Assistance to enterprises would enable them to make the transition to non-ODS materials before supplies diminish."

According to the TE the global environmental objective of the project was:

> "To assist Ukraine in the rapid phase out of ODS consumption, in a manner consistent with international efforts and within internationally agreed timeframes."

Although the intent of the original global environmental objectives in the project document listed in the PMIS database and the TE is the same, there is a slight difference in the wording.

The TE further informs that:

> "The Project’s objectives were never formally revised and essentially remained as originally stated throughout its implementation. However, the phase out compliance date effectively changed when Ukraine was granted a further extension to December 31, 2002 for correction of its non-compliance status (UNEP/OzL.Pro/ImpCom/21/3, Decision X/27(h). - Compliance with the Montreal Protocol by Ukraine Minutes of the Implementation Committee under Non-Compliance for the Montreal Protocol, Twenty-first meeting Cairo, 16 November 1998). Revisions to the scope and GEF Work Program were initiated during implementation to place greater emphasis on investment initiatives in the refrigeration servicing and fire protection sectors were made to better address economic and social impacts associated with phase out, particularly in light of the rapid closure of traditional ODS suppliers in Russia in 2000."

Thus, some changes seems to have been made in the

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

According to the TE the development objectives of the project were:

- To assist high consumption enterprises in Ukraine to make the transition to non-ODS substitutes before ODS supplies diminish;
- To provide technical assistance for phase out in the halon sector;
- To provide technology transfer associated with low Global Warming Potential (GWP) refrigerants for domestic refrigeration; and
- To provide institutional strengthening to the Ozone Office within MEPNS and MEP.
The TE does mention that although there were no formal changes in the project’s development objectives, informally the project components were modified due to changes in the project’s operational environment. Among the three project components, the investment component was expanded and adjustments were made in the scope of technical assistance and PIU components. Within the investment component resources released from procurement savings, transfers from underutilized technical assistance resources and a sub-project cancellation, were used to accommodate five additional refrigeration servicing sub-projects and a halon reclaim and recycling project. The technical assistance component was curtailed due to presence of local institutional barriers related to procurement and taxation. PIU component was enhanced through use of funds released from the technical assistance component. A

The TE also informs that the phase out compliance date effectively changed when Ukraine was granted an extension till December 31, 2002 for correction of its non-compliance status.

### 3.2 Outcomes and Impacts

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

  According to the TE:
  - The project’s performance was satisfactory in assisting Ukraine in rapid phase out of ODS consumption, consistent with the international efforts and internationally agreed timeframes, despite there being delays in meeting the objective of the rapid phase out of ODS;
  - The project’s performance was satisfactory in assisting high ODS consumption enterprises in refrigeration, aerosol, and ODS solvent sectors to make the transition to Non-ODS substitutes – before ODS Supplies diminish – by providing them with means for conversion to internationally accepted ODS substitute technologies.
  - The project’s performance was satisfactory in providing technical assistance for phase out in the Halon sector through assistance in development of the Halon Management Plan and capacity strengthening within the fire protection service.
  - The project’s performance was highly satisfactory in facilitating technology transfer associated with the low GWP refrigerants for domestic refrigeration.
  - The project’s performance was marginally satisfactory in enhancing the institutional capacities of the PIU within Ministry of Environment Protection and Nuclear Safety (MEPNS) and Ministry of Environment Protection (MEP).
  - The project’s performance was satisfactory in addressing economic and social impacts associated with the Phase Out.

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

#### 4.1 Outcomes and Impacts

**Rating: MS**

**A Relevance**

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

  According to the TE, the project’s outcomes include phase out of ODS consumption, transition by the high ODS consumption enterprises to Non-ODS substitutes, development of Halon Management Plan and capacity strengthening within the fire protection service, and technology transfer to facilitate adoption of low GWP refrigerants for domestic refrigeration. These outcomes are consistent with the Ozone Depleting Substances Focal Area strategy.

**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)?

  Overall the project’s performance was commensurate with the expected outcomes and the problems the project was intended to address. Although there were delays in the implementation of the project, due to which outcomes that should have been achieved by the end of 2002 were
achieved two years later, most of its stated objectives were accomplished.

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?

According to TE the overall GEF grant cost effectiveness was US $ 18.75/ kg of ODP. When this is compared to other East European countries where similar projects were implemented by the World Bank, it corresponds to a rather high per unit abatement cost (Table 3, TE). The TE ascribes this to the delays that the project went through during implementation.

The IEG’s review of the ICR took a more lenient view of the efficiency of the project, it rated it as satisfactory. From the narrative of its review it appears that it did not take into account the unit abatement cost and also the delays in implementation of the project.

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

A Financial resources
Rating: L

According to the TE, the results that the project has attained are sustainable because the phase-out of ODS consumption, the primary outcome of the project, has been achieved and is irreversible – at least in the foreseeable future. Thus, additional financial resources are not required. The TE reports that the prospects for the long term viability of majority of investments undertaken as part of the project are good.

B Socio political
Rating: L

According to the TE, the general direction of the new government suggests that more proactive policies respecting the global environmental issues, especially those prioritized by the European Union, will be under taken. Further, TE informs that Ukraine continues to maintain its participation in international forums on ODS, and the recent initiatives such as adoption of an updated country program and ratification of other amendments that are consistent with the Montreal Protocol are encouraging.

C Institutional framework and governance
Rating: ML

Since phase out of the ODS consumption has been achieved it is unlikely that there are any institutional and governance related risk that would affect the sustainability of this outcome. However, there is indeed a risk that the institutional and governance framework might not be able to sustain similar efforts at addressing environmental problems. In the section on sustainability, TE addresses some of the issues of institutional framework and governance related risks to sustainability. According to it, sustainability of the project’s institutional and regulatory outcomes could be at risk. It opines that utilization and further development of the institutional mechanisms and regulatory tools stimulated by the project will depend on policy and resource commitments by the government towards this end. Elsewhere in the report, the TE informs that at the local implementing agency level the general support provided by the project for developing and sustaining capacity within it through the PIU budget was not matched by any real financial commitment from the government, not is it apparent that what now exists will be sustained, implying hesitation on part of the evaluators in describing the institutional framework and governance dimensions as sustainable.

D Environmental
Rating: NA
This issue has not been addressed directly. However, the TE seems to suggest that all the outcomes of the project were ecologically sustainable and that there were no negative consequences of the project.

Provide only ratings for the sustainability of outcomes based on the information in the TE:

| A | Financial resources | Rating: HL |
| B | Socio political     | Rating: L  |
| C | Institutional framework and governance | Rating: ML |
| D | Environmental       | Rating: NA |

Catalysis and Replication

i. **Production of a public good:** The project led to adoption of technologies that reduced consumption of ODS. Thus, it prevented ozone depletion from taking place.

ii. **Demonstration:** The project provided the high ODS consumer enterprises means to convert to internationally accepted ODS substitute technologies in the refrigeration, aerosol and ODS solvent sectors. In all cases access to new technology allowed the respective enterprises to remain in business despite closure of the traditional sources of supply from Russia.

iii. **Replication**

iv. **Scaling Up:** According to the TE, the project was successful in stimulating the creation of a dedicated capability within the Ministry of Environment Protection for the regulatory management of Ozone Depleting Substances (ODS) through direct financial support of Project Implementation Unit (PIU, also known as Ozone Office). This led to development of the necessary regulatory framework for ODS control, including licensing of ODS use and control of import and export. It is, however, not clear whether this has made a difference in terms of the level of enforcement.

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

A. In retrospect, was the M&E plan at entry practicable and sufficient? (Sufficient and practical indicators were identified, timely baseline, targets were created, effective use of data collection, analysis systems including studies and reports, and practical organization and logistics in terms of what, who, when for the M&E activities)

   Rating: U

Little information has been provided in the TE or in the project documents on this issue. The IEG review of the project’s ICR (TE) recognizes that the M&E had a weak design. It comments: “The appraisal report has a short section on M&E and reporting requirements but mainly refers to monthly/quarterly progress reports with management data such as status of physical implementation, disbursements and procurement. There is brief reference to the monitoring of ODS being continued by the Ozone Office. A small table on environmental performance (Annex I, page 4) provides some indicators, but with no structured links to either the project’s objectives or the components”.

B. Did the project M&E system operate throughout the project? How was M&E information used during the project? Did it allow for tracking of progress towards projects objectives?

   Rating: NA

Little information has been provided in the TE on this issue. Although the TE does mention that the project made adaptive changes in the scope of various components within the project, it is not clear whether information for it was provided by the M&E system or was ad hoc. Similarly, in the logframe attached as annex performance against some of the indicators is given but it is not organized according to the objectives or components. The IEG review of
the project’s ICR (TE) is consistent with EO assessment. IEG review of the ICR states: “The ICR has no mention of M&E. Routine management information appears to have been collected from the information contained in the ICR and would have been important for project management. Data on ODS would also have been useful for reporting project progress. A short logframe is provided in the ICR (Annex 1), and some interesting information is provided on achievements. However, the logframe only includes a few indicators and is not organized by objective and components. Thus, it is only partially useful in assessing project achievements. There is also no discussion of how certain key parameters (e.g. ODS) are measured.”

C. Was M&E sufficiently budgeted and was there existing capacity or was this capacity built to implement the M&E plan?

Rating: NA

This has not been addressed.

Can the project M&E system be considered a good practice?

No.

4.4 Lessons

Project lessons 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 TE has covered the issue of lessons learnt during implementation of the project in considerable length. The major lessons listed in the TE are:

- For the PIU placement within the operational structure of a responsible implementing agency to be beneficial, it must be placed high enough to have access to decision making in order to have the authority and influence to effectively champion the project’s objectives and be able to operate somewhat independently of restrictive administrative structure.
- The experience gained in this project shows that there may be a relationship between implementation performance and counterpart financial commitments. At the local implementing agency level the general support provided by the project for developing and sustaining capacity within it through the PIU budget was not matched by any real financial commitment from the government, nor is it apparent that the institutional capacities developed as part of the project will be sustained. In interventions that required enterprise participation, where ever the participating enterprises contributed financially and were committed to implementation, the interventions achieved the desired results.
- A lesson learnt from this project is that the future projects should carefully evaluate the practicality of supporting technical assistance under the World Bank procedures, get agreements that this can be done before committing resources to such activities, and clearly define what will be done within PIU budgets and within a technical assistance component. In this regard, the recommended requirement of credible government contribution in this area should allow a better distinction to be made between grant funded technical assistance, administered transparently under the grant agreement and the use of internal resources under contract within the PIU.

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.

4.5.1 Comments on the summary of project ratings and terminal evaluation findings

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.

No such information was available to the reviewer.

### 4.5.2 Quality of terminal evaluation report

<table>
<thead>
<tr>
<th>A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated?</td>
<td>S</td>
</tr>
<tr>
<td>C. Does the report properly assess project sustainability and/or a project exit strategy?</td>
<td>MS</td>
</tr>
<tr>
<td>D. Are the lessons learned supported by the evidence presented and are they comprehensive?</td>
<td>HS</td>
</tr>
<tr>
<td>E. Does the report include the actual project costs (total and per activity) and actual co-financing used?</td>
<td>S</td>
</tr>
<tr>
<td>F. Does the report present an assessment of project M&amp;E systems? This is one of the major weaknesses of the report; it does not address the issue of M&amp;E systems at all. There is some discussion on supervision of the project by the World Bank but that alone is not sufficient to assess the M&amp;E systems of the project.</td>
<td>U</td>
</tr>
</tbody>
</table>

### 4.6 Is a technical assessment of the project impacts described in the TE recommended?

Yes:  
No: X

Explain: Nothing extraordinary about the project; its one of the many ODS project implemented in the in Eastern Europe area.

Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.? None have been mentioned in the TE.

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

- PIR 2005