

GEF Secretariat Terminal Evaluation Review

1. Project Data		Review date posted:	1/21/2003	
PROJ ID:	GEF ID#: 115		at endorsement Million \$	at completion Million \$
Project Name:	Phaseout of Ozone Depleting Substances	GEF financing	\$6.21	\$5.88
Country:	Poland	Co-financing:	\$13.95	\$13.46
GEF Operational Program:	N/A	Total Project Cost:	\$20.17	\$19.34
Implementing Agency	WB			
Partners involved:	Ministry of Economy (Industrial Development Agency), Gov. of Poland	Dates		
Prepared by:	Reviewed by:	Work Program date	4/1/1996	
Antonio Del Mónaco	Ramesh Ramankutty	CEO Endorsement	11/5/1996	
		Effectiveness/ Prodoc Signature	7/29/1997	
		Closing Date	4/30/2001	

2. Project Objectives and Components as Proposed or any Changes during Implementation	
a. Global Environmental Objectives	To assist Poland in carrying out its Country Program for ODS phase-out as required by the Montreal Protocol and its amendments. There were no changes during implementation.
b. Development Objectives	a. To support the phase-out of the consumption of chlorofluorocarbons (CFCs) through adoption of proven, cost-effective CFC-free technologies; b. To support the establishment of a national network for recovery/reclamation/recycling (3R) of refrigerants (CFC- 12 and CFC- 11); and c. To improve the capacity of the new Ministry of Economy (MOE) (former Ministry of Industry and Trade (MOIT)) to manage and oversee the phase-out of ODS in Poland through institutional strengthening. There were no significant changes during implementation.
c. Expected Outcomes	Project implementation will contribute to direct phase-out of 914 t/yr ODP consumption, or 47% of the 1994 total. An additional 140 t/yr consumption will be reduced through a national recovery, reclamation and recycling (3 R) scheme in the domestic and commercial refrigeration service sector, while a refrigerator compressor factory conversion to non-ODS technology will facilitate indirect phase-out of an additional 150 t annually of CFC-12.
d. Outputs/ components/ activities	(i) technology conversion and investment component (six sub-projects in the refrigeration, foam and aerosol sectors: Polar, Zamex, Inzynieria, Metalplast, POLFA, and EDA); (ii) a recovery, reclamation and recycling (3 R) component (one sub-project: PrOzon); and, (iii) an institutional strengthening and training component (two sub-projects: one with the State Fire Service Headquarters and one with the Industrial Development Agency (IDA), Ozone Layer Protection Unit (OLPU) of the Government of Poland.)
e. Comments on Project Cost, Financing and Dates	<ul style="list-style-type: none"> · Most Sub-Projects were identified in Poland's Country Program as phase-out priorities and all of them received final approval from the World Bank's Ozone Operations Resource Group (OORG) for eligibility under the incremental costs criteria. Some enterprises phased out their CFCs using their own resources before the end of 1995. GEF funds were used to fund the conversion in those enterprises with the highest costs. This conversion would not have been possible without GEF support. · The grant agreement between Poland and the Bank became effective in June 1997, and the project's initial expected closing date was December 31, 1998. However, the project closing date was extended three times, first until June 30, 2000, then until October 31, 2000 and finally until April 30, 2001. The main reasons for the delays were difficulties with the recipient enterprises to enter an agreement as required under the grant and the bankruptcy of EDA/MPW and Zamex (more detailed information is presented in the Significant Shortcomings section). · The ICR presented a detailed breakdown of the cost of project activities. The total GEF financing was US\$6.214 million, which became US\$5.8 million at project closing due to fluctuations in exchange rates.

3. Contribution towards the achievement of global environmental objectives:
The project achieved the Global Environmental Objective. The enterprises that participated in the project converted to non ODS technology, and the 3R system is operational. This resulted in the phasing out of 820 tons of ODS/year as well as the indirect phaseout of 290 tons/year. By the time the ICR was completed in June of 2001 and as a result of the project, there was no consumption of CFCs in the Poland, which made it fully compliant with the Montreal Protocol regarding this substance.

4. Compliance with GEF review criteria	
a. Implementation Approach	<ul style="list-style-type: none"> · The project did not have a logical framework although the report showed a table with performance indicators and their status at project closure. · The project drew on the strategies used for the ODS phase out projects in the Czech Republic, Hungary and Slovenia. · According to the ICR, the design of the project and implementation arrangements took into account the grantee's capacity to effectively execute the project. Technical Assistance was provided to ensure that the objectives of the project were met. Also, sustainability of the investments was a significant factor in project design considerations. · The project management adapted to changing circumstances to achieve the objectives. For example, the Bank allowed the use of Polish commercial practices to be used for procurement procedures after it the Bank's procedures proved cumbersome. This speeded up the implementation of activities and was particularly helpful for the 3R component. Another example of adaptive management was the modification of the ProOzon subproject so 3R operators could take the equipment for free if they complied with certain requirements (explained in the Lessons section). This increased adoption of the program immediately. At the same time the Bank worked with the GoP to adopt the appropriate legislation for banning the venting of ODS.
b. Country Eligibility, Ownership/Driveness, and Endorsement	<p>According to the ICR, "Poland committed to phase-out Ozone Depleting Substances (ODS), with the signing of the Vienna Convention and Montreal Protocol (MP) and their subsequent London, Copenhagen and Montreal amendments. Poland qualified as an "Article 2" or "non-Article 5" developed country under the MP. As such, Poland is not eligible for financial assistance from the Multilateral Fund for the Implementation of the Montreal Protocol, but is eligible for Global Environment Facility (GEF) financing. A Country Program (CP) for ODS Phaseout was prepared with the support of the United States Environmental Protection Agency (USEPA) and the United Nations Development Program (UNDP) and Polish National Fund for Environmental Protection and Water Management."</p> <p>Poland's annual ODS consumption among relevant user sectors as documented in the CP was:</p> <p>Refrigeration: 47.7% (913.6 ODP tons) Aerosols: 32.4% (621 ODP tons) Foams: 10.8% (207 ODP tons) Solvents: 1.9% (35.5 ODP tons) Other: 7.2% (138 ODP tons) Total: 100 % (1,916 ODP tons)</p> <p>To help implement a program to phase out the ODS consumption identified in the Country Program the Government of Poland requested financial assistance in the form of grants from the GEF.</p>
c. Stakeholder Participation/Public involvement	<p>The project conducted a public awareness raising campaign under the umbrella of the ProCountry Agency and worked with a well know public spokesperson. Extensive activities aimed at disseminating information on the ozone shield protection and at encouraging people to service refrigerators using properly trained technicians bearing a "Green Card" (i.e. card that identifies technicians who have been trained in ODS recovery from refrigerators). This outreach campaign was carried out through: the production and distribution of leaflets, short films, concerts, seminars, interviews, publications, advertisements, TV programs, ProOzon's web-page, school videos, CD-ROMs on the 3R scheme for enterprises and to NGOs. An evaluation by the Impact Assessment Committee of independent experts and an NGO ("Green Mazovia") found the campaign to have been very successful.</p>
d. Sustainability	<p>The project's sustainability is high because:</p> <ul style="list-style-type: none"> · The policies required for Poland to meet the Montreal Protocol requirements are in place and are being enforced by the GoP. · The domestic and export markets of the participating enterprises require the use of non-ODS substances. As a result, all the enterprises participating in the Project, -- except for Zamex and EKOPON, which were not in operation when the ICR was completed in June of 2001-- make the best use of the technology conversion implemented and strive to remain competitive and expand their business. · The public outreach campaign increased awareness of the benefits and urgency of using ozone friendly technologies. · The 3R scheme seems to operate well in spite of not having all the enabling legislation in place. It allows for the recovery, reclamation and recycling not only of CFCs, but also HCFCs and HFCs. · The training and certification program provided to over 1,800 refrigeration technicians has allowed the service sector to virtually eliminate venting of ODS into the atmosphere by handling the existing ODS in hermetically closed systems and reusing them after servicing old equipment. <p>EDA was purchased by EKOPON, which was expected to begin full operation by September of 2001. Since the ICR was completed in June of that year there was no information to indicate the current status of that company. Regarding Zamex, bidding processes were underway in June of 2001 to sell the company. No further information was available.</p>
e. Replication	No replication plans or budgets were mentioned in the ICR.
f. Financial Planning	The project cofinancing was US\$13.953 million provided by the enterprises participating in the project.
g. Cost Effectiveness	<ul style="list-style-type: none"> · The project's average cost effectiveness in terms of total grant funds allocated for each activity divided by the total ODS kg phased out by that activity was 6.44\$/kg of ODP. This was below the initially projected of 6.80\$/kg of ODP. In addition, the actual cost effectiveness (\$/kg ODS) for the 6 technology conversion activities was equal or below the Montreal Protocol thresholds for those ODS. · Nevertheless, the cost effectiveness of the project as a whole is decreased by the fact that two of the participating enterprises were not in operation (i.e. they were under bankruptcy restructuring) when the project was completed. These two companies used 46% of the GEF grant funds.

h. Monitoring & Evaluation	<ul style="list-style-type: none"> · There were no formal M&E procedures discussed in the ICR, however the status of the indicators (e.g. tons of ODS phaseout by each project component) was assessed during the project and at completion. · The quarterly reports and annual audit requirements of participating enterprises and the project accounts were not always submitted in time and the quality was not as good as expected. The project audit of 1999 had to be redone and reissued to the Bank to meet formal requirements.
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5. Significant Outcomes/Impacts achieved by the Project

Establishment of a network for recovery/reclamation/recycling (3R) of refrigerants: The project successfully established a 3R scheme. This included training 1840 technicians, and increased the awareness among the population to use project certified technicians (identified with the "Green Cards"). These technicians successfully implemented the 3R scheme to achieve the project's global environmental objective.

Government institutional strengthening: The project assisted in the creation of the Ozone Layer Protection Unit (OLPU) and the ODS Monitoring System which were essential to develop and implement the policies required to phase out ODS in compliance with the country's commitments.

6. Significant Shortcomings (including non-compliance with GEF policies and procedures)

The project conducted a financial diagnostic of the participating enterprises and their financial viability was not considered to be a concern. However, two of the enterprises financed by the GEF lost their markets due to the 1998 Russian crisis and went bankrupt in 2000. This jeopardized the investments in those two companies. The legal documents used for the project did not include any clauses for bankruptcy cases of enterprises financed by the GEF. The collapse of one of these companies, EDA/MPW (a manufacturer of domestic refrigerator compressors) may have been avoided if its conversion to the new non CFC using technology had taken place before 1998 when competition in the non-ODS compressor market was not so strong. However, delays in restructuring and privatization of the company did not allow for this. The total GEF funds invested in these two companies represent 46% of the total GEF grant for the project, while it represented only 3% of the cofinancing funds.

7. Ratings

	ICR	OED	GEF comments on the project	
Outcome	Satisfactory	Satisfactory	The project achieved the intended objectives but the bankruptcy of two of the six companies raises questions about proper due diligence, specially since in the project document it was mentioned that at least one of them (EDA) was undergoing financial difficulties. Furthermore, the appraisal estimate for the conversion of EDA was US\$1.7million from GEF and US\$1.697 million from the enterprise. The actual expenses were US\$1.5million from the GEF and US\$21.8million from EDA. Hopefully if the acquisition by EKOPON gets the company in business again, the funds will not be lost.	
Institutional Development	Substantial	Substantial		
Sustainability	Likely	Likely		
IA Performance	Satisfactory	Satisfactory		
GEF Grant Recipient Performance	Satisfactory	Satisfactory		
Monitoring and Evaluation	N/I	N/I	S	There is evidence of M&E system in place and use for adaptive management
Quality of the Evaluation Report		S	S	

8. Lessons for on-going and future GEF projects:

- **Bank policies:** The project could have progressed faster with more flexible procurement arrangements from the beginning. Also, more procurement training was necessary.
- **Bankruptcy risks:** Due to the unpredictable risk of bankruptcy, the Bank should include policies that allow for the use of the equipment financed for ODS conversion in other projects if a company goes bankrupt. (To its credit, the Bank adopted policies to address bankruptcy issues in following ODS phase out projects based on the lessons learned in this project, for example in Belarus). It would be interesting to know the practical approach employed under such circumstances.
- **Technical support:** It is important to include highly qualified technical expertise in ODS phase out projects to avoid underestimating the amount of work needed to complete the projects.
- **Project management:** It is essential to work with a qualified and readily available in country Project Management Unit to ensure proper reporting of project implementation and financial status of the participating companies. Better due diligence is also necessary.
- **Public involvement:** Public awareness campaigns are essential to increase demand for Ozone friendlier services (such as 3R) and appliances (refrigerators, etc.)
- **Labeling and incentives:** Environmental labeling assist informed consumers to identify the Ozone friendly products. In addition, financial incentives (such as rebates) to purchase these products will make them more attractive in a competitive market.
- **3R schemes:** This project used a great incentive that increased the adoption of 3R schemes by technicians. It distributed the recovery machines free of charge to technicians that had taken the 3R course and had received the "Green Card" certificate. In addition, they had to recover 50 kg of CFC within 3 months and deliver them to the reclaim plant or the cylinder depots to avoid having to pay a semi-annual lease fee of 30US\$. The results were 1840 service men enlisted and over 31 tons of CFCs recovered by March 2001. As CFC are phased out, the demand for 3R schemes will increase to service old equipment (i.e. domestic refrigerators before the end of their useful life) with reused CFCs as they become scarce.

9. Post Completion Evaluation/Impact Evaluation (Yes or No)

No

10. Comments on the quality of Completion Report

The quality of the ICR was satisfactory.