1. Project Data

	Su	ımmary project data		
GEF project ID		768		
GEF Agency project ID		1912		
GEF Replenishment P	hase	GEF-2		
Lead GEF Agency (inc	lude all for joint projects)	UNDP, UNEP		
Project name		Programme for Phasing Out Oz	one Depleting Substances	
Country/Countries		Estonia		
Region		ECA		
Focal area		Ozone Depleting Substances		
Operational Program Priorities/Objectives	or Strategic	n/a		
Executing agencies in	volved	UNEP/UNDP		
NGOs/CBOs involven	nent		ies with the Refrigeration Association, I the Security Association; details	
Private sector involve	ement	46 companies received recover	y and recycling commitment.	
CEO Endorsement (FS	SP) /Approval date (MSP)	7/27/2000		
Effectiveness date / p	project start	2001		
Expected date of pro	ject completion (at start)	5/31/2004		
Actual date of projec	t completion	2004		
		Project Financing		
		i i oject i indricing		
		At Endorsement (US \$M)	At Completion (US \$M)	
Project Preparation	GEF funding		At Completion (US \$M) 0.34 according to Trustee	
Project Preparation Grant	GEF funding Co-financing	At Endorsement (US \$M)		
	_	At Endorsement (US \$M) 0.07	0.34 according to Trustee	
Grant	_	At Endorsement (US \$M) 0.07 0	0.34 according to Trustee 0	
Grant	Co-financing	At Endorsement (US \$M) 0.07 0 0.85 0.85	0.34 according to Trustee 0 0.87	
Grant	Co-financing IA own	At Endorsement (US \$M) 0.07 0 0.85 0	0.34 according to Trustee 0 0.87 0	
Grant GEF Project Grant	Co-financing IA own Government	At Endorsement (US \$M) 0.07 0 0.85 0 0.05	0.34 according to Trustee 0 0.87 0 0.08	
Grant GEF Project Grant	Co-financing IA own Government Other multi- /bi-laterals	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0	0.34 according to Trustee 0 0.87 0 0.08 0	
Grant GEF Project Grant	Co-financing IA own Government Other multi- /bi-laterals Private sector	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0	0.34 according to Trustee 0 0.87 0 0.08 0 0.08 0	
Grant GEF Project Grant Co-financing	Co-financing IA own Government Other multi- /bi-laterals Private sector	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0 0 0.05 0 0 0	0.34 according to Trustee 0 0.87 0 0.08 0 0 0 0 0 0 0	
Grant GEF Project Grant Co-financing Total GEF funding	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.92 0.05 0.97	0.34 according to Trustee 0 0.87 0 0.08 0 0.108 0 0 0 0 0 0 0 0 0 0 1.21 0.08 1.29	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.105 0 0.05 0 0.05 0 0.05 0.05 0.05 0.05 0.05	0.34 according to Trustee 0 0.87 0 0.08 0 0 0 0 0 0 0.08 0 0 0 0 0 0.08 1.21 0.08 1.29	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.92 0.05 0.97	0.34 according to Trustee 0 0.87 0 0.08 0 0.108 0 0 0 0 0 0 0 0 0 0 1.21 0.08 1.29	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.92 0.05 0.92 0.97 valuation/review information	0.34 according to Trustee 0 0.87 0 0.08 0 0.108 0 0 0 0 0 0 0 0 0 0 1.21 0.08 1.29	
Grant GEF Project Grant Co-financing Total GEF funding Total Co-financing Total project funding (GEF grant(s) + co-fin TE completion date	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.92 0.05 0.92 0.97 valuation/review information	0.34 according to Trustee 0 0.87 0 0.08 0 0 0 0.08 0 0 0 0 0 0 1.21 0.08 1.29	
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	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.92 0.05 0.97 valuation/review information March 2010	0.34 according to Trustee 0 0.87 0 0.08 0 0 0 0.08 0 0 0 0 0 0 1.21 0.08 1.29	
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	Co-financing IA own Government Other multi- /bi-laterals Private sector NGOs/CSOs ancing)	At Endorsement (US \$M) 0.07 0 0.85 0 0.05 0 0.92 0.05 0.97 valuation/review information March 2010 Dr. Tom Batchelor and Mr. Vale	0.34 according to Trustee 0 0.87 0 0.08 0 0 0 0 1.21 0.08 1.29 n	

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF EO Review
Project Outcomes	S	n/a*	n/a	S
Sustainability of Outcomes	ML	n/a*	n/a	ML
M&E Design	n/a	n/a*	n/a	MU
M&E Implementation	n/a	n/a*	n/a	MU
Quality of Implementation	n/a	n/a*	n/a	MS
Quality of Execution	n/a	n/a*	n/a	UA
Quality of the Terminal Evaluation Report	n/a	n/a	n/a	MS

*The TE only gives ratings for individual sub-projects and not the project as a whole.

3. Project Objectives

3.1 Global Environmental Objectives of the project:

This project is part of the international effort to phase out ozone depleting substances, which damage the earth's ozone layer and increase the amount of ultraviolet radiation exposure from the sun. The Montreal Protocol, ratified by Estonia in 1996, is the basis for phasing out ozone-depleting substances. While Estonia does not produce ozone-depleting substances, it imports them from Russia. This project would allow Estonia to transition to other materials and reduce demand for ozone-depleting substances before the production of such substances ends in Russia.

3.2 Development Objectives of the project:

The project consisted of the following four subprojects:

- 1. Institutional Strengthening and Capacity Building, Establishment of an Ozone Office
- 2. Train the trainers for use of ODS-free refrigerants in maintenance and servicing
- 3. National programme for recovery and recycling of ODS refrigerants
- 4. Regional halon management stockpile programme

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

No changes were reported in the TE.

4. GEF EO assessment of Outcomes and Sustainability

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

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
---------------	----------------------

The GEF Operational Strategy of 1995 states that the GEF's ozone depletion portfolio will "support activities to phase out ozone-depleting substances that are committed under the Montreal Protocol, with special emphasis on short-term commitments and enabling activities" (GEF/C.6/3, page 77). This project will contribute to that strategy.

This project supports Estonia, an economy in transition, in meeting its Montreal Protocol obligations. . Estonia's stated priorities for the phase-out of ozone depleting substances are: to phase out the consumption of ozone-depleting substances, HCFCs, and methyl bromide; to support the conversion of industry to ODS-free technology; to develop the legal and regulatory framework to ensure phase-out; to establish monitoring and licensing systems for imports and exports; and to support scientific research on ozone layer depletion.

4.2 Effectiveness	Rating: Satisfactory
-------------------	----------------------

The project was divided into four subprojects, detailed below. According to the Project Document, "the main objective of this project is to assist Estonia in the rapid phase-out of ODS consistent with international efforts in this direction... The GEF proposal presented herewith would allow Estonia to phase out by 2002" (PD, page 6). This project is rated satisfactory because from 2001 onward, Estonia has been able to comply with the Montreal Protocol's requirements on ozone-depleting substances.

As described below under M&E Design, the project design did not include comprehensive indicators, targets, or a log frame. Where indicators and targets are present, they are noted below.

1. Institutional Strengthening and Capacity Building; Establishment of an Ozone Office

The TE rated this subproject as satisfactory. The project established a National Ozone Unit within the Ministry of Environment. Legislation was passed to ban CFC and halon imports, penalize illegal trade, and establish licensing procedures, reporting systems, qualification requirements, and quotas for HCFCs. An awareness campaign was conducted via press releases, newspaper articles, radio and television interviews, brochures, booklets, a website, and a seminar. The National Ozone Unit helped to coordinate the other subprojects, and reported on ozone-depleting substances to the Montreal Protocol.

2. Train the trainers for use of ODS-free refrigerants in maintenance and servicing

The TE rated this subproject as highly satisfactory. A total of 74 refrigeration technicians were trained to be trainers, and a further 200 personnel were subsequently trained in both theory and practice. This covered about half of the refrigerant technicians working in Estonia. Training equipment and a manual

on good refrigeration practices were also supplied. In addition, 24 customs officers and environmental inspectors were trained and provided with refrigerant identification kits and a handbook.

3. National programme for recovery and recycling of ODS refrigerants

The TE rated this subproject as satisfactory. 50 recovery machines, 5 recovery and recycling machines, a HCFC reclamation unit, and other equipment were distributed to 46 companies and 5 recycling centers. The following ozone depleting substances were recovered and recycled:

Table 38: Ozone depleting substances recovered and recycled in Estonia from 2003 until 2006 (kg)

Ozone-depleting substance	2003		2004	2004		2005		2006	
	Re-covered	Re-cycled	Re-covered	Re-cycled	Re-covered	Re-cycled	Re-covered	Re-cycled	
CFC-12	474	474	9*	127	114	0	13	0	
HCFC-22	2320	2320	2431	9	2838	2838	5240	4356	
Carbon tetra- chloride	300	0	0	0	15	0	0	0	
Methyl bromide	0	0	0	0	30	0	0	0	

* Last year of project when owners reported less recovered but more recycled from stocks

4. Regional halon management stockpile programme

The TE rated this subproject as highly satisfactory regarding implementation, but satisfactory for the quantity of halon recovered. Equipment was installed for halon recovery, recycling, and storage. A laboratory was established for monitoring halon, and three workshops were implemented on decommissioning halon.

Year	Halon 2402		Halon 2402 Halon 1301		Halon 2001*	
	Recovered (kg)	Recycled (kg)	Recovered (kg)	Recycled (kg)	Recovered (kg)	Recycled (kg)
2002	1,200	1,200				
2003	445	445	1,777	375		
2004	2,472	1,777	2,219	2,219		
2005	1,338	1,320	80	80		
2006	1,182	1,182	201	201		
2007	1,857	800			100	
2008	442	142	627	627	810	
TOTAL	8,936	6,866	2,774	3,502	910	
2008 Latvia	1,139				421	

Table 39: Halon recovered and recycled in Estonia from 2002 until 2008

* Halon 2001 is C₂H₃Br or ethyl bromide (Drs David Catchpole and Dan Verdonik HTOC pers. comm. 28 May 2009); halon 2402 has an ODP of 6; halon 1301 has an ODP of 10; and halon 1211 has an ODP of 3

4.3 Efficiency	Rating: Moderately Satisfactory
----------------	---------------------------------

For the institutional strengthening subproject, the TE states that "a relatively small team in the NOU leveraged national resources to coordinate the conversion to CFC-free technology in a cost-effective and timely manner" (TE, page 249). It says the same thing regarding the training subproject, although the training project was delayed by a year for unknown reasons. The recovery and recycling subproject had a cost-effectiveness of \$21.41 ODP-kg per year, more than twice the average of similar projects. The halon subproject had a cost-effectiveness of \$26.28 ODP-kg per year, which was four times higher than envisioned at project design and more expensive than similar halon projects. On the other hand, the halon project was completed several months earlier than anticipated.

4.4 Sustainability	Rating: Moderately Likely	

Financial: **Likely**; the National Ozone Unit is funded by the Estonian government and other private sources, so it is not reliant on project funds. Estonia also has access to European Union funds that can continue to support project activities. Training is paid for by both the trainee and by the government, so it will continue post-project.

Sociopolitical: **Likely**; the National Ozone Unit worked with other government agencies and NGOs, and "the partnerships formed as a result of these relations were assessed as creating a stable socio-political environment that would help to promote the ongoing work of the NOU" (TE, page 241). Country support for the National Ozone Unit and its activities is strong. Technician training will continue into the future, but formal customs training is not planned.

Institutional: **Likely**; the TE states that the National Ozone Unit is well-placed in a "robust institutional framework" (TE, page 241). Linkage of ozone activities to other environmental issues promotes the continuation of these activities. Supportive legislation for ozone control was enacted before the project closed, and the European Union member requirements add another layer of legislative protection to the project's goal. Estonia financed an ozone-depleting substances reclamation center.

Environmental: **Moderately likely**; there are no facilities for the destruction of ozone-depleting substances in Estonia, and "there is a risk that the owners of ODS will not pay for destruction if the price increases above the level that they are willing to pay" (TE, page 241). There is no evidence of illegal CFCs in the Estonian market.

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?

The Estonian government contributed \$45,000 to the institutional strengthening subproject, but there is no account of how the money was spent. The TE states that "the Government has probably allocated financial resources in support of ozone layer protection. This funding has been important for sustaining the outcome of the sub-projects" (TE, page 248). The government also contributed \$30,000 to the training subproject for the production of a training manual. According to the TE, "The provision of cofinance by Estonia for this Manual was evidence of the government's commitment to the training project and to ozone layer protection in general. The co-finance would have also increased the government's ownership of the training programme, and provided confidence to the two organisations responsible for the delivery of the courses that the government was committed to the training programme in the future" (TE, page 260). There was no cofinancing for the recovery and recycling subproject. The government spent an unknown amount to create the Halon Recovery Center after project start.

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?

There was a 27 month delay between the approval of the project and its signature by UNEP, for unknown reasons. This delay may have improved project sustainability "since it brought the project closer to the time that Estonia acceded to the EU and entered into a period of substantial commitment to EC legislation on ozone layer protection" (TE, page 248). On the other hand, the NOU believed that the project was implemented too late to have a large impact on CFC recovery due to the bankruptcy of a major fishing company in the mid-1990s; the project was implemented too late to recover the refrigerants used on the fishing fleet. The training subproject was delayed by a year for unknown reasons, but this did not affect project outcomes. The halon project was not delayed.

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:

Country ownership was high for Estonia, as demonstrated in the institutional strengthening subproject by: "early preparation and adoption of legislation on ODS...the establishment of an effective NOU for implementing policy developed by the MoE; consistent funding from the central government budget, supplemented by funding from other sources for specific projects; training of technicians in bestpractice management of ODS; training of customs officers in the detection of ODS and ODS-containing equipment; participation in awareness raising activities in collaboration with national stakeholders; preparation of materials to promote the adoption of ODS-free technology and methods; participation in meetings with the EU (which started prior to accession) and Parties to the Montreal Protocol; and submission of reports on ODS to the EU and other bodies" (TE, page 247).

For the training subproject, the evidence for strong country ownership includes "collaboration with organisations to deliver the training courses; consistent funding from the central government budget, supplemented by funding from other sources for specific projects; training of technicians in best-practice management of ODS; training of Customs officers in the detection of ODS and ODS-containing equipment; awareness raising activities in the workshops for technicians and Customs officers; and government funding for the preparation and distribution of a Training Manual" (TE, page 259).

For the recovery and recycling subproject, "Estonia had made arrangements for the training of technicians in best-practice management of ODS, and had prepared information to promote the adoption of ODS-free technology and methods. The equipment was distributed to the companies. Estonia itself paid for the development and installation of the Reclamation Centre" (TE, page 269).

Strong country commitment was also evident for the halon subproject: "The MoE put in place legislation to prevent halon imports; the NOU made arrangements for the training of technicians in three different courses according to their professional requirements for training; the NOU prepared information to describe the environmental damage caused by halon and to promote the adoption of halon-free technology and methods. The equipment for the collection storage, and recycling of halon was installed in specialised facilities. Estonia paid for the development and installation of the Reclamation Centre, not the sub-project. When the project had been completed, the NOU worked with relevant ministries to have the halon on ships decommissioned and replaced with halon free systems. Ships that continued to use halon were penalised. Halon was decommissioned from large facilities such as the TV tower (more than 1 tonne of halon) and replaced with halon-free alternatives" (TE, pages 279-280).

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
-------------------------	-----------------------------------

The Project Document only contains two sentences regarding project M&E: "Project monitoring will be performed by UNEP/UNDP and the cost for it is included in the budgets that are indicated in Annex-1. Standard evaluation will be performed as stipulated in the elimination of Halons in the Regional Halon Management Scheme and the recovery/recycling sub-projects documentation" (PD, page 10). However, the subproject documentation indicated does not contain M&E information. The individual subprojects

did not contain baselines, performance indicators, or log frames, although the overall project contains a few very general indicators such as "availability of suitable methods to reduce ODS consumption" (PD, page 13). M&E is not specifically mentioned in the project budget in Annex-1, and the midterm evaluation reported a lack of results-based management and accountability frameworks as well as a lack of performance indicators.

6.2 M&E Implementation	Rating: Moderately Unsatisfactory
------------------------	-----------------------------------

The TE implies that UNEP did not do any monitoring of the institutional strengthening or training subprojects, so the National Ozone Unit took over the task: "In the absence of evidence of any plan implementation by UNEP, the NOU coordinator and/or MoE representative met on a regular basis with other departments and the private sector to monitor and evaluate work on ozone-layer protection in Estonia. The meetings reviewed progress on projects, discussed reports, and highlighted problems and suggested solutions. The NOU coordinator informed participants of key outcomes of national and international meetings. The NOU coordinator prepared and submitted reports to UNEP...which facilitated monitoring and reporting in an efficient, comprehensive and timely manner" (TE, page 246). For the recovery and recycling subproject, "There was no evidence to show that the M&E plan had been implemented, as there were no documents indicating the criteria for distribution of the equipment, there was no database showing that the equipment had been properly used and maintained, and there were no records of the amounts of CFC recovered, recycled and reused for the period of the sub-project" (TE, page 267). There was also no monitoring of the halon subproject. Therefore only half of the subprojects were monitored.

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
---------------------------------------	---------------------------------

The TE does not comment on the project design.

Regarding supervision, UNEP was in charge of the institutional strengthening and training subprojects. The TE states that UNEP's role was "minimal" and it did not make any site visits to Estonia (TE, page 248). For the recovery and recycling and halon subprojects, there is no information available on UNDP's conduct. However, the TE states that heavy supervision was not necessary for the outcome of the project.

7.2 Quality of Project Execution	Rating: Unable to Assess
----------------------------------	--------------------------

PMIS lists UNEP and UNDP as both the project executors and implementers. The TE does not include much information on either agency.

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.

The TE does not specify the quantity of ozone-depleting substances that were reduced by the project. However, the TE states that Estonia has been able to comply with the Montreal Protocol's requirements on ozone-depleting substances since 2001 (TE, page 245). The following charts depict the amount of recovered and recycled ozone depleting substances in Estonia (TE, pages 266 and 273).

Table 38: Ozone depleting substances recovered and recycled in Estonia from 2003 until 200	5
(kg)	

Ozone-depleting substance	2003		2004		2005		2006	
	Re-covered	Re-cycled	Re-covered	Re-cycled	Re-covered	Re-cycled	Re-covered	Re-cycled
CFC-12	474	474	9*	127	114	0	13	0
HCFC-22	2320	2320	2431	9	2838	2838	5240	4356
Carbon tetra- chloride	300	0	0	0	15	0	0	0
Methyl bromide	0	0	0	0	30	0	0	0

* Last year of project when owners reported less recovered but more recycled from stocks

Year	Halon 2402		Halon 1301		Halon 2	001*
	Recovered (kg)	Recycled (kg)	Recovered (kg)	Recycled (kg)	Recovered (kg)	Recycled (kg)
2002	1,200	1,200				
2003	445	445	1,777	375		
2004	2,472	1,777	2,219	2,219		
2005	1,338	1,320	80	80		
2006	1,182	1,182	201	201		
2007	1,857	800			100	
2008	442	142	627	627	810	_
TOTAL	8,936	6,866	2,774	3,502	910	
2008 Latvia	1,139				421	

Table 39: Halon recovered and recycled in Estonia from 2002 until 2008

* Halon 2001 is C₂H₅Br or ethyl bromide (Drs David Catchpole and Dan Verdonik HTOC pers. comm. 28 May 2009); halon 2402 has an ODP of 6; halon 1301 has an ODP of 10; and halon 1211 has an ODP of 3

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.

No socioeconomic changes were recorded in the TE.

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

A total of 74 refrigeration technicians were trained to be trainers, and a further 200 personnel were subsequently trained in both theory and practice. This covered about half of the refrigerant technicians working in Estonia (TE, pages 251-252). Training equipment and a manual on good refrigeration practices were also supplied. In addition, 24 customs officers and environmental inspectors were trained and provided with refrigerant identification kits and a handbook (TE, pages 252-253). 50 recovery machines, 5 recovery and recycling machines, a HCFC reclamation unit, and other equipment were distributed to 46 companies and 5 recycling centers (TE, page 265). Equipment was installed for halon recovery, recycling, and storage. A

laboratory was established for monitoring halon, and three workshops were implemented on decommissioning halon (TE, page 277).

b) Governance

The project established a National Ozone Unit within the Ministry of Environment. Legislation was passed to ban CFC and halon imports, penalize illegal trade, licensing procedures, reporting systems, qualification requirements, and quotas for HCFCs (TE, pages 242-243).

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 were 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 project's approach was replicated in several Eurasian countries as part of the GEF's ozone-depleting substances program. Other than applying similar project designs to each country, no scaling up or mainstreaming was mentioned in the TE.

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.

There are no lessons learned for the Estonia project, but the TE states several lessons from the overall ozone-depleting substances program:

Funding bodies should be much clearer on their expectations of governments to continue funding and staffing of work on ODS after the project finished. Governments should use the funds to enhance institutional capacity and to put in place justification for continued funding while the project is underway and the environmental benefits are becoming evident.

The success of the National Ozone Units depended on the qualifications and ability of the staff to undertake the work, and in having sufficient funds available for the work. Out-sourcing activities by the government is a modern approach which has been shown to operate so far in these projects, and might

open up opportunities for other governments to consider the same as centralized budgets come under more pressure for reductions.

It is important that the National Ozone Units are staffed by some well qualified and senior people that can gain access to key government officials in order to ensure that programs and legislation on the phase out of ODS are progressed in a timely and effective manner.

Governments could consider establishing a centralized unit staffed by specialists that are knowledgeable in engaging with international funding organizations in environmental projects.

UNEP must improve delivery of finance to ensure that there are no gaps in time between projects.

Communications should be between UNEP and the National Ozone Units in the local language, which means that UNEP will need to employ staff with sufficient language skills to be able communicate effectively with project staff many countries, depending on the project.

Project and task managers must pay more attention to the M&E elements that are developed in the Project Document to ensure that appropriate baseline and performance indicators are carefully checked and are present from the beginning for the project.

Review the work that was undertaken in the past and design new projects that avoid the pitfalls of past projects.

Financial appraisals should be part of the risk assessment for deciding on which enterprises to fund within a sector.

Investment projects should be based on a realistic assessment of the baseline data as a basis for determining the extent of the funding that is required to promote the transition to ODS-free technology.

For refrigeration training, training programs need to be short (two days maximum, preferably one day); focused mainly on the practical aspects and alternatives and less on the theory; be delivered by or in collaboration with a Refrigeration Association so the training becomes self-funding; UNEP/UNDP need to ensure equipment is available before the training starts; and the government needs to have enabling legislation in place that ensures R&R activities are undertaken and enforced.

9.2 Briefly describe the recommendations given in the terminal evaluation.

There are no recommendations for the Estonia project, but the TE states several recommendations from the overall ozone-depleting substances program:

Countries should improve the implementation of legislation, policies and standards on all aspects of ozone layer protection.

Countries' existing efforts to prevent illegal trade need to be further strengthened.

Countries need to take further action to manage and bank halon.

UNEP/UNDP should consider further investment and capacity development to assist countries with economies in transition to address the remaining threats to the ozone layer.

UNEP/UNDP should learn from the positive private sector engagement in the reduction of Ozone Layer Depletion focal area and incorporate similar approaches into its efforts to engage the private sector in other focal areas.

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 is detailed in its assessment of outcomes and impacts. It would have been helpful to have an overall description of the project rather than just the assessments of the individual subprojects. The TE did not provide sufficient info on implementation & execution to enable a rating.	MS
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The ratings only cover sub-projects and not the project as a whole. The report is repetitive, which made it difficult to discern which outcomes and outputs were original and which were a restatement from a previous section. It was not always clear which changes were a part of the project and which were independent or driven by different forces.	MS
To what extent does the report properly assess project sustainability and/or project exit strategy?	The sustainability of the entire project as a whole was not discussed, but the assessment of the sustainability of each individual subproject was adequate. Sustainability ratings were not always well-supported.	MS
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The TE does not contain lessons and recommendations related to the Estonia project. However, it does have lessons and recommendations pertaining to the entire ozone-depleting substances program. These lessons are detailed, comprehensive, and result from project experiences.	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The TE includes project costs and cofinancing. It lists the funding for each subproject, but not per-activity.	MS
Assess the quality of the report's evaluation of project M&E systems:	Adequate evaluation of project M&E, although it would have been helpful to have an overall evaluation of project M&E rather than an evaluation of the individual subprojects' M&E. M&E ratings were not always well substantiated. The recovery and recycling subproject states that M&E would deserve an unsatisfactory rating, but in the actual ratings section it is given a score of MS.	MU
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).