1. Project Data

GEF Project ID	2715
IA/EA Project ID	GF/ROM/07/001
Focal Area	Persistent Organic Pollutants (POPs)
Project Name	Disposal of PCB Wastes in Romania
Country/Countries	Romania
Geographic Scope	National
Lead IA/Other IA for joint projects	UNIDO
Executing Agencies involved	National Research-Development Institute for Environmental Protection - ICIM
Involvement of NGO and CBO	Among the executing agencies
Involvement of Private Sector	
Operational Program or Strategic Priorities/Objectives	POPs S1 & 2, Implementation and capacity building for NIP
TER Prepared by	Sandra Romboli
TER Peer Review by	Neeraj Negi
Author of TE	Mr. Mario Marchchich, Mr. Szabolcs Fejes, Mr. Radu Cadariu
Review Completion Date	
CEO Endorsement/Approval Date	13/02/2007
Project Implementation Start Date	15/03/2007
Expected Date of Project Completion (at start of implementation)	30/09/2010
Actual Date of Project Completion	30/09/2010
TE Completion Date	01/06/2010
IA Review Date	
TE Submission Date	10/1/2012

2. Project Financing

Financing Source	At Endorsement (millions USD)	At Completion (millions USD)
GEF Project Preparation Grant	0.05	0.05
Co-financing for Project Preparation		
Total Project Prep Financing	0.05	0.05
GEF Financing	0.95	0.95
IA/EA own	0.02	0.02
Government	0.02	0.07
Other*	0.08	1.57
Total Project Financing	1.97	2.61
Total Financing including Prep	2.02	2.66

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

3. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF Evaluation Office TE Review
Project Outcomes	S	HS	HS	HS
Sustainability of Outcomes	N/A	HS	S	ML
Monitoring and Evaluation		MU	MU	MU
Quality of Implementation and Execution	N/A	HS	S	S
Quality of the Evaluation Report	N/A	N/A	S	S

4. Project Objectives

4.1. *Global Environmental Objectives of the project:*

As reported in the CEO Approval document (ProDoc), the objective of the project is to reduce and eliminate the threats to human health and the environment posed by PCBs in Romania.

No changes in project objectives were noted in the ProDoc.

4.2. *Development Objectives of the project:*

As reported in the CEO approval document, the objective of the project is to overcome the current barriers which impede the implementation of the PCB-related obligations under the Stockholm Convention in Romania.

No change in the project's development objectives were noted in the ProDoc.

4.3. *Changes in the Global Environmental Objectives, Development Objectives, or other activities:*

Criteria	Change?	Reason for Change
Global Environmental Objectives	No	
Development Objectives	No	
Project Components	No	
Other activities	Yes	Any other (specify to the right)

5. GEF EO Assessment of Outcomes and Sustainability

5.1. *Relevance – **Satisfactory***

The project was developed on the basis of the National Implementation Plan and discussions with national experts and relevant governmental institutions in 2005. The NIP was endorsed in the same year and concluded that PCB management related matters are one of the top priorities of the NIP implementation. The project is addressing two strategic priorities of the POPs focal area of the GEF. Under Strengthening Capacities for NIP Development and Implementation the project has strengthened the legislative and regulatory framework for the management of PCBs. New pieces of legislation have been developed and enacted which clarified the obligations for PCB management, reporting, phase-out and disposal. Furthermore,

on the administrative capacity at the national, regional and local level authorities of the demonstration locations have been strengthened. NEG included among their regular activities the inspection of potentially PCB-containing equipment and the management practices and phase out plans of the PCB owners to reduce the PCB-related human health and environmental risks. This led to strengthened and sustainable capacity for enforcement of the PCB-related legislations in the demonstration areas and at the national level.

5.2. *Effectiveness* – ***Highly Satisfactory***

As reported in the Terminal Evaluation (and UNIDO evaluation office), the project was very effective and achieved its intended outcomes (rated HS by both). The results achieved by the project exceeded the expectations and targets set at design especially in terms of eliminated PCB waste and price reduction of PCB waste per kg. Overall the project managed to achieve its outcomes. Some of the initial risks identified did materialize e.g. the enactment of amended and new legislation took more time than planned. The splitting and privatization of Electrica SA has resulted in the modification of the beneficiaries of the project. The National Environment Fund was not available to subsidize the costs of disposal to the PCB-owners. However all these risks were appropriately addressed by the project management, plans and strategies modified and objectives have been fulfilled. Project management on technical issues was very good. The M&E part of the project seemed to have been the weakest component with regular monitoring activities and systematic records of project progress lacking. Project results are expected to have good sustainability due to the private actors investing their own resources into the projects activities (waste disposal) and due to the country-wide approach undertaken. The Evaluation Team conducting the TE concluded that the behavior of project beneficiaries has significantly changed: There is now a general understanding on the PCB issues, PCB -owners have developed and submitted PCB eliminating plans to the respective authorities. Their employees generally follow the ESM system on PCBs and the required occupational safety measures. NEPA is keeping their PCB database up-to-date. PCB disposal facilities have started their operation in Romania and private sector investment in this regard is improving. The project has exceeded its disposal target by more than four times. PCB disposal price went down by approximately 80%, form 5.5 US$/kg to 1.2 US$/kg. ICIM has sampled 6,869 transformers and conducted 6,915 analyses. This is 13.5% less than what was expected.

These results include (but are not limited to):

- The disposal price of PCBs and PCB wastes has decreased by 80% due to the technology transfer, the investment promotion and the capacity building activities of the project.
- Through the support of NEPA, the project activities performed at the demonstration areas have been extended to the whole country. Due to the strict deadline of final PCB elimination and to the achieved reduction of the PCB disposal price, the increase in the pace of disposal was observed not only in the demonstration areas but also in the whole country.

- Since the project has put in place best available technologies for disposal of PCBs and PCBs containing equipment, the targets established in the project have been exceeded by eliminating 1,166 tons of PCB containing equipment against the planned 300 tons.

5.3. *Efficiency –**Satisfactory***

The project started with a 6 month delay due to the negotiation with ICIM on the terms and conditions of the implementation. Although actual activities started 5 months before the official cooperation agreement was signed between UNIDO and ICIM with putting in place the project related management and coordination as well as the project steering committee. As per the TE: The technical activities started officially in January 2008, which was to a certain extent a failure, since due to the cold weather and heavy snow, the expert teams had difficulties in undertaking the inventory exercise, especially in remote areas.

At the end, although the project exceeded its timeline, the budget was not overspent. Furthermore, the project adapted its strategy when it became clear that the planned electricity provider would not be participating in the project and found an alternative with the help of NEPA (national environmental protection agency). This corporation added significant value to the project and its success in implementation. The evaluation team concluded that project implementation was efficient on technical matters but that in the future more attention should be placed on regular monitoring activities and proper documentation of the project progress.

5.4. *Sustainability – **Low/Moderate Risks***

6. Processes and factors affecting attainment of project outcomes

6.1. *Co-financing*

6.1.1. To what extent was the reported co-financing essential to the achievement of GEF objectives? Were components supported by co-financing well integrated into the project?

Co-financing data not complete in report and not elaborated on in terms of how/what money was used for different activities. There is no detailed discussion on how the grant money or the co-financing money was used. The terminal evaluation notes that "Regarding co-financing cash contribution to the project by the private sectors involved in the activities has reached approximately 1,573,000 US$ for investment in BAT/BEP. In-kind contribution from the Government was approximately 69,000 US$ according to a report from September 2009 covering the fiscal years of 2007 and 2008 (apparently the data for 2009 and 2010 are missing in this regard). As per the TE: The total co-financing of the project can be calculated in 1,642,000 US$ that is slightly above the desired 1:1.5 ratio for co-financing the received GEF contribution". It is not possible for the reviewer to determine where what funding went.

6.1.2. 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 it did, then in what ways and through what causal linkages?

As per the TE: The Romanian Government was supposed to provide US$ 200,000 (in-cash and in-kind contribution) through the Ministry of Environment and Forests. These in-kind contributions were planned to be mobilized through ICIM and LEPAs, which include salaries, transportation, communication costs, etc. During the evaluation exercise the Evaluation Team requested an up-to-date status of the Government co-financing. The NPC provided the last status report from 2009, which indicated that up to the end of 2008 a total of 69,000 US$ was provided for the project. This fact does not seem to have had any significant impact on the project as the co-financing that materialized was higher than expected overall. This was because the PCB owners invested in the projects.

6.2. Delays

6.2.1. 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 it did, then in what ways and through what causal linkages?

The duration of the project was planned to be two years. The cooperation agreement between UNIDO and ICIM as executing agency is dated 31st November 2007, although the activities have started in June 2006, with putting in place the project related management and coordination, as well as forming the Project Steering Committee. The project started with some delay due to the negotiation with ICIM on the terms and conditions of the implementation. The discussions concluded that the UNIDO should have a direct involvement in subcontracting national experts and controlling the expenditures. Therefore, a subcontract was signed between the Implementing Agency and the Executing Agency. National Experts were hired by UNIDO from ICIM through reimbursable loans, or contracted directly by UNIDO. Certain expenditures were directly paid by UNIDO through the local UNDP office. All equipment procurements were also undertaken directly by UNIDO. The technical activities started officially in January 2008, which was to a certain extent a failure, since due to the cold weather and heavy snow, the expert teams had difficulties in undertaking the inventory exercise, especially in remote areas. At the end, although the project exceeded its timeline, the budget was not overspent.

6.3. Country ownership

6.3.1. 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:

The project appears well anchored in the country in terms of addressing the highest priority area for action - identified in the NIP endorsed in 2004 (for the SC). The governmental agency implementing the project, ICIM, had a strong ownership of the project according to the TE. The ICIM are planning the same level of activity (inspecting sites) for 2010 as in 2009. The demonstration areas as well as the involved private stakeholders were also important partners that were incentivezed to become and stay involved, because it benefitted their competitiveness on the market (which also lead to them making significant investments). The PCB owners also remained very interested as the technologies of the project brought the PCB disposal prices down drastically (from 5.5 usd/kg to 1.2 usd/kg.).

7. Assessment of project's Monitoring and Evaluation system

7.1. *M&E design at entry* – ***Moderately Unsatisfactory***

There is no information on the project's M&E system at Entry in the TE. However the logframe in the Pro Doc is well developed and included outcome level indicators, means of verification as well as assumption and risks. There are no stress reduction indicators in the logframe.

7.2. *M&E implementation*- ***Moderately Unsatisfactory***

There is limited information on the project's M&E system at Implementation in the TE. TE and UNIDO evaluation office rating of M&E during implementation is MU. However the logframe has been included in the TE and each activity and output assessed. There are no indicators included and no means of measuring stress reduction in the log frame. There does not seem to have been any elaborate M&E system put in place for the project during its operation, but rather it consisted of meetings and reports. Nevertheless adaptive management did take place and ensured a successful project implementation when the context of the project changed (privatization of main collaborator that as a result dropped out of project).

8. Assessment of project's Quality of Implementation and Execution

8.1. *Overall Quality of Implementation and Execution* –***Satisfactory***

8.2. *Overall Quality of Implementation*- ***Satisfactory***

The TE rates UNIDO as HS in its supervision and backstopping. The TE further states: UNIDO, as implementing agency provided a backstopping officer at its Headquarters. The International Chief Technical Advisor was nominated to transfer international knowledge and expertise in PCBs management to Romania. He was one of the key persons in transferring knowledge to the local expert teams through training workshops, on the job trainings and daily technical backstopping. He assisted in identification of the required technical infrastructure for the upgrade of the interim storage location.

8.3. *Overall Quality of Execution* – ***Moderately Satisfactory***

The (TE) evaluation team concludes that the executing Agency has fulfilled its obligations satisfactorily (especially strong technically). The project was able to adapt to a new and unforeseen circumstance that lead to a shift in project focus and was essential to the successful implementation of the project (as described above in several sections). The TE outlines however that the ICIMs leadership changed several times in the past three years, which to a certain extent has hampered the timeliness of the implementation. Furthermore, the project monitoring left room for improvement. Although some progress reports were submitted, there does not seem to have been any systematic M&E system put in place for this project. The project start was delayed but this delay did not have any significant impact on the project implementation and did not lead to any incurred costs. The project was very successful in engaging and developing a working relationship with private sector actors in Romania which lead to better project outputs and outcomes. The project exceeded targets of reduced PCB waste by 4 times and also reduced the price of waste disposal from 5.5. usd/kg to 1.2 usd/ kg - significant achievements. ICIM, as executing agency undertook technical and management related duties under the leadership of the National Project Coordinator. ICIM also provided sixteen technical experts to the project and established a project office with one secretary. The NPC provided secretarial assistance to the Project Steering Committee as well. ICIM dedicated a laboratory space for the analytical instruments and storage locations for the samples received during the inventory exercise. The electronic PCB database is located within the ICIMs server. The duration of the project was planned to be two years. The cooperation agreement between UNIDO and ICIM as executing agency is dated 31st November 2007, although the activities have started in June 2006, with putting in place the project related management and coordination, as well as forming the Project Steering Committee.

The project has started with some delay due to the negotiation with ICIM on the terms and conditions of the implementation. The discussions concluded that the UNIDO should have a direct involvement in subcontracting national experts and controlling the expenditures.

Therefore, a subcontract was signed between the Implementing Agency and the Executing Agency. National Experts were hired by UNIDO from ICIM through reimbursable loans, or contracted directly by UNIDO. Certain expenditures were directly paid by UNIDO through the local UNDP office. All equipment procurements were also undertaken directly by UNIDO. The technical activities started officially in January 2008, which was to a certain extent a failure, since due to the cold weather and heavy snow, the expert teams had difficulties in undertaking the inventory exercise, especially in remote areas.

At the end, although the project exceeded its timeline, the budget was not overspent.

9. Quality of the Terminal Evaluation Report

Criteria	Rating	GEF EO Comments
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	**Satisfactory**	Outcomes and impact were discussed sufficiently in the TE.
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	**Satisfactory**	The report is internally consistent and overall well written. The evidence presented is collected from the 4 sites the evaluation team visited - these were 4 out of 339 company sites, and is therefore a very small sample to extrapolate from.
To what extent does the report properly assess project sustainability and/or project exit strategy?	**Moderately Satisfactory**	The terminal evaluation does not sufficiently elaborate on exit strategies put in place or sustainability issues facing the project as it has come to its close. The Government / private sector are intending to continue to put resources into the established structures but it is not spelled out or elaborated on in any detail. Funding sources for the future are not discussed in the report. There is a section on Sustainability in the TE (legal, technical, financial and institutional) which addresses this aspect partly but it is too brief and general in nature. No specific arrangements are mentioned.
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	**Moderately Unsatisfactory**	The lessons in the terminal evaluation are not well written and are not adding a lot of value. Nonetheless, this project was successful in its achievements and could be replicated elsewhere in terms of the technology and approach used for waste disposal of PCBs. (see lessons in section above)
Does the report include the actual project costs (total and per activity) and actual co-financing used?	**Moderately Satisfactory**	The TE includes proposed and actual costs (in the co-financing table) by type of funding. No details on cost per activity is included.
Assess the quality of the report's evaluation of project M&E systems:	**Moderately Satisfactory**	There is no detailed section that evaluates the M&E system of the project, however the TE goes through the logframe activities and outputs and mentions progress reports being completed. Overall very limited information on the M&E setup for this project.

Annex I – Project Impacts as assessed by the GEF Evaluation Office

Did the project have outputs contributing to knowledge being generated or improved?	No

WHAT OUTPUTS CONTRIBUTED TO KNOWLEDGE BEING GENERATED OR IMPROVED?

Is there evidence that the knowledge was used for management/ governance?	No

HOW WAS THIS KNOWLEDGE USED AND WHAT RESULTED FROM THAT USE?

Did the project have outputs contributing to the development of databases and information-sharing arrangements?

Yes

WHAT OUTPUTS CONTRIBUTED TO INFORMATION BEING COMPILED AND MADE ACCESSIBLE TO MANY?

Countrywide plan of actions for PCB elimination - PCB database for the whole country for the phased-out equipment is in place at NEPA. Transformer database for the country is available in ICIM (page 58). Development of a focused inventory of PCB containing equipment and wastes. The inventory reports are available on the internet on ICIMs servers.

Is there evidence that these outputs were used?	Yes

TO WHAT EXTENT HAVE THESE OUTPUTS BEEN USED?
WHAT HAS RESULTED FROM INFORMATION BEING MADE ACCESSIBLE TO OTHERS?

There is now a general understanding on the PCB issues, PCB -owners have developed and submitted PCB eliminating plans to the respective authorities. Their employees generally follow the ESM system on PCBs and the required occupational safety measures. NEPA is keeping their PCB database up-to-date. PCB disposal facilities have started their operation in Romania and private sector investment in this regard is improving.

Did the project have activities that contributed to awareness and knowledge being raised?	Yes

WHAT ACTIVITIES CONTRIBUTED TO AWARENESS AND KNOWLEDGE BEING RAISED?

Several activities were addressing transfer of information and knowledge. Several training programmes, workshops and publications were developed and undertaken. Information and awareness programmes were developed by ICIMs expert teams under the guidance of the CTA. One of the main achievements in this regard is the development of a comprehensive environmentally sound management (ESM) system for PCBs. It includes all the necessary tools, guidelines and practices in a written form which are required for successful PCBs management and disposal. The ESM of PCBs was elaborated through the joint work of all involved stakeholders, the Government, public and private entities and NGOs. It was presented, explained and tested in the selected three demonstration areas. Private sector beneficiaries, especially the three operators of the demonstration areas have developed several brochures, informing their potential costumers on their PCB management system, technologies and advertising their services. This expertise has already been utilized since two of the operators won large Government tenders for hexachlorocyclohexan (HCH) elimination and site decontamination. ICIM has also developed a brochure on the achievements of the project Over the course of the implementation several workshops were organized to disseminate project related knowledge and expertise. TE Page 49: The project provided on site trainings to 339 enterprises. The number of trained people could not be retrieved during the fact finding mission. Project approach of training of trainers was successful and efficient. The CTA held a two-week theoretical on-the-job training for the Expert Teams, then the teams on the field trained the PCB-owners, LEPA and REPA personnel, the employees of the interim storage locations, etc. Several meetings were held with the project stakeholders, especially during the development of the ESM system.

Was any ***positive*** change in behavior reported as a result of these activities? Yes

WHAT BEHAVIOR (POSITIVE OR NEGATIVE) HAS CHANGED AS A RESULT?

As stated above (per TE), There is now a general understanding on the PCB issues, PCB -owners have developed and submitted PCB eliminating plans to the respective authorities. Their employees generally follow the ESM system on PCBs and the required occupational safety measures. NEPA is keeping their PCB database up-to-date. PCB disposal facilities have started their operation in Romania and private sector investment in this regard is improving.

Did the project activities contribute to building technical/ environmnetal management skills? Yes

WHAT ACTIVITIES CONTRIBUTED TO ***TECHNICAL/ENVIRONMENTAL MANAGEMENT SKILLS*** BEING BUILT OR IMPROVED?

The project has trained 339 PCB-owners, personnel of 3 interim storage locations, 16 national experts and several other government employees. The Evaluation Team believes that the necessary pool of experts have been created to allow the continuation of project activities (page 52). 16 people at ICIM received intensive on-the-job training, laboratory equipments were provided to ICIM and the three selected operators, Government officials were informed on the PCB-related obligations of the Stockholm Convention and the development of the ESM guidelines. ICIM has the necessary capacity to assist the Government and the private sector in PCB management. They also have the necessary capacity to extend their services in undertaking research and development in the field of PCBs.

Is there evidence of these skills being applied by people trained?	Yes

HOW HAVE THESE SKILLS BEEN APPLIED BY THE PEOPLE TRAINED?

Due to the ESM system and the systematic trainings at PCB owners and interim storage locations, PCB related occupational safety measures are strictly followed and are adhered to (according to the authors of the terminal evaluation).

Did the project contribute to the development of legal / policy / regulatory frameworks?	Yes
Were these adopted?	Yes

WHAT LAWS/ POLICIES/ RULES WERE ADOPTED AS A RESULT OF THE PROJECT?

As per the terminal evaluation - The project has strengthened the legislative and regulatory framework for the management of PCBs. New legislation has been developed and enacted which clarified the obligations for PCB management, reporting, phase-out and disposal. The Governmental decision 173/13.13.2000 on regulating the special management and control of PCBs and similar compounds was revised three times by 291/07.04.2005, 210/28.02.2007 and 975/22.08.2007 decisions to harmonize PCBs related legislations with international standards. A governmental decision was made to update the National Implementation Plan - Government decision no. 1497 of 19 November 2008. The ESM system has been developed and is waiting for the approval by the Ministry of Environment and Forests. This system is a guideline which is waiting for signing by the respective environmental authority. Once approved, it will become a legal binding document in Romania, therefore PCB-owners will be required to follow its principles. The National Environment Guard is undertaking inspections to assure adherence to the environment related legislations. The National Environment Protection Agency is also monitoring compliance to the reporting and PCB phase-out obligations of the PCB-owners.

Did the project contribute to the development of institutional and administrative systems and structures?	Yes
Were these institutional and administrative systems and structures integrated as permanent structures?	Yes

WHAT OFFICES/ GOVERNMENT STRUCTURES WERE CREATED AS A RESULT OF THE PROJECT?

The Government of Romania, through the Ministry of Environment and Forests, nominated the National Research-Development Institute for Environmental Protection - ICIM to be the National Executing Agency in charge of coordinating activities at country level. The institute expertise has been proven through their leading role in the country during the development of the National Implementation Plan (NIP). Task teams have been composed for the implementation of specific activities of the project. Project related decisions and monitoring at country level are conducted by a Project Steering Committee. Tee ICIM is a well established Institute (1952) with 320 employees. The Research-Development National Institute for Environmental Protection (ICIM) is a national institute coordinated by the Romanian Ministry of Environment and Forests. It performs - on contracted bases - complex researches and studies in the field of environmental protection and engineering, with accent on the management of waters, air and ecosystems.
According to the TE the Institute is one of the largest and most vigorous institutions in Romania. It is composed of strong, distinctive and coherent groups of researchers.

Did the project contribute to structures/ mechanisms/ processes that allowed more stakeholder participation in environmnetal governance?

Yes

Were improved arrangements for stakeholder engagement integrated as permanent structures?

Yes

WHAT STRUCTURES/ MECHANISMS/ PROCESSES WERE SUPPORTED BY THE PROJECT THAT ALLOWED MORE STAKEHOLDERS/ SECTORS TO PARTICIPATE IN ENVIRONMENTAL GOVERNANCE/ MANAGEMENT ACTIVITIES?

Institutional capacity was strengthened at all key implementation partners, i.e. the Government, ICIM, Local and Regional Environment Protection Agencies of the demonstration areas, PCB management enterprises and owners of PCB-containing equipment and wastes. According to the Terminal Evaluation this project is a good example of good collaboration between Government and Private Sector stakeholders. Strong coherence was observed with on going initiatives. The project has complemented the PCB inventory development activities of the Local Environment Protection Agencies. It supported the private sector in investing on BAT/BEP in the field of PCB management, thus creating capacity in Romania to treat PCBs locally. It also created awareness on the PCB issue at owners of PCB equipment. New technologies for PCB management resulted in lower price for disposal that eventually boosted PCB owners to speed up the disposal of their equipment instead of keeping them in storage.

Did the project contribute to informal processes facilitating trust-building or conflict resolution?

Yes

WHAT PROCESSES OR MECHANISMS FACILITATED TRUST-BUILDING AND CONFLICT RESOLUTION?
WHAT RESULTED FROM THESE?

Good collaboration between the Government and the Private Sector stakeholders facilitated trust-building and development of a working relationship.

Did the project contibute to any of the following: Please specify what was contributed:

Technologies & Approaches	Yes	New technology for elimination of PCBs in Romania (previously had to be exported) and the development of a comprehensive evironmentally sound management (ESM) system for PCBs which will be obligatory after the environmental authorities will finish its institutionalization through a legally binding document (Government Decision or Ministerial Order). Once approved, the project objectives will be replicated in whole the country. The Inventory activities aslready cover the whole country, therefore expert teams of ICIM have provided on the job trainings to all the eight REPAs in the country.
Implementing Mechanisms/Bodies	Yes	As desrcibed above.
Financial Mechanisms	Yes	Project introduced a mechanism to reduce the price of PCB waste significantly.

Did r**eplication** of the promoted technologies, and economic and financial instruments take place? Yes

SPECIFY WHICH PLACES IMPLEMENTED WHICH TECHNOLOGIES/APPROACHES OR ASPECTS OF A TECHNOLOGY/APPROACH.

WHAT WAS THE RESULT IN THOSE PLACES (ENVIRONMENTAL & SOCIOECONOMIC)?

As per the TE: The results of the implementation of the ESM system in the three demonstration areas have been extrapolated to the whole country (in output number four) culminating in the countrywide inventory estimate and PCB phase-out plan. The development of a comprehensive evironmentally sound management (ESM) system for PCBs which will be obligatory after the environmental authorities will finish its institutionalization through a legally binding document (Government Decision or Ministerial Order). Once approved, the project objectives will be replicated in whole the country. The RESULTS are: disposal of 1,166 tons of PCB waste (other results are: Capacity to solve the PCB issues at the
country level through strengthened institutions and infrastructure, PCB- releases into the environment are minimized, Human exposure to PCBs are avoided, PCB disposal options and facilities are available, Replicable programme for PCB management for national or international use, Well-trained technical personnel is available in PCB management)

Did **scaling-up** of the promoted approaches and technologies take place? Yes

SPECIFY AT WHAT ADMINISTRATIVE & ECOLOGICAL SCALE AND WHICH TECHNOLOGIES/APPROACHES OR ASPECTS OF A TECHNOLOGY/APPROACH WAS ADOPTED.

HOW WAS IT MODIFIED TO FIT THE NEW SCALE? WHAT WAS THE RESULT AT THE NEW SCALE/S (ENVIRONMENTAL & SOCIOECONOMIC)?

The results of the implementation of the ESM system in the three demonstration areas have been extrapolated to the whole country (in output number four) culminating in the countrywide inventory estimate and PCB phase-out plan.

Did **mainstreaming** of the promoted approaches and technologies take place? Yes

SPECIFY HOW (MEANS/ INSTRUMENT) AND WHICH ASPECTS OF THE TECHNOLOGY/APPROACH WAS INCORPORATED INTO THE EXISTING SYSTEM. WHAT WAS THE RESULT OR STATUS (ENVIRONMENTAL & SOCIOECONOMIC)?

The results of the implementation of the ESM system in the three demonstration areas have been extrapolated to the whole country (in output number four) culminating in the countrywide inventory estimate and PCB phase-out plan. AND the development of a comprehensive evironmentally sound management (ESM) system for PCBs which will be obligatory after the environmental authorities will finish its institutionalization through a legally binding document (Government Decision or Ministerial Order). Once approved, the project objectives will be replicated in whole the country. However, there project has yet to produce outcomes at the country level, currently at local level (environmental). The procedures per se are similar in terms of approach nationally/locally as it concerns a management system for PCBs with set guidelines on how to reduce the release.

Did r**emoval of market barriers** and sustainable market change take place? Yes

SPECIFY HOW DEMAND HAS BEEN CREATED FOR WHICH PRODUCTS/ SERVICES THAT CONTRIBUTE TO GEBs.

Many barriers were identified at the beginning of the project, the most important one being that "Hazardous waste management companies could only export PCB wastes abroad since Romania were lacking the necessary technologies and expertise". Due to the lack of appropriate countrywide inventory of PCB-containing equipment, Romania was lacking the necessary information a) to undertake its regular reporting as per the Stockholm Convention and 2) to develop a comprehensive PCB phase-out plan. The private sector was mostly reluctant to implement the PCB containment, phasing-out and disposal measures The project completely removed this barrier by putting in place BAT/BEP for local preprocessing and disposal of PCB wastes at the demonstration areas. Three enterprises have invested in upgrading their technologies in this regard. It resulted in significant reduction in the PCB disposal price (from ~5.5 US$/kg to 1.2 US$/kg) which is likely to be sustained. **This consequently boosted the amount of PCBs disposed (which contributes to the GEBs). The project target of 300 tons to be eliminated was by far exceeded. At the time of evaluation a total of 1,166 tons of PCBs had been eliminated.** The TE includes a "barrier analysis" and the extent to which these have been removed (page 34-36).

Based on most of the project's components and/or what it generally intended to do, what type of project would you say this is?

Combination <--*dropdown menu*

If "combination", then of which types?

Institutional Capacity (governance) & Implementation Strategies <--*dropdown menu*

*QUANTITATIVE OR ANECDOTAL DETAILS ON HOW ENVIRONMENTAL **PRESSURE HAS BEEN REDUCED/PREVENTED** OR ON HOW ENVIRONMENTAL **STATUS HAS CHANGED** AT THE DEMONSTRATION SITES AS A CONTRIBUTION/RESULT OF PROJECT ACTIVITIES. FOR SYSTEM LEVEL CHANGES, SPECIFY THE ADMINISTRATIVE AND/OR ECOLOGICAL SCALES.*

Was stress reduction achieved?					Yes
If so, at what scales?	Please mark 'x' for all that apply				
	x	Local	x	Intended (local)		Unintended (local)
		Systemic		Intended (systemic)		Unintended (systemic)
How was the information obtained?	x	Measured		Anecdotal		

Was there a change in environmental status?					No
If so, at what scales?	Please mark 'x' for all that apply				
		Local		Intended (local)		Unintended (local)
		Systemic		Intended (systemic)		Unintended (systemic)
How was the information obtained?		Measured		Anecdotal		

Evidence of intended stress reduction achieved at the **local level**

The project has contributed to global environmental objectives, through developing and introducing the ESM system for PCBs. **The environmental releases and human exposures by PCB have been reduced.** By removing those equipments and wastes, which were in critical condition, the risk of PCB releases to the global atmosphere, soil, and water bodies were eliminated. The project has removed and disposed of 1,166 tons of PCB-containing wastes (project target was 300 tons = approx. 4 times more achieved). The project has contributed to the goals of two global treaties, the Rotterdam Convention on the Prior Informed Consent Procedures for Certain Hazardous Wastes and the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal. **There is no measurement on how much the pressure on the environment has been reduced (no such indicators) other than the reduction of 1,166 tons of PCB waste.**

Evidence of intended stress reduction at a **systemic level**

Evidence of intended changes in environmental status at the **local level**

Evidence of intended changes in environmental status at a **systemic level**

Evidence of unintended changes in stress or environmental status at the **local level**

Evidence of unintended changes in stress or environmental status at the **systemic level**

Were arrangements to collect data on stress reduction and environmental & socioeconomic status in place during the project?

Environmental	No
Socioeconomic	No

To what extent were arrangements in place and being implemented during the project? Briefly describe arrangements.

To what extent did these arrangements use parameters/ indicators to measure changes that are actually related to what the project was trying to achieve?

Were arrangements to collect data on stress reduction and environmental & socioeconomic status in place to function after the project?

To what extent were arrangements put into place to function after GEF support had ended? Briefly describe arrangements.

Was there a government body/ other permanent organization with a clear mandate and budget to monitor environmental and/or socioeconomic status?

Has the monitoring data been used for management?

How has the data been used for management? Describe mechanisms and actual instances.

Has the data been made accessible to the public?

How has the data been made accessible to the public? Describe reporting systems or methods.

"SOCIOECONOMIC" REFERS TO ACCESS TO & USE OF RESOURCES (DISTRIBUTION OF BENEFITS), LIVELIHOOD, INCOME, FOOD SECURITY, HOME, HEALTH, SAFETY, RELATIONSHIPS, AND OTHER ASPECTS OF HUMAN WELL-BEING .AS MUCH AS POSSIBLE, INCLUDE "BEFORE" AND "AFTER" NUMBERS, YEARS WHEN DATA WAS COLLECTED, AND DATA SOURCES.

Did the project contribute to **positive** socioeconomic impacts? Yes

If so, at what scales? Please mark 'x' for all that apply

x	Local		Intended (local)		Unintended (local)
	Systemic		Intended (systemic)		Unintended (systemic)

How was the information obtained?

x	Measured		Anecdotal

Did the project contribute to **negative** socioeconomic impacts? No

If so, at what scales? Please mark 'x' for all that apply

	Local		Intended (local)		Unintended (local)
	Systemic		Intended (systemic)		Unintended (systemic)

How was the information obtained?

	Measured		Anecdotal

Evidence on intended socio-economic impacts at the **local level**

Human and environmental exposure to PCBs are reduced as 1,166 tons of PCB waste is eliminated = Local impact on health and safety

Briefly describe the key lessons, good practice or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The lessons in the terminal evaluation are not well written and are not adding a lot of value. Nonetheless, this project was successful in its achievements and could be replicated elsewhere (other countries with similar conditions) in terms of the technology and approach used for waste disposal of PCBs. As per the TE lessons learned:

1) Technology is a combination of several actions, like joint ventures, licensing, purchase of machinery, consultancy and training, maintenance contracts and even new technological processes originated and developed in the enterprises themselves.
Implementation or adaptation of technological changes normally involves investments and consequently it originates the problem of financing for the interested enterprises.
In the case of this project it has been demonstrated that technology development reduces the prices for the proper disposal of the waste and that this approach is more sustainable than subsidizing the disposal costs of the wastes.

2) The upgrading of local disposal capacity for waste is helping in resolving the national disposal problem. Further, improving the available national technological capabilities it is a considerable help for the country for not depending on the changes of the global markets.

3) Proper and regular monitoring of the project gives the opportunity to adjust timely the production of the outputs according to the initial planning.

4) Following the evaluation exercise, the national stakeholders and the members of the Steering Committee should be informed and invited well in advance and in writing by the management of the project to the final presentation of the conclusions and recommendations by the Evaluation Team.

5) During the formulation of a project particular attention should be paid to the quantitative figures of the outputs to be accomplished, in order to avoid that later, when evaluating the results achieved by the project, these are much more than expected in relation to the target indicators expressed in the project document. In some cases this may indicate that the forecast was too optimistic or too pessimistic.

6) The compilation, analysis and dissemination of the experiences of a positive and successful project require that actions are started to promote the replication of the results in other regions or countries. The positive results obtained may create the opportunity for developing mechanisms at national level to encourage and promote the utilization of co-financed resources.

Briefly describe the recommendations given in the terminal evaluation

The TE offers a number of recommendations. The recommendations were mostly around the importance of approving and publishing the legislation on ESM systems, using the capacity build within ICIM for other POPs projects, continue the monitoring of implementation of the phase-out plans, and the dissemination of the results of the project. More specifically the recommendations in TE were: Ministry of Environment and Forests shall approve and publish the ESM system. National Environment Guard should regularly assure the enforcement of the ESM system. UNIDO and the GEF should disseminate the results of the project in other countries for possible replication * It is imperative that Ministry of Environment and Forests and NEPA continues the monitoring of the PCB inventory and disposal activities. The Stockholm Convention requires regular national reporting on PCB inventory * NEPA and ICIM shall regularly inform the POPs focal point in the Ministry of Environment and Forests on the PCB inventory and phase-out activities so that the concerned authorities could be informed and kept updated * Enterprises dealing with hazardous wastes management should continue to invest in adopting BAT/BEP. The Government should continue to support promoting private sector investments into this field. State-of-the-art technologies can further reduce the costs of disposal of not only PCBs, but also of other POPs such as hexachlorocyclohexanes (HCH). UNIDO and GEF should continue supporting projects in the area of POPs, particularly considering that new chemicals have been added to the list of the Stockholm Convention. The National Environment Guard should continue PCB-related inspections in their regular activities and shall accompany the inventory teams to PCB owners, as already requested by the National Project Coordinator in a letter to the Guard dated 23rd June 2009.