1. PROJECT DATA				
			Review date:	7/28/05
GEF ID:	867	UNDP no. 1997	at endorsement (Million US\$)	at completion (Million US\$)
Project Name:	Regional - Transfer of Environmentally Sound Technologies (TEST) to Reduce Transboundary Pollution in the Danube River Basin.	GEF financing:	\$0.99	\$0.99
Country:	Bulgaria, Croatia, Hungary, Romania, Slovak Republic	Co-financing:	\$1.41	\$0.48
Operational Program:	OP8 and OP10	Total Project Cost:	\$2.40	\$1.47
IA	UNDP	<u>Dates</u>		
Partners involved:	UNIDO	Work Program date 10/2000		
			CEO Endorsement	10/05/2000
		Effectiveness/ Prodoc Signature (i.e. date project began)		01-04-2001
		Closing Date	Proposed: 04/2004	Actual: 10/2004
Prepared by: Antonio del Monaco	Reviewed by: Aaron Zazueta	Duration between effectiveness date and original closing: 3 years and 3 months	Duration between effectiveness date and actual closing: 3 years and 10 months	Difference between original and actual closing: 7 months
Estimated duration: 3 years	Actual duration:	TE completion date: March 2005	TE submission date to GEF OME: Jun 2005	Difference between TE completion and submission date: 3 months

### **GEFM&E** Terminal Evaluation Review Form

#### 2. SUMMARY OF PROJECT RATINGS

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

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. OED)	GEFME
2.1 Project impacts	N/A		N/A	
2.2 Project outcomes	HS	84%	N/A	S
2.3 Project sustainability	N/A	75%	N/A	S
2.4. Monitoring and evaluation	N/A	85%	N/A	MS

2.5. Quality of	N/A	N/A	N/A	S
the evaluation				
report				

Should this terminal evaluation report be considered a good practice? Why? This terminal evaluation report can not be considered a good practice because the information provided on actual project costs and cofinancing was not complete and a section on lessons was not explicit.

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

#### 3.1 Project Objectives

• What are the Global Environmental Objectives? Any changes during implementation? According to the project brief, the objective of the project is to build capacity in existing cleaner production institutions to apply the UNIDO Transfer of Environmentally Sound Technology (TEST) procedure to transfer technology to 20 pilot enterprises that are contributing to transboundary pollution, primarily nutrients, in the Danube River Basin and the Black Sea.

• What are the Development Objectives? Any changes during implementation?

According to the project brief, there are three immediate objectives. 1) to establish a TEST focal point in the National Center for Pollution Control or Pollution Prevention Centers (NCPC/PPC) (US\$180,000); 2) To reduce the discharge of transboundary pollution/nutrients into the Danube River and Black Sea from the 20 pilot enterprises in the five countries (US\$2,380,000); and 3) to disseminate the [experience with the] 20 pilot enterprises to other enterprises in the five countries as well as other Danubian countries (US\$100,000).

#### 3.2 Outcomes

• What were the key expected outcomes and impacts indicated in the project document?

According to the project document, at the end of the 36 months project period, the following specific situation is anticipated:

a. All enterprises participating in the full program would have prepared a Sustainable Enterprise Strategy (SES) including business plans, social action commitments, environmental compliance schedules, implementation plans and best environmental practices needed to integrate environmentally sustainable technologies into their production processes;

b. Environmentally sound technology options (some combination of advanced process, pretreatment and final pollution control technologies) successfully identified for three-quarters of the 20 enterprises. These options would bring these enterprises into compliance with environmental norms of the EU and the Convention;

c. Significant (at least 30 per cent) pollutant reductions, with an emphasis on nutrients, in at least one-half of the participating enterprises and some pollutant reductions in the other one-half as a result of implementing only cleaner production (process change) measures;

d. Capacity built in networks of national institutions to advise some of the 73 remaining industrial hot spots in the five participating countries on how to implement the TEST procedure.

e. A TEST management toolkit (technical manuals on enterprise viability, cleaner production, industrial management, environmentally sound technology assessment, sustainable enterprises strategy, environmental management systems and investment negotiations as well as 20 case studies and information sources on subsector specific ESTs tailored for the needs of Danubian enterprises) would be available for teams of national experts in working with the remaining 80 enterprises to identify and install the most appropriate ESTs at least cost; and

f. The TEST program and toolkit disseminated to industrial enterprises identified as hot spots in the TDA and located in Danubian countries. If a follow-up stage should be implemented in other Danubian countries, a project document will be prepared for a technical cooperation program in these countries.

• What were the major project outcomes and impacts as described in the TE? The TE indicates that capacity building efforts at Cleaner Production/Pollution Control Centers, coupled with the technical assistance these centers and the project provided to industries, as well as the demonstration projects in 17 industries resulted in considerable investments (US\$1.66 M) made by the selected companies to implement cleaner production processes and environmentally sound technologies. These investments and changes in operations can be classified into three categories: A. Good management practices and changes in operation resulting in no cost or low cost options; B. Adoption of cleaner technologies with low costs and short pay back periods; and C. Larger scale environmentally sound technologies with high costs and long pay back periods. The impacts of these measures were presented in the TE and summarized in the last PIR and resulted in the following economic and environmental benefits:

- US\$ 1.3 M yearly financial savings
- 4.6 M m3/y of wastewater discharge reduction in the Danube river basin
- Average 30% of BOD/COD reduction in effluent per unit of production
- Other relevant outcomes include:
- 4 plants have implemented Environmental Management Systems EMS and were certified ISO 14001
- 11 industries have EMS documentation in place ready for ISO certification

## 4. GEF OFFICE OF M&E ASSESSMENT

#### A Relevance

Rating: 5 (S)

 In retrospect, were the project's objectives, its design, expected outcomes (original and/or modified) consistent with the focal areas/operational program strategies? Explain

The TE indicates that based on the Operational Program guidance and the requirements of the SAP, it is clear that the TEST Project is directly meeting the needs of the countries and the Danube region as a whole as well as conforming to the Operational Strategy for International Waters (OP8 and OP10) as set out by GEF, and therefore providing effective global benefits. There was plenty of evidence in the TE to support this statement as discussed in this review. **B** Effectiveness Rating: 5(S) I. To what extent did the project achieve the expected outcomes as described in the project document? Rating: 5 (S) The project substantially achieved the expected outcomes as described in the project document II. Are the project outcomes as described in the TE commensurable with the problems the project was intended to address (i.e. original or modified project Rating: 5 (S) objectives)? Explain Yes. It is important to consider that the reduction in waste water discharge and average reduction of BOD were based on self reporting of the industries involved and could not be measured independently during the TE. Water Authorities are responsible for setting the standards for permitted effluents associated with operating licenses and may also undertake spot checks and financial penalties are getting stiffer in line with the requirements to meet EU standards. The TE argues that industries have an incentive to do accurate monitoring of effluents because this allows them to assess whether they are on track in the improvements which also reduce their costs. However, the TE also indicates that there is a need for industries to keep more detailed records of improvements, reduction in pollution and waste discharges, toxicity levels to increase the credibility of the data presented. Regarding dissemination of the experiences (the third objective of the project), the project organized a series of workshops with key stakeholders in all participating countries but a strategy to take these dissemination efforts towards replication and market transformation was missing. C Efficiency (cost-effectiveness) Rating: 5 (S) Include an assessment of outcomes in relation to inputs, costs, and implementation times based on the following questions: Was the project cost effective? How does the cost-time Vs. outcomes compare to other similar projects? Where there any bureaucratic, administrative or political problems that

delayed of affected in other ways the implementation of the project?

The TE indicates that the project demonstrates one of the best investments that GEF has made

in an MSP project within the International Waters portfolio. The challenge now is to build on the project achievements to transfer the lessons, practices and procedures to other key polluting industries in the Danube River Basin and elsewhere. This project can be considered very cost effective given its budget, time frame and results.

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

A Financial resources Rating: 5 (	S)
The availability of finance (for example through loans) for industries to implement the more	
expensive cleaner production measures with longer payback periods still remains to be resolve	ed.
Some country government like the Croatian, have created environmental trust funds based on	
collection of fees from vehicle and industry CO2 emissions. Although the funds are intended to	)
reduce CO2 emissions, stakeholders believe the government may use them for wastewater	
treatment. The TE indicates that considerable funding is being made available for technical	
capacity building through various donor programs for the project participating countries to enal	ole
them to comply with the more stringent EU environmental standards.	
B Socio political Rating: 5 (	S)
The TE indicates that the enhanced national capacity to deliver integrated services is already	-1
demonstrating sustainability as the demand from the industrial sector for such services is now	
increasing in all countries. According to the TF there are market forces now driving this proce	ee
that will ensure such sustainability, at least in the short-term	50
C Institutional framework and governance Rating: 5	(S)
The TE indicates that the industrial sector and the local environmental authorities are becoming increasing	
aware on improving environmental performance as FLI Directives become more and more pressing. This	igiy
has increased demand for environmentally sustainable technologies and for formally-recognized and	
accredited cleaner production techniques. In this regard, the general feedback at the industrial level is the	at
once a company has successfully attained ISO 14000 accreditation it will make every effort to keep it rati	ner
than have to go through a renewed and costly reappraisal. The TE also indicates that one main success	
driver for the project has been the need to comply with EU standards on water quality, discharges and ai	r
emissions. Because a company has to use an accredited agency to take measurements and report to the	Э
government there are limited opportunities for fraudulent reporting.	
D Ecological (for example, for coffee production projects, reforestation for carbon	
sequestration under OP12, etc.) Rating: N	/ <b>A</b>
N/A	
E Examples of replication and catalytic outcomes suggesting increased likelihood of	
sustainability Rating: 4 (F	IS)
The TE indicates that activities for replication and transfer of lessons from the Project's achievements to	
other beneficiaries and stakeholders within the countries and the Danube Basin as a whole were weak. I	ne
I I multaled that these can be related to the absence of any specific transfer and replication mechanism	or to
some extent 3 year time limitation). In addition, aside from dissemination workshops, the Project Docum	ont
did not include a strategy for replication of project activities to other industries, even though it was one of	the
project objectives.	

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

A. Effective M&E systems in place: What were the accomplishments and shortcomings of the project's M&E system in terms of the tools used such as: indicators, baselines, benchmarks, data collection and analysis systems, special studies and reports, etc.? Rating: 4 (MS)

At the industry level, the TE indicated and demonstrated that the project developed a detailed matrix of indicators which effectively follow the TEST process within each enterprise participating in the project and allowed to quantify the changes, improvements and benefits gained through the activities. These indicators covered both process and pollution reduction indicators and are considerably more specific than those included in the original Project Document, providing a more measurable detail of what was achieved.

However, regarding the project overall M&E system, the TE notes general weaknesses in the

selection and use of indicators from the project design and throughout the project. Indicators evolved during the project but were never formally adopted and could have been more related to what the project was trying to accomplish. The TE indicates that there was no mechanism included in the original project design, nor are there any current plans to review the status of the demonstration enterprises or the national counterpart institutions following closure of the project.

B. Information used for adaptive management: What is the experience of the project with adaptive management? Rating: 4 (MS)

The project adapted to changing circumstances and that the M&E system evolved to allow the measurements of project outcomes and even some impacts in terms of water quality improvements. However, the TE indicates that there were weaknesses in the involvement of the UNDP regional office which resulted in the failure to act early on some issues such as the deficit in co-financing. This was important because this shortfall probably was responsible for the lower dissemination of results, shortcomings in replication and transfer of lessons.

Can the project M&E system be considered best practice? No, because it should have been properly laid out from the start.

#### 4.6 Quality of lessons

Weaknesses and strengths of the project lessons as described in the TE (i.e. lessons follow from the evidence presented, or lessons are general in nature and of limited applicability, lessons are comprehensive, etc.)

Strengths	Weaknesses	
	There was not an explicit section on lessons.	
What lessons mentioned in the TE that can be considered best practice or approaches to		
avoid and could have application for other G	EF projects ?	
One of the key lessons mentioned in the TE is th management of industries to quickly adopt meas achieving the environmental protection objectives assessment (CPAs) of industries provided their r of their pollution problems, which also represente the waste of production inputs. This assessment resolving the problems and costs to enable mana remains to be resolved is availability of finance for with longer payback periods.	e approach used by the project to convince ures that would help them reduce costs while s of the project. The cleaner production nanagement to identify more clearly the source ed significant production costs associated with included an analysis of causes, measures for agement to prioritize actions. One key issue that or these industries to implement the measures	

**4.7 Quality of the evaluation report** Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to the "Criteria for the assessment of the quality of terminal evaluation reports" in the document "Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems" for further definitions of the ratings.

**4.7.1 Comments on the summary of project ratings and terminal evaluation findings** In some cases the GEF Office of M&E may have independent information collected for example, through a field visit or independent evaluators working for the Office of M&E. If substantial independent information has been collected, then complete this section with any comments about the project.

4.7.2 ratings	Ratings
A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? Yes	6 (HS)
B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated? Yes	6 (HS)

C. Does the report properly assess project sustainability and /or a project exit strategy? Yes	ct 6 (HS)
D. Are the lessons learned supported by the evidence presented and are they comprehensive? No. The TE lacked a section with specific lessons, although some lessons could be extracted from the report.	e 3 (MU)
E. Does the report include the actual project costs (total and per activity and actual co-financing used? No, but it presents a discussion of co- financing shortcomings, the causes and how the project managed to overcome some of the lack of cofinancing through industry contributions.	/) 3 (MU)
<b>F.</b> Does the report present an assessment of project M&E systems? Yes, a very good assessment. The evaluation focused on the process indicators (training, capacity building, improvements in cleaner production, adoption of other TEST processes, etc) and Stress Reduction indicators (physical changes to handling procedures, construction of waste handling and reduction facilities, end-of-pipe treatments, etc) identified for each enterprise to ascertain the accuracy of the indicators. In all cases that were reviewed the measurable indications were seen to be accurate.	6 (HS)

<b>4.8 Is a technical assessment of the project impacts described in the TE recommended?</b> Please place an "X" in the appropriate box and explain below.	Yes: X	No:
Explain: This project could be an interesting case study of how industries adopted measures that reduce water pollution and helped their bottom line. It would be interesting to see if these measures are still in place two years after project completion and whether they have been implemented in other industries after the project's dissemination efforts.		
Is there a follow up issue mentioned in the TE such as corruption etc.?	, reallocation	of GEF funds,