

EcoLinks Partnership Grants Program
Quarterly Progress Report
July – September 2001

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**EcoLinks Partnership Grants
Quarterly Progress Report
July 1, 2001 – September 30, 2001**

Part I. Narrative Discussion

1. Brief overview of activity status and major accomplishments this quarter.

Status:

Challenge Grants: The third and fourth cycles are in progress. The fifth cycle was launched on March 12 and 78 applications were received by the deadline. The selection panel will meet on November 5 to select the winners. To date 134 Challenge Grants have been awarded for a total of \$6.3 million.

Quick Response Awards: QRAs continue to be offered on a rolling basis. During the quarter, 76 Quick Response Awards were awarded for \$313,200.

Cost Share: By the end of the quarter, IIE had accounted for \$2,777,930 in cost share to the program, exceeding the required amount.

Financial: Estimated total program expenses at the end of the quarter are \$11,964,855.

Major Achievements:

Grants Administration:

- The fifth cycle for Challenge Grants was launched on March 12. Of the 348 Concept papers received, 120 were cleared to proceed to the Full Application stage. 78 Full Applications were received by the deadline. The selection panel will meet on November 5 to select the winners. The breakdown of Full Applications by country is below:

Bulgaria	7	Macedonia	4
Croatia	7	Romania	17
Bosnia	6	Russia Far East	6
Kazakhstan	8	Ukraine	23

- 70 grants from Cycles 3 and 4 are being actively monitored and closed. During the quarter, 19 grants from Cycle 3 were closed and the remaining 31 grants will be closed by the end of the year. Mid-term reports are being reviewed for the 30 grants in Cycle 4.
- In mid-September 2001 a survey was conducted among grantees who participated in Challenge Grants Cycles 1 and 2. The aim was to obtain information on follow-up

activities and feedback on staff support. Questionnaires were sent to 74 grantees (both Project Leaders and American partners), and completed questionnaires were received from 21 of them. The main results were that 71% of the respondents stated that their partnership was continuing, all the respondents said that the capacity of the Project Leader was strengthened as a result of the grant, and 90% rated staff support as either excellent or good. More survey results are provided in Annex A.

- During the quarter, 76 Quick Response Awards were awarded for \$313,195. A listing is provided in Annex B. Of this total, 53 facilitated Challenge Grant applications and 23 pursued environmental trade and investment relationships.
- To date 295 QRAs have been awarded for \$1,254,645. The country breakdown is provided below:

Bulgaria	44	Lithuania	5
Bosnia Herzgovina	3	Macedonia	19
Croatia	17	Moldova	1
Czech Republic	20	Poland	26
Estonia	1	Russia	31
Georgia	3	Romania	48
Hungary	20	Slovakia	5
Kazakhstan	26	Ukraine	23
Latvia	2	Turkmenistan	1

- An example of a QRA success story was reported in Russia Far East. Inkom, a wood finishing company in Vladivostok, had problems related to sawdust accumulation and inefficient joint gluing processing. With a QRA, Inkom's Director traveled to the U.S. to visit Koetter Dry Kiln and to attend the International Woodworking Fair. At the Koetter facility, the Inkom representative studied woodwaste recycling and finger gluing technology. As a result of his meetings, Inkom purchased a \$60,000 energy-efficient dry kiln and reached an agreement to be Koetter's official distributor in Russia Far East.
- During the quarter, a Best Practice was prepared from a closed Challenge Grant. It describes a successful model for collecting and processing petroleum waste in Prahova County, Romania. As a result of this project, the environmental impacts from used oil contamination of land and water were reduced and the used oil waste was converted to an energy resource. The entire Best Practice is provided in Annex C. In addition, twenty Best Practices were posted to the website, a new Best Practice format was prepared that is more user friendly and a new Best Practices webpage was developed that provides search options and is easier to read.
- With IIE's costshare contribution to the program, a consultant with Environmental Management Resources was enlisted to help grantees obtain additional financing to implement their projects. During the quarter, he screened information provided by

the staff for grants awarded in Cycles 1 and 2. He then prepared a short list of nine project concepts that he presented to the IFC. The IFC may have interest in two of them, though more information needs to be collected. He plans to approach additional funders over the next several weeks.

Program Outreach and Coordination:

- During the quarter the Annual Report for FY 01 and the Annual Workplan for FY 02 were submitted to USAID. Both were approved.
- The draft Mid-Term Assessment Report prepared by PricewaterhouseCoopers was reviewed. Corrections and requests for clarification were submitted to PwC. The final report was highly favorable, confirming IIE/REC's effective program administration and financial management.
- The EcoLinks team in Russia Far East organized Angela Crooks' trip to evaluate the program there and to consider new grant topics. Her travel report was quite positive. Angela noted that EcoLinks is the only "brown" program in Russia and the only one that can help develop feasibility studies. She reported that the participation of an American partner enhanced the credibility of the Russian partner in the eyes of potential financing institutions.

Staffing Office and Network:

- Effective September 1 Violeta Kogalniceanu joined EcoLinks as the CEE Regional Program Manager at the REC. She replaced Jacek Podkanski who resigned to accept another position at the REC. A training program was organized to introduce Violeta to EcoLinks and to her new responsibilities.

As head of her own consulting company in Romania, Violeta has served as project leader on a number of major environmental and energy efficiency projects, funded by the World Bank, Phare, UNDP and other organizations. Most recently, she has managed a team of technical, financial and legal experts to establish an Energy Efficiency Fund for the World Bank in Romania. She has also been Executive Director of a successful NGO, Association for Energy Policy in Romania, and Head of International Cooperation of the Phare Program at the Ministry of Industry. Violeta has an undergraduate degree in power and heat engineering from the Technical University in Bucharest and an Executive MBA from the University of Washington in the US.

Cost Share and Financial Information:

- By the end of the quarter, IIE had accounted for its total cost-share contribution to the program, amounting to \$2,777,930. A listing of contributions is attached as Annex D.

- Estimated total program expenditures to date are \$11,964,855. A preliminary financial report is attached as Appendix E. As soon as final expense reports are available from IIE and the REC, a final financial report will be submitted.

2. Implementation issues identified last period and status of resolution.

- The recommendations from the mid-term assessment report were discussed with USAID. Also, both the annual report and annual workplan were approved by USAID.
- As a result of USAID's reorganization, the extension of the program was placed on hold.

3. Implementation issues and/or procurement issues anticipated in the next reporting period.

- USAID has requested adding a fast-track sixth cycle of Challenge Grants to be completed by the end of the program in June 2003. A timeline needs to be prepared and the staff needs to be briefed.
- Implementation issues may arise in the transfer of the program from the E & E Bureau to the Economic Growth, Agriculture and Trade Pillar. The issues of program extension and Mission buy-in are unlikely to be addressed until USAID's reorganization is completed.

October 26, 2001

IIE's Thirteenth Quarterly Report

For the Period: July 1, 2001 – September 30, 2001

Prepared by: Winston Bowman, IIE
Date Prepared: October 24, 2001

Part II. Basic Activity Information

Activity Name: Eurasian-American Partnerships for Environmentally Sustainable Economies – EcoLinks	Life of Activity Value:	\$23,297,897
Purpose of Activity: Promote market-based solutions to Environmental problems in CEE/NIS, with emphasis on the urban and industrial sectors.	Amount to be obligated:	\$ 5,794,194
Implementing Partner: Institute of International Education (IIE)	Amount obligated:	\$17,503,703
Award/Amendment No., Type (CA): EE-A-00-98-00020	IPSES Funds 180-0039 (CEE)	\$ 7,538,488
	EPT Funds 110-0003 (NIS)	\$ 4,426,367
Period of Award: 07/01/98 to 06/30/03	Funds Expended to Date (Total):	\$11,964,855
CO/CTO/COP: Sherrill Fachet (AO), Carl F. Maxwell (CTO), /Winston Bowman (COP).	Obligated Funds Remaining:	\$ 5,538,848
Linked to S.O. No.: 1.6 Increased Environmental Management Capacity to Promote Sustainable Economic Growth	Next Obligation Due By:	
Intermediate Results Nos.: IR 1.6.2 (Trade), IR 1.6.3a (Best Practices), and IR 1.6.4 (Inst.)		

Part III. Results Performance

Result Description	Result Indicator Performance
<p>Result No. 1.6.3a: "Best Practices" Adopted by Industrial and Public Sectors.</p> <p>Results: Successfully operating environmental partnerships will be established to promote solutions to environmental problems appropriate to market-oriented economies and democratic societies.</p> <p>Indicators: (1) Number of projects that result in a best practice to solve an environmental problem; (2) Number of projects that result in a market-based solution to an environmental problem; (3) Number of Quick Response Awards (QRAs) that result in a collaborative Challenge Grant Proposals.</p>	
<p>Result Indicator (1): Number of projects that result in a best practice to solve an environmental problem</p> <p>Unit of Measurement: same</p>	<p>Life of Strategy Target: 70</p> <p>Cumulative Achievement to Date: 32</p> <p>Current Year Target (6/02): 20</p> <p>Current Quarter Achievement: 7</p> <p>Current Year Achievement: 7</p>
<p>Result Indicator (2): Number of projects that result in a market-based solution to an environmental problem</p> <p>Unit of Measurement: same</p>	<p>Life of Strategy Target: 225</p> <p>Cumulative Achievement to Date: 69</p> <p>Current Year Target (6/02): 45</p> <p>Current Quarter Achievement: 23</p> <p>Current Year Achievement: 23</p>
<p>Result No. 1.6.4: Increased Institutional Ability to Identify and Remedy Environmental Problems.</p> <p>Results: Successfully operating environmental partnerships will be established to promote solutions to environmental problems appropriate to market-oriented economies and democratic societies.</p> <p>Indicators: (1) Number of Challenge Grant proposals that met prescreening criteria. (2) Number of partner searches that result in an on-going relationship (e.g. challenge grant proposal); (3) Number of projects that result in institutional changes that enhance the project participant's ability to identify and remedy environmental problems.</p>	
<p>Result Indicator (1): Number of Challenge Grant proposals that met prescreening criteria.</p> <p>Unit of Measurement: same</p>	<p>Life of Strategy Target: 525</p> <p>Cumulative Achievement to Date: 277</p> <p>Current Year Target (6/02): 50</p> <p>Current Year Achievement: 50</p>

<p>Result Indicator (2): Number of partner searches that result in an on-going relationship (e.g. challenge grant proposal)</p> <p><u>Unit of Measurement:</u> same</p>	<table border="0"> <tr> <td>Life of Strategy Target:</td> <td>150</td> </tr> <tr> <td>Cumulative Achievement to Date:</td> <td>56</td> </tr> <tr> <td>Current Program Year (6/02) Target:</td> <td>15</td> </tr> <tr> <td>Current Quarter Achievement:</td> <td>6</td> </tr> <tr> <td>Current Year Achievement:</td> <td>6</td> </tr> </table>	Life of Strategy Target:	150	Cumulative Achievement to Date:	56	Current Program Year (6/02) Target:	15	Current Quarter Achievement:	6	Current Year Achievement:	6
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Current Quarter Achievement:	6										
Current Year Achievement:	6										
<p>Result Indicator (3): Number of projects that result in institutional changes that enhance the project participant's ability to identify and remedy environmental problems</p> <p><u>Unit of Measurement:</u> same</p>	<table border="0"> <tr> <td>Life of Strategy Target:</td> <td>150</td> </tr> <tr> <td>Cumulative Achievement to Date:</td> <td>44</td> </tr> <tr> <td>Current Program Year (6/02) Target:</td> <td>30</td> </tr> <tr> <td>Current Quarter Achievement:</td> <td>14</td> </tr> <tr> <td>Current Year Achievement:</td> <td>14</td> </tr> </table>	Life of Strategy Target:	150	Cumulative Achievement to Date:	44	Current Program Year (6/02) Target:	30	Current Quarter Achievement:	14	Current Year Achievement:	14
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Cumulative Achievement to Date:	44										
Current Program Year (6/02) Target:	30										
Current Quarter Achievement:	14										
Current Year Achievement:	14										
<p>Result No. 1.6.2: Increased environmental trade, finance, and investment</p> <p>Results: Successfully operating environmental partnerships will be established to promote solutions to environmental problems appropriate to market-oriented economies and democratic societies.</p> <p>Indicators: (1)Number of QRAs that result in an agreement to pursue environmental trade, finance, or investment; will also track the number of QRAs that result in a Challenge Grant Proposal (2) Number of projects that result in an agreement to further pursue environmental trade, finance, or investment.</p>											
<p>Result Indicator (1): Number of QRAs that result in an agreement to pursue environmental trade, finance, or investment; also track the number that result in a Challenge Grant Proposal</p> <p><u>Unit of Measurement:</u> same</p>	<table border="0"> <tr> <td>Life of Strategy Target:</td> <td>350</td> </tr> <tr> <td>Cumulative Achievement to Date:</td> <td>Total QRAs = 295, Trade -107, Grants - 188</td> </tr> <tr> <td>Current Year Target (6/02):</td> <td>Total QRAs = 120, Trade - 40, Grants - 80</td> </tr> <tr> <td>Current Quarter Achievement:</td> <td>Total QRAs = 76; Trade - 23; Grants - 53</td> </tr> <tr> <td>Current Year Achievement:</td> <td>Total QRAs = 76; Trade - 23; Grants - 53</td> </tr> </table>	Life of Strategy Target:	350	Cumulative Achievement to Date:	Total QRAs = 295, Trade -107, Grants - 188	Current Year Target (6/02):	Total QRAs = 120, Trade - 40, Grants - 80	Current Quarter Achievement:	Total QRAs = 76; Trade - 23; Grants - 53	Current Year Achievement:	Total QRAs = 76; Trade - 23; Grants - 53
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Current Quarter Achievement:	9										
Current Year Achievement:	9										



Annex A
Survey of Challenge Grant grantees (Cycles 1 and 2)
October 11, 2001

Scope and Methodology:

In mid-September 2001, EcoLinks conducted a survey among cycle 1 and 2 Challenge Grant grantees with projects that were closed before April 2001 to gather information on their follow up activities and get feedback on staff service and support. A standard questionnaire was sent to 74 grantees (40 from cycle 2 and 34 from cycle 1).

Twenty-one questionnaires were returned, for a 28% rate of return. A few grantees did not answer all the questions.

Results:

1) Continuation of Partnership:

- 15 stated that the partnership is continuing through concrete activities and/or informal communication (3 of these were cross-borders partners that have continued to work with the local Partner, not the Leader)
- 6 stated that the partnership is not continuing or did not answer the question.

2) Project Follow-up

- Capacity building: 11 stated that the capacity of the Leader was strengthened as expected, within the scope of the project; 2 responded capacity was strengthened "somewhat"; and 8 indicated that the capacity was strengthened above expectations.
- Implementation of findings/recommendations: 9 stated that the recommendations in the final report were implemented after the project was closed. The rest either did not answer or said no.
- Successes: 4 grantees indicated cost-savings and environmental benefits; 2 stated cost-benefits; 2 – environmental improvements; 1 – follow-up financing; 1 – other success (the creation of a Green Hotel Award in the case of a project to develop an energy audit of a hotel network)

3) Staff support

Out of the twenty respondents to this question, 15 rated EcoLinks staff support as "excellent", 4 as "good", 1 as "poor".

4) Suggestions/recommendations to improve the process

Some of the suggestions were to increase the amount of the grant to provide more leverage for their efforts; to streamline the reporting process, to assist with obtaining post-grant financing and help publicize the results of their projects.

Examples of Challenge Grant follow-up/successes include:

CG1- SK-16 (Terming/Honeywell) - Mr. Smolka, Terming stated: The outputs and measures of the project have created the important basis in the decision process for Terming staff. Recommendations from the Challenge Grant were fully included in the preparation of the investment plan for the year 2001. This year the following cost and energy savings are expected at the heating plants that the Challenge Grant Project focused on:

Expected gas saving per year : 191,37 thous. m3

Expected money saving per year : 899,439 thous. Skk = \$ 18.355

Expected decreasing of pollutant emissions : 436 kg/per year

CG1-RO-13 (Rajac/Cavanaugh) – The leak detection demonstration project was significant in that it formalized the RAJAC-Iasi leak detection program. Additionally, both Project Leader and Project Partner benefited significantly from the project in that Cavanaugh & Associates, P.A. has utilized experience gained through this project to create a new US-based leak detection service business. RAJAC-Iasi has extended their knowledge and is now providing a market-based approach to their utility service and billing procedures. The leak awareness and water conservation information, as well as the technology transfer seminar, showed the water customers that RAJAC-Iasi is trying to improve the situation and reduce the leakage in the system. This provided a positive consumer confidence enhancement which bolstered the support and desire for citizens to pay their water bills. Additionally, the equipment that was transferred was integrated into RAJAC-Iasi's very sophisticated leak detection program and the equipment enabled the leak detection team's faster delivery and responsiveness to leaks in the system.

CG2-BG-26 (Municipalities of Rousse/Duluth/Giurgiu) - The result of the project was joint environmental planning incorporated into the day –to-day practice of the Municipalities of Rousse and Giurgiu. The meetings of the mixed commission are held regularly where active exchange of data concerning the levels of pollution from the both banks of Danub River are taken place. The mixed BG- RO commission elaborated a joint long term environmental program for the region. It has been approved by both city councils. The commission is monitoring its implementation and it is preparing updates.

CG2-BG-38 (Black Sea Coast Association/Ogden Beeman) – Based on the experience gained on the CG project, BSCA gained a dredging contract for the city of Varna. In September, they met with Ellicott Machine in Baltimore, a leading US producer of dredges and dredge equipment. They discussed possible cooperation on assembling Ellicott dredges in Varna to solve the environmental problems in the port. BSCA is working to obtain the Ministry of Environment's support for this project.

10/24/01

**Annex B
Ecolinks Quick Response Awards
July -September 2001**

GRANT #	DATE OF AWARD	GRANT NUMBER	GRANTEE	PROJECT TITLE	COUNTRY	PROJECT PARTNER	GRANT AMOUNT	ACTIVITY DATE	INITIATOR/ STAFF	REPORT (Y/N)
Bulgaria										
11 BG-311	09/06/01	70224881	CQS consulting, Ltd.	Water cleaning and rehabilitation in mi	BG to US	Computational Geosciences,	\$2,550	Nov-01	TR/PT	
BG-309	09/29/01	70224879	Manti Co., Ltd	water-purification technologies	BG to US	Cytec	\$4,337	Oct-01	AP/AK	
BG-307	08/27/01	70224877	Municipality of Montana	Treatment of waters polluted with arsen	BG to US	3M Engineering&Technology	\$4,058	Oct-01	TR/PT	
BG-301	08/09/01	70224871	Micro Service Plus/The Waste Reduct	Municipal waste/recycling	US to BG	Ekosens	\$3,740	Aug-01	AP/AK	
BG-297	08/07/01	70224867	Ship building Machine Co.	Wind Turbine Demonstration	BG to US	Bergey Windpower, OK	\$4,366	Sep-01	AP/H	
BG-286	08/06/01	70224866	Municipality of Nasebar	Municipal waste project	BG to US	SI-NOR, Inc.	\$3,324	Aug-01	AP/AK	
BG-288	07/23/01	70224836	Pleven Water Supply	Control of the underground water sources	BG to US	Harland Simon Technology	\$5,000	Aug-01	AP/PT	
BG-280	07/18/01	70224435	EWA, Inc.	Plovdiv Leak Detection Program	US to BG	Plovdiv municipality	\$5,000	Aug-01	AP/H	
BG-248	07/11/01	70224423	Innovatech	Transfer of Innovatech waste water tra	US to BG	Black Sea Coastal Associati	\$3,971	Jul-01	AP/AK	
BG-244	07/09/01	70224419	Evalin 99	Environmentally friendly production of fert	BG to US	Pritchard Engineering, Inc.	\$4,670	Jul-01	AP/AK	
BG-239	07/03/01	70224414	EKOKAN, NC	Wetland wastewater treatment in Bevelw	US to BG	Mun. of Bevelwo	\$3,625	Aug-01	AP/H	
				TOTAL:			\$44,641			
Bosnia and Herzegovina										
3 BH-299	08/09/01	70224869	Municipality of Mostar-Jugoslavok	Hydro power project	BH to CR	Ekenerg	\$3,657	Aug-01	AP/AK	
BH-291	08/01/01	70224861	UNISGAL Konjic	Recycling system at the metal coating pla	BH to US, CR	RESCO, CO; Jedinstvo, Zagreb	\$4,126	Aug-01	AP/H	
BH-286	07/30/01	70224856	Vodovod-Mostar	Leak abatement at the water supply netw	BH to CR	Montelektro	\$2,848	Aug-01	AP/H	
				TOTAL:			\$10,633			
Croatia										
5 CR-300	08/09/01	70224870	Varkom	Upgrading wastewater treatment	CR to CZ	Dekont spol. s. r. o., Aqua Proc	\$3,400	Aug-01	AP/AK	
CR-295	08/02/01	70224865	Jadran Galenaki Laboratorij d. d.	Pharmaceutical wastes (air and water)	CR to US	PMC Technologies	\$3,522	Aug-01	AP/AK	
CR-289	07/31/01	70224859	SACCA d.o.o.	Laundry waste water recovery system	CR to CZ	EHV s.r.o.	\$1,888	Aug-01	AP/PT	
CR-285	07/30/01	70224855	Municipality of Topusko	Energy efficiency Business plan	CR to FL	LamTech Consulting	\$2,904	Aug-01	AP/H	
CR-276	07/26/01	70224848	Komunalno d.o.o.	Municipal Waste Water Plant	CR to US	Krofta Technology Corp.	\$5,000	Aug-01	AP/PT	
				TOTAL:			\$16,814			
Czech Republic										
7 CZ-314	09/19/01	70224884	Ecochem a.s.	Presentation of the chromatograf spect	CZ to US	Micromass	\$6,000	Oct-01	TR/PT	
CZ-284	07/30/01	70224884	Dynamic Power Corporation	Liquefied methane Gas utilization in CZ	US to CZ	AFP-CZ	\$6,000	Sep-01	AP/H	
CZ-251	07/16/01	70224426	Chemtech International, Inc	selling US environmental products in t	US to CZ	Valecko-Acro	\$6,000	Aug-01	AP/AK	
CZ-247	07/11/01	70224422	ORTEP, s. r. o.	Energy saving projects in CEE/IS	CZ to US	Tysak Engineering, Electro	\$6,000	Aug-Sept-01	TR/AK	
CZ-243	07/05/01	70224418	Integrated Consult&Eng, Inc (PA)	Ind. Energy Eff. Program Assessment	US to CZ	LK Engineers	\$5,000	Jul-01	AP/H	
CZ-242	07/03/01	70224417	SMF Hodonin	Emissions reduction at Slovansky Hoc	CZ to US	Solar Turbines	\$5,000	Jul-01	TR/PT	yes
CZ-240	07/03/01	70224415	Ekosolaris a.s.	Modern Thermal Solar Systems	CZ to US	AET, Inc.	\$6,000	Jul-01	TR/PT	
				TOTAL:			\$36,000			
Georgia										
1 GE-313	09/13/01	70224883	Municipality of Rustavi	Landfill gas project	GE to US	Design Fuels Corporation	\$4,220	Sep/Oct-01	AP/AK	
Hungary										
6 HU-308	08/27/01	70224876	California Energy Commission	Consultation of pollution reduction met	US to HU	CEC	\$2,397	Oct-01	TR/PT	
HU-306	08/27/01	70224876	Comprehensive Global Business Se	Sewage systems, wastewater projects	US to HU	Municipality of Jaszarokazai	\$4,697	Sep-01	AP/AK	
HU-305	08/22/01	70224875	Sundine Enterprises, Inc.	Animal waste digestion	US to HU	Dei-Pest Megyei Mezogazdas	\$4,227	Sep-01	AP/H	
HU-304	08/20/01	70224874	North America Power CO.	Thermal Recovery Tech. Application	US to HU, CZ	Forg-Tech (HU); Millennium (C	\$6,000	Sep-01	AP/H	
HU-303	08/16/01	70224873	PMC Technologies	Technology Assistance at a City of Buc	US to HU	Municipality of the City of Bu	\$1,419	Aug-01	TR/PT	
				TOTAL:			\$17,740			

GRANT NUMBER	DATE OF AWARD	IE NUMBER	GRANTEE	PROJECT TITLE	COUNTRY	PROJECT PARTNER	GRANT AMOUNT	ACTIVITY DATE	INITIATOR/STAFF	REPORT (Y/N)
Kazakhstan										
8 KZ-270	07/23/01	70224840	Vodokanal	Production of clean drinking water	KZ to US	EnviroSmith Engineering, Inc.	\$4,950	Aug-01	Ap/PT	
KZ-281	07/18/01	70224438	Global Eco-Tech/Hagstan Int.	Cleaner Production of Milk	US to KZ	MTF, LLC	\$3,783	Aug-01	Ap/H	
KZ-258	07/18/01	70224433	Baldarghan Fruit and Vegetable Proce	Travel to meet partner, develop full app, u	KZ to US	US Magenges, Inc.	\$4,243	Aug-01	Ap/AK	
KZ-257	07/18/01	70224432	JSC ZHETYUSUGAS	Environmental partnership	KZ to US	Applied Marine Sciences, Inc.	\$5,000	Aug-01	TR/PT	
KZ-254	07/18/01	70224429	Copper Chemical Int. Plant	Application of US membrane techn.	KZ to US	Walek, MD	\$4,170	Aug-01	Ap/H	
KZ-253	07/18/01	70224428	Talganpiri (MC Falcon)	Environmental friendly production process	KZ to US	Witterman, FL	\$4,320	Jul-01	Ap/H	
KZ-245	07/09/01	70224420	Yuzhpollmetall	Industrial waste processing and manage	KZ to US	NorWest Inc., UT	\$4,500	Aug-01	Ap/H	
KZ-238	07/03/01	70224413	FoodMaster - Almaty	Cleaner production in the dairy plant	KZ to US	Env. Control Oppt., VA	\$4,900	Aug-Sept-01	Ap/H	
TOTAL:							\$35,848			
Macedonia										
3 MC-282	07/27/01	70224852	D.O.O. F-ka za stinski vozila	Environmental improvement of truck cars	MC to CR	Janko Gredelj, CR	\$1,950	Aug-01	Ap/PT	
MC-281	07/27/01	70224851	Municipality of Veles	Municipal Solid Waste Management	MC to US	Burge & Associates	\$4,808	Aug-01	Ap/PT	
MC-256	07/18/01	70224431	Davco Invest, Ltd.	Program for efficient lighting for Skopje	US to PL	Energored, Mun. of Skopje	\$3,308	Jul-01	Ap/AK	
TOTAL:							\$9,867			
Poland										
3 PL-315	09/24/01	70224885	BIOARCUS SP. z.o.o.	Remediation and Odor Control training	PL to US	Chemtech International Inc.	\$5,000	Oct-01	TR/PT	
PL-310	08/28/01	70224880	Phytokinetika, Inc.	Site visit to PROTE in Poznan, PL	US to PL	Prote Bioremalacja Ropopoc	\$2,550	Oct-01	Ap/PT	
PL-285	07/20/01	70224835	The Union of Upper Raba River Con	water protection, waste water, municip	PL to US	Coler & Colantonio	\$3,820	Aug-01	TR/AK	
TOTAL:							\$11,370			
Russia Far East										
5 RFE-280	08/01/01	70224860	Primorskugol	mine wastewater	RFE to US	EarthFax Engineering	\$4,870	Aug-01	Ap/AK	
RFE-287	07/31/01	70224857	Yaroslavsky Mining & Concentrating Pl	Reducing greenhouse gas emissions	RFE to US	Emission Technologies, Inc	\$4,530	Aug-01	Ap/AK	
RFE-277	07/28/01	70224847	Amur-Phvo	water quality management in soft drink an	RFE to US	Alvaconsult	\$4,800	Aug-01	Ap/AK	
RFE-274	07/24/01	70224844	Loomis Auzdn	Waste and Wastewater treatment Analysis	Us to RFE	Calina Ltd.	\$2,500	Aug-01	Ap/PT	yes
RFE-284	07/19/01	70224834	Far East Assoc.of Woodworkers	Management of Offal Timber	RFE to US	Wellone	\$4,492	Aug-01	Ap/PT	
TOTAL:							\$21,192			
Romania										
13 RO-294	08/02/01	70224864	Waste minimization Tech., Inc.	Advanced Treatment for waste water	US to RO & RO to US	REMI	\$4,850	Sep-01	TR/H	
RO-293	08/02/01	70224863	City of Slatina	Municipal waste management	RO to CZ	Aquatest	\$3,960	Aug-01	Ap/AK	
RO-283	07/30/01	70224853	WFC Environmental Eng.	Wastewater problem of manufacturer of s	US to RO	SC Republica SA	\$5,350	Aug-01	Ap/AK	
RO-280	07/28/01	70224850	S.C. Vracant	Reduction of sludge and solid waste	RO to US	Sandwell Engineering Inc.	\$3,586	Aug-01	Ap/PT	
RO-273	07/24/01	70224843	Ana Aalen Institute	Modernization of Olopeni Thermal Plant	RO to US	Artemel International	\$3,850	Aug-01	Ap/H	
RO-272	07/24/01	70224842	RADET	Modernization of TP Beneasa	RO to US	AEA, Black & Veatch	\$4,872	Aug-01	Ap/H	
RO-267	07/23/01	70224837	Ceserom SA	Cleaner production in ceramic industry	RO to US	Pojasek & assoc., MA	\$4,324	Aug-01	Ap/H	
RO-266	07/20/01	70224836	Project performance Corporation	Energy from sawdust in Babita county	US to RO	Ilva Mics city	\$4,360	Aug-01	Ap/H	
RO-263	07/19/01	70224833	UPBOM SA OCNA MURES	Know how exchange	RO to US	Sustainable Energy Partnership	\$4,785	Aug-01	TR/PT	
RO-255	07/17/01	70224430	BVA, Inc.	Integrated waste management syst. For di	US to RO	District 1, Bucharest	\$5,000	Aug-01	Ap/H	
RO-252	07/16/01	70224427	Hegyalja Microregional Association	energy from woodwaste for public building	RO to US	WV Rural Development Council	\$4,299	Aug-01	Ap/AK	
RO-249	07/11/01	70224424	Sandhill Associates	School audits/greenhouse gas reductions	US to RO	Municipality of Giurgiu	\$4,153	Jul-01	Ap/AK	
RO-241	07/03/01	70224418	SEMGI, Inc.	Evaluation of RWE's collection services	US to RO	RWE	\$4,988	Jul-01	TR/PT	yes
TOTAL:							\$56,347			
Ukraine										
11 UK-302	08/10/01	70224872	Kharkivkomunokhatvod	Reuse of sewage sludge as a power sour	UK to Russia	DAR/DODGEO	\$3,122	Aug-01	Ap/PT	
UK-298	08/08/01	70224868	Kievspatrans	Methane recovery at the landfill	UK to US	AURA Co, VT	\$3,878	Sep-01	Ap/H	
UK-292	08/02/01	70224862	Executive Committee of the Ozerzhins	Utilization of coal wastes	UK to CZ, CZ to UK	Atom Power	\$3,280	Aug-01	Ap/AK	
UK-279	07/28/01	70224849	Dnipro Basin Directorate	Water Quality Improvement	UK to US	Marine Physics Corporation	\$4,868	Aug-01	Ap/PT	
UK-278	07/25/01	70224848	Poltavavodokanal	Env. Frindly technologies for Water treat	UK to Russia	Ecopolymer, Russia	\$2,810	Aug-01	Ap/H	
UK-271	07/24/01	70224841	Kalush Teplo Komun Energo	Efficiency in heating systems	UK to US	Arkansas Environmental Feder	\$4,700	Aug-01	Ap/AK	
UK-269	07/23/01	70224839	CJBC Protos	Landfill Gas to Energy	UK to US	SCB Engineers	\$4,450	Aug-01	Ap/PT	
UK-262	07/18/01	70224437	McNeil Technologies, Inc.	Wood waste utilization at Belchakly DOK	US to UK	Belchakly DOK	\$3,854	Aug-01	Ap/H	
UK-259	07/18/01	70224434	Belgorod-Dnestrovsky Enterprise	Modern technology for safe water consum	UK to CZ	BRC International CZ	\$4,885	Aug-01	Ap/PT	
UK-250	07/11/01	70224425	BlezeTach Corp.	Solid Waste Management in Berdyansk	US to US	Berdyansk Municipality	\$4,733	Aug-01	Ap/PT	
UK-248	07/09/01	70224421	JSC "UkrGraphite"	Greenhouse gas reduction at kiln no. 3	UK to UK	American EnviroCare, Inc., NJ	\$4,992	Aug-01	Ap/H	
TOTAL:							\$48,552			
Turkmenistan										
1 TK-912	08/12/01	70224892	Env. Solutions International	Env. Impact of Offshore expl. in Caspie	US to TK	8c4ech. Analytical center	\$3,773	Nov-01	Ap/H	
TOTAL:							\$313,198			

Initiator: Tech Rep - TR; Applicant - AP; other-O
QRAs promoting trade in bold - 7/01/01-8/30/01

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Annex C

Managing Petroleum Waste In Romania

Project Title: Establishing a Model Program for Recycling and Reusing Petroleum Waste in Prahova County, Romania

Leader: Prahova County Council (Ploiesti, Romania)

Partner: CEVA International, Inc. (New Jersey, USA)

Location: Ploiesti, Romania

Project Duration: January 2000 – May 2001

EcoLinks Project Investment: EcoLinks Grant Support: \$50,000; Project Participant Cost Share Contribution: \$27,763.

Best Practice: Transferable Solutions

This project, "Managing Petroleum Waste in Romania," is an EcoLinks Best Practice. It demonstrates a successful model for collecting and processing petroleum waste in Prahova County, Romania providing an empirical knowledge base for implementing a comprehensive used oil management system throughout Romania. By recycling used oil, 1) environmental impacts from used oil contamination of land and water resources are significantly reduced, and 2) savings are generated from averting costly clean-up measures and turning used oil waste into an energy resource. In addition to developing an environmentally sound and economically beneficial used oil management scheme, this Best Practice establishes a local and national regulatory framework for used oil collection and recycling throughout Romania.

Project Summary

This section provides a brief overview of the project including the problem it addresses, its purpose, methods (i.e., activities), and benefits.

Before 1989, Romania had a centralized system for managing petroleum waste. Up to 90,000 tons of used petroleum were collected and recycled annually from the industrial sector and individual generators (i.e., operators of motor vehicles, utility engines, and farm equipment). This system broke down after the fall of communism as Romania embraced a free market system. In 1998, less than 2,000 tons of used oil waste were collected in Romania. The County of Prahova in Romania suffered this decline in used oil collection and recycling along with the rest of Romania. While Prahova County generates approximately 1000 tons of used oil waste per year now, only 100 tons are collected and recycled.

A new system for collecting and recycling used oil is needed in Romania to avoid human and environmental health risks from contaminated land and water resources, and to reduce costs associated with used oil waste clean-up efforts and the consumption of non-renewable energy resources. Without a management system in place, hundreds of tons of used oil containing heavy metals and polyaromatic hydrocarbons are 1) poured into Prahova's municipal sewers; 2) directly discharged on land or in surface water; 3) used inappropriately for dust suppression or wood impregnation; or 4) burned as low-grade fuel. Recycling used oil promotes the efficient use of valuable non-renewable resources and avoids costly and detrimental alternatives for disposing of used oil.

This EcoLinks project addresses the challenge of taking the first steps toward developing and implementing a new program for managing petroleum waste in Romania. The Prahova County Council in Romania in collaboration with CEVA International, Inc., an American based firm, designed and implemented a model system for collecting and recycling petroleum waste in Prahova County that can be implemented throughout Romania. It emphasizes 1) the use of up-to-date monitoring, collection and storage equipment and innovative recycling efforts; 2) securing the necessary legal framework and volunteer support of oil waste collectors and generators; and 3) collaborative public and private partnerships.

This project consisted of the following key implementation activities: (Note: A detailed outline of the project activities is provided in the section titled, "Project Activities.")

- 1) A collection scheme for used petroleum was developed and tested with an emphasis on promoting recycling.
- 2) A regulatory framework for managing used oil waste was implemented at the local and national scale.
- 3) Public-private partnerships were developed to initiate and commence operation of a local collection and recycling scheme.
- 4) An awareness raising campaign targeting businesses and the public was designed and implemented to draw attention to the environmental and economic benefits of collecting and recycling used petroleum.

This project provides several capacity building, environmental, and economic benefits. (Note: For a detailed description of the project benefits, see section titled "Project Benefits.")

- Expanded institutional capacity to manage petroleum waste in Romania.

- Reduced used oil contamination of land and water resources and decreased demand for non-renewable, virgin fuels.
- Enhanced economic efficiency by generating energy from recycled used oil waste and reducing environmental clean up costs associated with used oil contamination of soil and water.

This section is a summary of the overall project. For a detailed outline of the project activities, project benefits, lessons learned, and contact information, proceed to the following sections or click on the specific section of interest through the main page.

Project Activities

This best practice is based on carrying out several activities. These activities, listed below, were conducted as a pilot project in Prahova County, Romania. They provide a "how-to" basis for implementing a used oil management scheme throughout Romania and Eastern and Central Europe where applicable.

1. Generated alternatives for managing petroleum waste

Action: A comprehensive study of alternative schemes for managing used petroleum with a significant bibliography was developed by INCERP, subsidiary of the National Oil Company SNP Petrom, and "Petroleum-Gas" University of Ploiesti in Romania and distributed amongst project members. The results of the study were presented to project team members in a workshop format.

Product(s): 1) Fifteen distributed copies of a 150-page study on used oil management schemes based on a comprehensive bibliography of 100-reference citations 2) A thirteen-page Executive Summary in English 3) Two-day workshop (ten hours of presentations and four hours of discussion) for knowledge transfer among project team leaders

2. Developed, adopted, and enforced county and municipal rules for appropriately handling used petroleum

Action: Council County Decision 22/2000 for managing used oil was adopted and promoted in Prahova County, and the Ploiesti Environmental Protection Inspectorate (EPI) developed draft norms and guidelines to implement the County Decision. This draft was reviewed by a Technical Committee formed by the Prahova County Council, Prahova Prefecture, Mayors Office of the City of Ploiesti, SNP "PETROM" SA (Subsidiaries INCERP CERCETARE Ploiesti and PECO Prahova), and "Petroleum-Gas" University of Ploiesti.

Product(s): 1) Prahova County Decision 22/2000 finalized and distributed to 135 used oil generators and 16 media channels (local newspapers, radio, and television) 2) Public meeting involving over 90 participants

3. Reactivated former collection scheme

Action: An intermediary collector used oil, PECO, was identified. PECO then "re-activated" formerly operating transfer and storage facilities by ensuring the following equipment measures: 1) transfer deck for barrels, equipped with a below-grade basin where used oil is temporarily stored before being transferred to storage tanks; 2) discharge opening with a gear pump enabling the direct transfer of oil waste from road tankers; 3) two horizontal, above-ground, intermediary, storage tanks; and 4) pipelines and valves for controlled oil waste pumping. A transfer protocol including record keeping and labeling guidelines was established.

Product(s): 1) Updated transfer and storage facilities 2) Transfer protocol documentation 3) Special form for documenting each transfer and transfer procedure 4) Labeled containers disseminated to PECO gas stations for collecting used oil from citizens

4. Assessed collected used petroleum

Action: A sampling protocol was developed for keeping track of the quantity and quality of collected, used oil. As part of the protocol, two samples are taken from each batch of used oil (from barrels or road tanker) and labeled with an ID number corresponding to the transfer documentation. One sample is analyzed and the other sample is sealed and kept at the depot until the respective batch is disposed. The oil is transferred to storage tanks, which are also monitored periodically.

The used oil samples are tested for the following: density, water content, sediment, and diluents, oxide ash and sulfur content, total chlorine/halogen content, and metals (e.g., cadmium, chromium, nickel, copper, vanadium, zinc, and lead).

Product(s): 1) Technical report of analytical results from 18 samples of collected used oil representing the average of multiple collection sample results 2) Database of results of quantitative survey of used petroleum generation

5. Promoted public-private partnerships

Action: To initiate the program and implement collection strategies, public-private partnerships were established. The roles and activities of each actor were defined. Each identified actor was provided with rules and instructions for handling petroleum waste. EPI staff and the Council

project manager conducted on-site visits with generators and primary collectors. Information gathered during the site visits was integrated into a database.

Product(s): 1) Scheme operators identified including: 103 used oil generators and primary collectors, one intermediary collection facility, one recycling/refining facility, analytical and technical supervisors, and regulatory body 2) Information on generators contributing to database compilation

6. Supported participation of small businesses

Action: Many of the generators of used oil include small businesses such as individually owned gas stations and some car service and repair shops. Their participation in a collection scheme is critical, yet they usually have fewer resources to engage in a collection scheme. A road tanker equipped with a pumping/aspiration device was donated by CONPET Prahova (a national company that transports crude oil) at the request of the County Council and the EPI.

Product(s): Donated truck for collection of used oil from small businesses

7. Conducted awareness-raising campaign on the environmental and economic benefits of recycling used oil targeting businesses and the public

Action: Five eight-hour trainings were conducted for scheme operators to inform and get feedback on the proposed collection scheme. A training manual was developed outlining five sessions covering environmental pollution, international and national regulations, used oil management schemes, disposal pathways, and an introduction to the Prahova County pilot scheme for used oil collection and recycling. Public awareness-raising and education materials were developed, published, and distributed.

Product(s): 1) Training manual 2) 135 slides for slideshow presentation 3) Five one-day trainings 3) Public awareness materials: six two-page fliers, 20-page brochure, two color warning posters, on-going press releases

8. Initiated effort to promote country wide used oil collection and recycling program

Action: Two technical meetings were organized by the Ministry of Waters and Environmental Protection. International experts from the German Ministry of Environment and the Italian Consortium of Used Oils attended. Based on these meetings, draft national regulations for managing petroleum waste were developed. An experience-sharing workshop was

also held and attended by Environmental Protection Inspectorate representatives, County Council representatives from six Romanian counties, and 12 local media representatives.

Product(s): 1) Two technical meetings 3) Draft national regulations for managing used oil 3) Experience-sharing workshop: presentation of project background, project implementation progress and results and facilitated group discussion

9. Prepared brief technical report on Prahova pilot project for collection and recycling of used oil

Action: The Prahova County Council, CEVA, and project associates collaboratively prepared a report documenting the main findings and results of the pilot project. The report was disseminated to relevant and interested parties.

Product(s): An 80-page report on the methods and results of implementing a pilot scheme for collecting and recycling used oil in Prahova County, Romania

These are the steps taken by the project leader, partner, and multiple associates to achieve the purpose of the project. In taking these steps, several benefits were generated. They are covered in this next section.

Project Benefits

Several notable benefits were generated as a result of this project. This project demonstrates a successful way 1) to strengthen the capacity to handle petroleum waste in Romania, 2) to reduce environmental impacts from inappropriately handled used oil waste, and 3) and to promote economic efficiency. A detailed description of the project benefits is provided in the following subsections.

Capacity Building Benefits

The capacity to implement a used oil management scheme is key. This project builds implementation capacity by increasing public and private business awareness, promoting compliance and participation, establishing a regulatory framework, and providing an empirical knowledge base.

Increased awareness of the environmental and economic advantages of controlled collection and recycling of used oil: A public outreach campaign including trainings, workshops, and educational materials was conducted increasing awareness of the environmental and economic advantages of controlled used oil collection and recycling.

Increased compliance and participation in collecting and recycling used oil:

At completion time of the project, 103 used oil generators (i.e., primary collectors) were already participating in the pilot-scheme. It is anticipated that with further expansion of the collection scheme, 106 generators will be participating in the program. Through their participation and support, business firms and local government authorities increase their environmental credentials.

Enhanced local and national institutional capacity for the proper handling of used oil waste:

A regulatory framework for managing used oil was implemented at county and national levels. Prahova Council's Decision 22/2000, initiated by this project, set up the regulatory framework necessary for establishing the pilot collection and recycling program in Prahova County. This framework can be used by other counties in Romania to promote similar programs. A national regulatory framework was developed, establishing the institutional mechanisms for promoting the collection and recycling of used oil throughout Romania.

This project promoted public-private partnerships. These collaborative relationships allowed Prahova County to achieve its goal of increasing control over the handling of used oil waste, and provided private businesses the opportunity to increase their efficiency. These partnerships are likely to facilitate other activities that mutually address community and commercial interests.

Strengthened knowledge base for improving and expanding used oil collection and recycling in Prahova County and throughout Romania:

By running this pilot project, real empirical "hands-on" data was gathered about the challenges and opportunities of implementing a petroleum waste management program in Romania. The project conclusions and results were shared with representatives of County Councils and Environmental Protection Inspectorates from six Romanian counties. The information gathered in this pilot project provided a foundation for: 1) initiating used oil collection and recycling schemes in other counties throughout Romania; 2) further expanding and improving the collection and recycling system in Prahova County; and 2) finalizing national regulations for the management of used oil.

Environmental Benefits

This project generates environmental benefits by empirically demonstrating how to reduce 1) used oil contamination of land and water, and 2) pressure on non-renewable fuel resources. It further provides a successful methodology for running cement kilns on used oil and recycling used transformer oil further minimizing waste output and increasing the efficient use of precious resources.

Reduced used oil contamination of land and water resources: At completion time of the project, 103 used oil generators were participating in the pilot scheme providing used oil collection points on their premises and ensuring proper handling of the waste. The level of participation in the scheme is expected to reach a total of 160 used oil generators and primary collectors. Higher participation in the scheme means less damage to the environment from mismanaged used oil waste.

Before the collapse of the former collection scheme, approximately 90,000 tons of used oil was collected per year in Romania. After the system broke down, only 1,800 tons of used oil were collected. Table 1. indicates the amount of used oil recoverable through the new scheme.

Activated Collection and Recovery Scheme for Used Oil	Used Transformer Oil	Other Used Oil
Generated Used Oil	6,500 tons per year in Romania	1000 tons per year in Prahova County
Amount Recoverable	5,200 tons per year	500-600 tons per year
Recovery Rate	80%	50-60%

Table 1. Used Oil Recovery with New Scheme.

Reduced pressure on non-renewable resources: Under the new scheme used oil is turned into a secondary resource supporting cement kiln operations and other activities. Producing a secondary fuel resource reduces the need for raw fuel resources. By re-refining 5,200 tons of used transformer oil (the recoverable amount per year in Romania), 25,000 tons of selected crude oil is saved per year. Emissions generated from a cement kiln using used oil are the same as one using conventional oil so there is no additional pollution generated from used oil combustion.

Increased recycling of used transformer oil preventing uncontrolled emissions associated with illegal burning: Over period of five months, 50 tons of used transformer oil were collected and re-refined by Astra Romana Refinery, Ploiesti in Romania to generate energy to support refinery operations. Before implementing this recycling alternative, used transformer oil was illegally burned. This refinery recently implemented an energy savings program to reduce greenhouse gas emissions by improving energy efficiency and uses the re-refined used transformer oil in an efficient manner.

Economic Benefits

This project promotes several economic benefits. It establishes a demonstrated method for 1) minimizing the reliance on more costly, conventional, virgin fuels; 2) enhancing the economic vitality of small and

medium-sized businesses; and 3) significantly reducing remediation costs from mishandled used oil.

Savings generated from using re-refined transformer fuel: Used transformer oil is the least contaminated used oil type. It can be easily reprocessed at no additional cost and with minimum environmental impact. The reprocessing of used transformer oil ensures higher-value recycling (as compared to combustion in cement kilns from derived fuel).

Using recycled oil also displaces the demand for virgin oil or conventional fuels that are limited, non-renewable, and costly. The amount of transformer oil generated from used transformer oil in Romania potentially increases production at Astra Romana that is valued at \$1,820,000 (the cost of transformer oil is \$500/ton).

Savings generated from fueling cement kilns with used oil: Operating a cement kiln on used oil rather than select crude oil produces a savings of \$63,000-\$75,600 per year.

Promotion of small and medium-sized businesses: The implementation of national regulations on the collection and processing of used oil will likely define financial instruments to support scheme operations. This will attract new scheme operators promoting small and medium-sized businesses involved in collecting and recycling used oil.

Avoided costs associated with remediation efforts to handle mismanaged petroleum waste: Implementing an effective collection and recycling program for used oil waste prevents environmental damages caused by the mismanagement of petroleum waste. Thus, costs associated with cleaning up soil and water contaminated with used oil, for example, are avoided.

Lessons Learned

Several lessons were learned during the implementation of this project. These lessons, outlined below, provide useful insight into the additional opportunities and unanticipated challenges of implementing a used oil collection and recycling scheme.

- Workshops and a field survey of petroleum waste generators not only encourage compliance, but also help to identify any informal institutional mechanisms for handling petroleum waste that might hinder controlled collection and recycling efforts. For example, it was discovered through the workshop and on-site visits with generators that there are "underground" collectors of used oil who illegally sell insufficiently treated oil as "light liquid

fuel" to be burned in small combustion devices without any emissions control.

- Defining and assigning clear roles and face-to-face communication facilitate project implementation.
- Despite a well-designed and implemented public outreach campaign, ensuring quality control of the collected product is difficult.
- While operator participation is enhanced if non-compliant transfers of petroleum waste (e.g., waste contaminated with water) are accepted, these transfers create used oil processing problems at collection and recycling facilities such as lengthy separation time and tank drainage, and lowered cement kiln operational efficiency.
- Project completion deadlines must take into account several important factors: local elections, county budget guidelines, and customs clearance of equipment sent across borders. For example, the adoption of the County Decision was delayed due to pending local elections and a pre-existing, full Council agenda.
- It is difficult to collaborate when multiple project associates are involved in the same project. It helped, however, that the US partner had personnel located in Romania.
- Without a sufficient legal framework in place, more pressure had to be placed on encouraging volunteerism through public outreach. This method for securing participation in the scheme is not as effective as timely sanctions applied for non-compliance of enforced legal requirements.

Contact Information

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Last revised: Date: September 28, 2001

**Annex D
IIE Cost-Share Contribution
September 30, 2001**

IIE In-Kind Contribution: \$172,958
 REC In-Kind Contribution: \$76,005
 IIE Financial Contribution: \$56,000
 Grantee Cost-Share: \$2,472,967
 Total: \$2,777,930

LISTING OF GRANTEE COSTSHARE CONTRIBUTION:

CYCLE	GRANT NUMBER	PROJECT TITLE	PROJECT LEADER	PROJECT PARTNER	AMOUNT OF COSTSHARE
1	CG1-BG-02	Potential for Improved Environmental Performance and Expanded Ability to Use Recycled Paper	ZKMO Kocherino	New Horizon Management & Consulting	5,101.00
1	CG1-BG-03	Using Hydro Resources in Bulgaria	Interconsult	BET Consultants	7,205.00
1	CG1-BG-04	Energy Efficiency Action Plan for Sofia Building Stock	Sofia Municipality	Good Consulting	22,709.00
1	CG1-BG-05	Modernization of Municipal Solid Waste management in Partnership with Danube Region Initiative	Association of Danube River Municipalities	Institute for Environ. Strategies	7,501.00
1	CG1-BG-06	Initiating Effective Environment Management Implementation in Bulgarian Industry	CIC / Bulgarian Industrial Association	Camp Dresser & McKee, Inc.	18,700.00
1	CG1-BG-07	EMS for Municipalities in Bulgaria	Polyconsult ECO	Pittsburgh Technology Council	12,873.00
1	CG1-BG-08	Energy and Water Conservation Program in Galatex AD	Galatex AD	EETEK Hungary	16,850.00
1	CG1-BG-09	Energy efficient retrofit of the municipal hospital St. Ivan Rilski Goma Oriahovitsa	Municipality of G. Oriahovitsa	Electrotek Concepts	10,348.00
1	CG1-BG-10	Capacity Building and Demonstration Projects in Small Scale Waste Management in Bulgaria	Geopont - Intercom Ltd.	DSM Compost	21,448.00
1	CG1-HU-11	Living Machine Barge for the Danube	Organica Ecotechnologies	Living Technologies, Inc.	3,308.00
1	CG1-MK-01	Combining Energy Efficiency Measures and Fuel Conversion	Davos Invest, Ltd.	CityProf Consulting S.C.	6,742.00
1	CG1-MK-17	Providing Technical Documentation For Establishing Gas Exploitation in Kriva Palanka	Municipality of Kriva Palanka	Overgas Engineering, Ltd.	8,292.00
1	CG1-MK-18	Upgrading of Lignite by Ecological Briquettes	Energobrikat Briq DOO	Varos Szolgaltato	14,029.00
1	CG1-RO-12	Program Development aimed at Solid Waste Recycling	Town Hall of Zalau	Briket	38,971.00
1	CG1-RO-13	Pilot Study of Leak Detection and Leak Abatement Equipment Technologies	Regia Autonoma Judeteană Apa - Canal Iasi	Cavanaugh & Associates	68,892.00
1	CG1-RO-14	Implementation of Cleaner Technology to Contain Underground Pollution by Petroleum Products	Astra Romana Refinery S.A.	Laggette, Braashear & Graham Inc.	8,800.00
1	CG1-RO-20	Recycling & Reuse of PET Wastes in Iasi, Romania	SC Camis SRL Iasi	Geoscience and Technology PA	5,950.00

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1	CG1-SK-15	Treatment of Effluent Water from Smolnik Mine	Aquipur A.S.		14,640.00
1	CG1-SK-15	Treatment of Effluent Water from Smolnik Mine		Knight Piesold and Company	3,956.00
1	CG1-SK-16	Increasing Thermal Energy Production Effectivity	Termining S.R.O.		10,600.00
1	CG1-SK-16	Increasing Thermal Energy Production Effectivity		Honeywell SRO	10,215.00
2	CG2-BG-03	Greenhouse Emissions Reduction and Energy Saving Program	Polimeri		13,870.00
2	CG2-BG-03	Greenhouse Emissions Reduction and Energy Saving Program		TransELEKTRO Rt	12,321.00
2	CG2-BG-10	ISO 14001 EMS development and Implementation Support for Verlia Ltd.	Verlia, Ltd.		6,100.00
2	CG2-BG-10	ISO 14001 EMS development and Implementation Support for Verlia Ltd.		Ecoplan-Engineering, Ltd.	0
2	CG2-BG-10	ISO 14001 EMS development and Implementation Support for Verlia Ltd.		Montgomery Watson Americas, Inc.	4,321.00
2	CG2-BG-11	Energetic/Ecological System "Cold Rooms"	IRAC		40,387.00
2	CG2-BG-11	Energetic/Ecological System "Cold Rooms"		Femtechnika Kft	2,172.00
2	CG2-BG-13	Using Market Mechanism to Improve Solid Waste Management services	Municipality of Blagoevgrad		27,482.00
2	CG2-BG-13	Using Market Mechanism to Improve Solid Waste Management services		Moore Recycling Associates	9,777.00
2	CG2-BG-19	Energy Efficiency in Hotels and Restaurants	Bulgarian Hotel and Restaurant Assoc.		3,520.00
2	CG2-BG-19	Energy Efficiency in Hotels and Restaurants		Artemis International, Inc	10,295.00
2	CG2-BG-19	Energy Efficiency in Hotels and Restaurants		Euroinform Ltd.	3,779.00
2	CG2-BG-28	Regional Environmental Management System	Municipality of Ruse		5,301.00
2	CG2-BG-28	Regional Environmental Management System		Giurgiu City Hall	6,471.00
2	CG2-BG-28	Regional Environmental Management System		City of Duluth	7,435.00
2	CG2-SK-25	Introduction and Implementation of EMS into municipalities in Slovakia	City of Presov		21,428.00
2	CG2-SK-25	Introduction and Implementation of EMS into municipalities in Slovakia		Barr Engineering Company	9,375.00
2	CG2-BG-27	Education and Training in EMS for Machine Building Companies	Association of Machine Building Companies		510.00
2	CG2-BG-27	Education and Training in EMS for Machine Building Companies		TeKontrol, Inc.	30,075.00
2	CG2-BG-28	Effective Management of the Rendering Activity in the firm "APP Zoohraninvest Ltd."	APP Zoohraninvest Ltd		292,750.00
2	CG2-BG-28	Effective Management of the Rendering Activity in the firm "APP Zoohraninvest Ltd."		Kuykendall&Associates	4,005.00
2	CG2-BG-33	Landfill Gas Extraction and Energy Utilization System	Municipality of Bourgas		21,017.00
2	CG2-BG-33	Landfill Gas Extraction and Energy Utilization System		Brown, Vance & Associates	10,877.00
2	CG2-BG-38	EMS Related to Dredging Works on the Bulgarian Black Sea Coast	Black Sea Coastal Association		9,546.00
2	CG2-BG-38	EMS Related to Dredging Works on the Bulgarian Black Sea Coast		Ogden Beeman & Associates, Inc.	16,873.00
2	CG2-CR-08	Cleaner Production: Reduction of Water consumption and Waste Waters	Gavrilovic		53,263.00
2	CG2-CR-08	Cleaner Production: Reduction of Water consumption and Waste Waters		UAT	39,333.00
2	CG2-CR-29	CP in Osijek-Baranja County	HGK- komora Osijek		12,788.00
2	CG2-CR-29	CP in Osijek-Baranja County		Dakont Umwelttechnik Zlin	1,788.00
2	CG2-CR-30	Using the Extra Energy from Regional Waterwork	The Town of Obrovac		10,450.00
2	CG2-CR-30	Using the Extra Energy from Regional Waterwork		ECOPLANT d.o.o.	2,873.00
2	CG2-CR-30	Using the Extra Energy from Regional Waterwork		Cink s.s.	18,493.00
2	CG2-HU-09	Environmental performance evaluation and environmental cost accounting	gf strategies		3,920.00
2	CG2-HU-09	Environmental performance evaluation and environmental cost accounting		KOVET-INEM	17,911.00
2	CG2-KZ-05	Development and Implementation of Environmental Management System for Karaganda Region	Akimat of Karaganda		7,438.00
2	CG2-KZ-05	Development and Implementation of Environmental Management System for Karaganda Region		Eurasia Environmental Associates, LLC	30,222.00
2	CG2-KZ-06	Making Chips Production more Environmentally friendly	Agristar Talgar Company		6,311.00
2	CG2-KZ-06	Making Chips Production more Environmentally friendly		Environmental Control Opportunities	6,533.00
2	CG2-KZ-06	Making Chips Production more Environmentally friendly		Savory Snacks, LLC	3,000.00
2	CG2-MK-12	Project for Improving the Effluent Quality from Galvanizing Activities at Zastava	Zastava AGP		8,586.00
2	CG2-MK-12	Project for Improving the Effluent Quality from Galvanizing Activities at Zastava		AMTECH, inc.	12,776.00
2	CG2-MK-18	Hydropower of Bogovinjska River	Municipality of Bogovinje		1,050.00
2	CG2-MK-18	Hydropower of Bogovinjska River		Paul C. Rizzo Associates	22,427.00

2	CG2-PL-01	Development of Wind Energy Investment Project for the Municipality of Klesilica	Municipality of Klesilica		12,241.00
2	CG2-PL-01	Development of Wind Energy Investment Project for the Municipality of Klesilica		AWS Scientific, Inc.	4,298.00
2	CG2-RO-34	Modernization of the District Heating System Supplying Jiului-Pajure Area	RADET		5,282.00
2	CG2-RO-34	Modernization of the District Heating System Supplying Jiului-Pajure Area		Global Energy Services	-
2	CG2-RO-34	Modernization of the District Heating System Supplying Jiului-Pajure Area		WPT, Inc.	-
2	CG2-RO-38	Development and Implementation of a Model Recycling/Reuse Program for Used Oils	Prahova County Council		12,023.00
2	CG2-RO-38	Development and Implementation of a Model Recycling/Reuse Program for Used Oils		CEVA International, Inc.	15,740.00
2	CG2-RO-40	Reduction of Municipal Solid Waste by Recycling	CITADIN - D. S. P. M.		8,912.00
2	CG2-RO-40	Reduction of Municipal Solid Waste by Recycling		Swanson Environmental Management Sy:	48,274.00
2	CG2-RO-41	Energy Audit	OLTCHIM S. A.		15,865.00
2	CG2-RO-41	Energy Audit		Robert A. Watts, Consulting Engineer	25,955.00
2	CG2-RO-42	Environmental Management System	S. C. G. C. I. T. S. A. DAMBOVITA		8,278.00
2	CG2-RO-42	Environmental Management System		OMNI Associates	4,345.00
2	CG2-RO-42	Environmental Management System		S. C. Ceptar S. A.	2,257.00
2	CG2-RO-43	Reduction of Greenhouse Gases	CIMUS		1,182.00
2	CG2-RO-43	Reduction of Greenhouse Gases		Chavond-Barry Engineering Corp.	5,530.00
2	CG2-RO-43	Reduction of Greenhouse Gases		GASTAR	10,740.00
2	CG2-RO-44	Comprehensive Energy Conservation Program SANEX SA - Cluj Napoca	SANEX SA		3,390.00
2	CG2-RO-44	Comprehensive Energy Conservation Program SANEX SA - Cluj Napoca		Ipartev	4,667.00
2	CG2-RO-47	Energy Efficiency Evaluation and Training for Galati Water System	SC Apatem SA		43,116.00
2	CG2-RO-47	Energy Efficiency Evaluation and Training for Galati Water System		Cadmus Group	5,659.00
2	CG2-RU-20	Solid Waste Recycling Plant for Yuzhno-Sakhalinsk	Spetsavto		9,288.00
2	CG2-RU-20	Solid Waste Recycling Plant for Yuzhno-Sakhalinsk		Vaughn & Melton	8,329.00
2	CG2-RU-21	Development of a Model Training Program to Assist Municipalities with Environmental Policies	Khabarovsk Krai Administration		7,849.00
2	CG2-RU-21	Development of a Model Training Program to Assist Municipalities with Environmental Policies		American International University Network	9,050.00
2	CG2-RU-32	Clean Sky for Vladivostok	Spelazavod N1		54,375.00
2	CG2-RU-32	Clean Sky for Vladivostok		EECE	2,775.00
2	CG2-SK-22	Emission reduction by Cleaner Technology Application in Coatings production Unit of Chemolac, s.s.	Chemolac, s.s.		21,541.00
2	CG2-SK-22	Emission reduction by Cleaner Technology Application in Coatings production Unit of Chemolac, s.s.		SYNPO, s.s.	12,480.00
2	CG2-Sk-23	CP and EMS for SMEs in Central and Eastern Europe	Calendula s.s.		2,700.00
2	CG2-Sk-23	CP and EMS for SMEs in Central and Eastern Europe		Kasko s.s.	21,543.00
2	CG2-Sk-23	CP and EMS for SMEs in Central and Eastern Europe		SCPC	10,494.00
2	CG2-SK-24	Minimalization of Energy Consumption and Decreasing of Air Pollution	DeMicien s.s., Levice		9,747.00
2	CG2-SK-24	Minimalization of Energy Consumption and Decreasing of Air Pollution		ATON Centrum	6,883.00
2	CG2-SK-31	System of separation, collection of household hazardous waste from municipal waste and its disposal	City of Banska Bystrica		4,914.00
2	CG2-SK-31	System of separation, collection of household hazardous waste from municipal waste and its disposal		DETOX s.r.o.	20,799.00
2	CG2-SK-31	System of separation, collection of household hazardous waste from municipal waste and its disposal		Ecotechnik s.r.o.	7,485.00
2	CG2-UK-04	Development of Environmental Management System for Concern Stirol	Concern Stirol		62,023.00
2	CG2-UK-04	Development of Environmental Management System for Concern Stirol		UKNTECH	1,834.00
2	CG2-UK-04	Development of Environmental Management System for Concern Stirol		Futurepast, Inc.	4,265.00
2	CG2-UK-05	Developing Olymp sausage as a Model of Clean Production	Olymp		17,594.00
2	CG2-UK-05	Developing Olymp sausage as a Model of Clean Production		Mead&Hunt International	11,648.00
2	CG2-UK-07	Improvement of Energy Efficiency of sanatoriums at Truskavetsk	JSC Truskavetskurort		61,063.00
2	CG2-UK-07	Improvement of Energy Efficiency of sanatoriums at Truskavetsk		Energy Cities	10,142.00
2	CG2-UK-18	Development of Communal Waste Management Program for the City of Chervonograd	City of Chervonograd		3,394.00
2	CG2-UK-15	Development of Communal Waste Management Program for the City of Chervonograd		EKOPOL II	9,336.00
2	CG2-UK-16	Identifying the Priority Policies and Measures to Mitigate the Impacts of Climate Change	Berdychiv City		300.00

2	CG2-UK-16	Identifying the Priority Policies and Measures to Mitigate the Impacts of Climate Change		ARENA-ECO	9,200.00
2	CG2-UK-16	Identifying the Priority Policies and Measures to Mitigate the Impacts of Climate Change		Econergy International Corp.	6,450.00
3	CG3-BG-41	Public/Private Project for Water Treatment and Delivery to the Haskovo municipality	Municipality of Haskovo		5,206.00
3	CG3-BG-41	Public/Private Project for Water Treatment and Delivery to the Haskovo municipality		POVVIK-EP Ltd.	6,070.00
3	CG3-BG-41	Public/Private Project for Water Treatment and Delivery to the Haskovo municipality		Clearwater Consultants, Inc.	46,455.00
3	CG3-CR-02	Introduction of Environmentally Friendly Processes in Leather Production	Croatian Association of Leather and Footwear Manufacturers		21,234.00
3	CG3-CR-02	Introduction of Environmentally Friendly Processes in Leather Production		Ingstav Ostrava a. s.	720.00
3	CG3-ES-05	Energy Production of Waste and Biomass	Kurassara Town Government		13,229.00
3	CG3-ES-05	Energy Production of Waste and Biomass		SCS Engineers	8,148.00
3	CG3-KZ-04	Process Efficiency Upgrades and Cyanide Recycling at Akbakal Gold	JSC Aitynalmaz		15,367.00
3	CG3-KZ-04	Process Efficiency Upgrades and Cyanide Recycling at Akbakal Gold		EnviroNet Management Systems	24,726.00
3	CG3-KZ-35	Technology for Water Treatment and Water Reuse in Car Washing Centers	Municipality of Almaty		-
3	CG3-KZ-35	Technology for Water Treatment and Water Reuse in Car Washing Centers		Shell Engineering & Associates, Inc	17,012.00
3	CG3-KZ-35	Technology for Water Treatment and Water Reuse in Car Washing Centers		Gomee Buro, Ltd.	2,834.00
3	CG3-MK-04	Modernization of Municipal Landfill Through Degasification and Utilization of Landfill Gas	Orisa		1,700.00
3	CG3-MK-04	Modernization of Municipal Landfill Through Degasification and Utilization of Landfill Gas		EcoStar	41,194.00
3	CG3-MK-04	Modernization of Municipal Landfill Through Degasification and Utilization of Landfill Gas		Energo Sistem	2,030.00
3	CG3-MK-71	Rehabilitation of Small Hydro Power Plants	Electric Power Company of Macedonia		20,423.00
3	CG3-MK-71	Rehabilitation of Small Hydro Power Plants		Elektroprojekt	-
3	CG3-RFE-19	Model Program of Waste Disposal Control at Sinegorakaya Mine	Shakhta Sinegorakaya, Ltd.		4,197.00
3	CG3-RFE-19	Model Program of Waste Disposal Control at Sinegorakaya Mine		EarthFax Engineering, Inc.	25,410.00
3	CG3-RFE-21	Modernization of Hot water Supply Systems in the Yuzhno-Sakhalinsk Municipality	Yuzhno-Sakhalinsk Dept. of Housing		8,500.00
3	CG3-RFE-21	Modernization of Hot water Supply Systems in the Yuzhno-Sakhalinsk Municipality		Joseph Technology Corporation, Inc.	8,700.00
3	CG3-RO-30	Energy Efficiency System of COMPA	JC Compa		953.00
3	CG3-RO-30	Energy Efficiency System of COMPA		Hydrox, Inc.	5,724.00
3	CG3-RO-30	Energy Efficiency System of COMPA		Energy Group	51,648.00
3	CG3-RO-54	Energy Efficient Wastewater Collection and Treatment Program for Satu Mare	RAC Satu Mare		13,286.00
3	CG3-RO-54	Energy Efficient Wastewater Collection and Treatment Program for Satu Mare		VITUKI Consult	15,480.00
3	CG3-RO-60	Energy Efficiency Improvement of District Heating System	Energoterm		12,170.00
3	CG3-RO-60	Energy Efficiency Improvement of District Heating System		ERS	1,620.00
3	CG3-RO-60	Energy Efficiency Improvement of District Heating System		Trapez SA	2,610.00
3	CG3-RO-81	Reduce Emissions and Discharge	Policolor SA		3,000.00
3	CG3-RO-81	Reduce Emissions and Discharge		Colt International	2,975.00
3	CG3-RO-81	Reduce Emissions and Discharge		IT Corporation	13,244.00
3	CG3-RO-89	Improvement of the energy efficiency and ambient conditions for the patients on hospital no. 1	Crailova Hospital 1		6,708.00
3	CG3-RO-89	Improvement of the energy efficiency and ambient conditions for the patients on hospital no. 1		EnEx Ltd	2,458.00
3	CG3-RO-89	Improvement of the energy efficiency and ambient conditions for the patients on hospital no. 1		Scintl	1,580.00
3	CG3-RO-72	Performing Techno-Economical Solutions to Reduce Cyanide Polluted Water at Elmet	SC ELMET SA		6,071.00
3	CG3-RO-72	Performing Techno-Economical Solutions to Reduce Cyanide Polluted Water at Elmet		ICIA	5,524.00
3	CG3-RO-72	Performing Techno-Economical Solutions to Reduce Cyanide Polluted Water at Elmet		Hoffland Environmental	7,685.00
3	CG3-RO-74	Feasibility Study to Improve the Quality of Drinking Water	SC Comes SA		6,222.00
3	CG3-RO-74	Feasibility Study to Improve the Quality of Drinking Water		Lemna International, Inc.	11,778.00
3	CG3-UK-70	Development of the Comprehensive Program for Reduction of Harmful Emission	RCU Odessa CHPP-2		5,320.00
3	CG3-UK-70	Development of the Comprehensive Program for Reduction of Harmful Emission		CENTURY-XXI Ltd.	12,380.00
3	CG3-UK-70	Development of the Comprehensive Program for Reduction of Harmful Emission		SRC International CS	28,198.00
3	CG3-KZ-04	Process Efficiency Upgrades and Cyanide Recycling at Akbakal Gold	JSC Aitynalmaz		15,367.00
3	CG3-KZ-04	Process Efficiency Upgrades and Cyanide Recycling at Akbakal Gold		Environet Management Systems	24,726.00
Note: Back - up documentation for contributions is kept on file at IIE / Washington					
					TOTAL
					\$ 4,645,934.00

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